PTTEP

40 YEARS

56-1 One Report / Annual Report 2024

Sustainability Report Incorporated

With a clear mission to ensure national energy security throughout its 40-year journey, PTTEP remains committed to exploring and producing petroleum for economic prosperity and enhancing the quality of life for the Thai people, while caring for the community, society, and the environment, and upholding the principles of good corporate governance to foster a sustainable future for all.

40 Years of PTTEP's Journey to the Endless Possibilities

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For cases where this Annual Report (56-1 One Report) references information disclosed on the Company's website the disclosed information shall be deemed to be part of Form 56-1 One Report. The Board of Directors certifies the correctness and completeness of such disclosed information which is the same as information disclosed in Form 56-1 One Report.

Message from Chairman and CEO

Krairit Euchukanonchai
Chairman

Montri Rawanchaikul
Chief Executive Officer

Dear Shareholders,

The year 2024 continues to be a challenging time for the energy industry, with key challenges including the development of new energy sources – both conventional and clean energy – as well as the need to balance energy production with greenhouse gas reduction efforts to mitigate global warming.

PTTEP remains committed to providing energy security while striving to become a low-carbon organization. This is driven by its three strategy pillars: Drive Value, strengthening and monetizing the petroleum exploration and production business; Decarbonize, reducing greenhouse gas emissions; and Diversify, expanding into new businesses focusing on future energy and advanced technology.

In 2024, PTTEP takes great pride in contributing to alleviating the impact of energy prices on public and driving the country's economy. This has been achieved by increasing the natural gas production rate from G1/61 Project (Erawan, Platong, Satun, and Funan fields) to 800 million cubic feet per day (MMSCFD), ahead of schedule under the Production Sharing Contract. The Company strives to maintain this production level moving forward. When combined with other key projects such as G2/61 Project, Arthit Project, and Contract 4 Project, PTTEP's domestic natural gas production accounts for 82 percent of Thailand's total natural gas output. This supports the energy demands of both the industrial and household sectors while strengthening the country's energy security.

Regarding PTTEP's international expansion, the Company has strengthened its investment in strategic areas. PTTEP acquired a participating interest in the Ghasha Concession Project in the United Arab Emirates (UAE), one of the country's largest offshore natural gas fields. Additionally, the Abu Dhabi Offshore 2 Project has received government approval for its field development plan and is now progressing toward the Final Investment Decision (FID) before entering the development phase. In Algeria, PTTEP acquired the share capital of E&E Algeria Touat B.V., resulting in an indirect investment in the Touat Project, an onshore natural gas field. This acquistion supports PTTEP's long-term growth strategy.

In 2024, PTTEP also paid THB 50,450 million of income taxes, royalties and other remunerations to the government. This strongly supports national development in various areas such as community, education, and research & development (R&D).

To enhance operational efficiency, PTTEP has developed the “DigitalX” project, leveraging digital technologies such as AI and Machine Learning to analyze and process data with greater speed and accuracy. Additionally, the company has developed “X.brain,” a self-learning AI engine that continuously improves to support workforce agility. PTTEP also prioritizes advancing digital literacy, skills and creativity among employees to further drive organization efficiency.

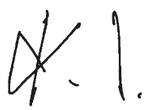
In support of the Net Zero Greenhouse Gas Emissions target by 2050, PTTEP has achieved a cumulative greenhouse gas emissions by 4.08 million tonnes of CO_2 equivalent from base year 2020. Furthermore, PTTEP has implemented restoration and conservation of terrestrial and mangrove forest to help increase CO_2 absorption areas. Another key development is the Carbon Capture and Storage (CCS) project at PTTEP-operated Arthit gas field in the Gulf of Thailand which has been incorporated into the Nationally Determined Contribution Action Plan on Mitigation 2021–2030 approved by the Thai Cabinet in 2024. PTTEP is currently preparing for the FID of the project. Arthit CCS project aims to reduce CO_2 emissions by approximately 700,000–1,000,000 tonnes of CO_2 per year.

In the realm of clean energy, the HyDuqm Project – an integrated green hydrogen project in Oman – is currently assessing wind and solar resources and conducting a feasibility study. Engineering design is set to commence in 2025. PTTEP remains focused on exploring investment opportunities in clean energy businesses to support its goal of becoming a low-carbon organization and facilitating the energy transition.

For the 2024 financial performance, PTTEP generated a total revenue of THB 327,415 million (equivalent to USD 9,273 million). The average sales volume reached 488,794 barrels of oil equivalent per day, reflecting an approximate 6 persent increase from the year 2023, primarily driven by the natural gas production ramp-up from G1/61 Project. As a result, the Company reported a net profit of THB 78,824 million (equivalent to USD 2,227 million). This net profit will be pivotal in financing capital investments for the development and production of petroleum to meet domestic energy demand and support future growth. In 2024, PTTEP also paid THB 50,450 million of income taxes, royalties, and other remunerations to the government. This strongly supports national development in various areas such as community, education, and research & development (R&D).

Driven by a commitment to business operations, alongside concerns for the community, society, the environment, and good corporate governance, PTTEP has been recognized with 36 awards from 24 institutions at both the national and international levels in 2024. This serves as another testament to the Company’s achievement.

On behalf of the Board of Directors, management, and employees, we would like to express our sincere gratitude to our shareholders, business partners, financial institutions, government and private sector agencies, and all stakeholders for their continuous support. In 2025, PTTEP will celebrate its 40th anniversary. We all pledge to continue our dedicated efforts to fulfill our mission of ensuring energy security for the Thai people and the country, with the goal of delivering a sustainable energy future for all.

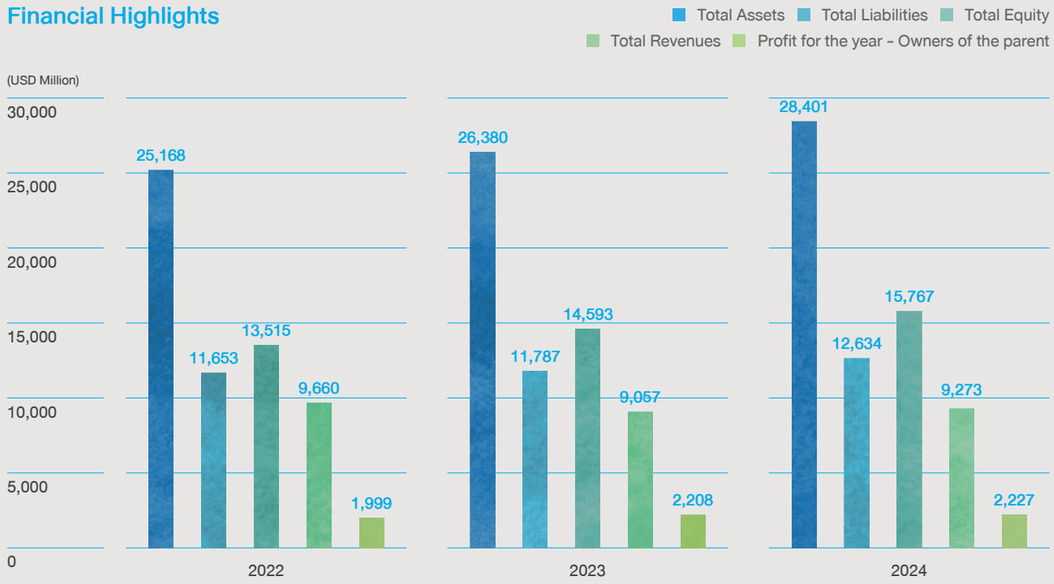


Krairit Euchukanonchai
Chairman

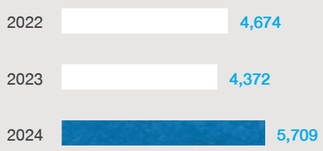
Montri Rawanchaikul
Chief Executive Officer

Financial Highlights

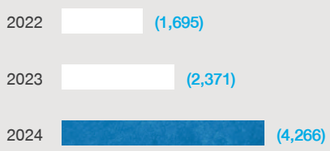
Financial Highlights



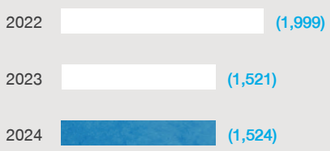
Net cash flows provided by operating activities*



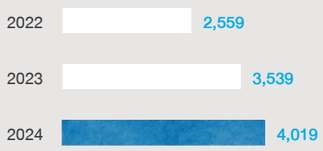
Net cash flows used in investing activities



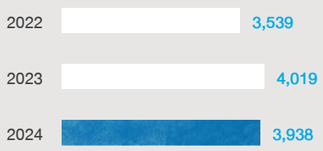
Net cash flows used in financing activities



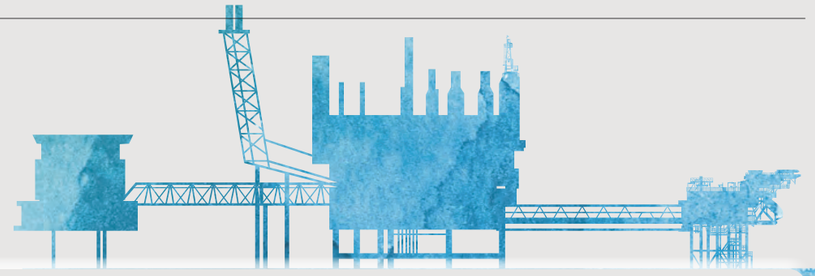
Cash and cash equivalents at the beginning of the year**



Cash and cash equivalents at the end of the year**



(USD Million)
* Including the impact of exchange rate changes
** Excluding short-term investment

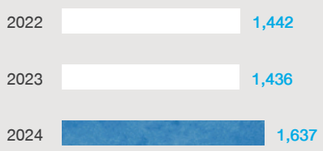


	2022	2023	2024
Dividend per Share (THB)	9.25	9.50	9.625*
Dividend Yield (%)**	5.24	6.35	8.09

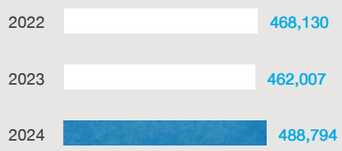
* Total dividend of 2024 at the rate of THB 9.625 per share includes the interim dividend at the rate of THB 4.50 per share and the second half-year dividend at the rate of THB 5.125 per share. Payments of the interim dividend and the second half-year dividend will be proposed in 2025 General Shareholder's Meeting on March 31, 2025, for acknowledgment and approval, respectively.
** Calculated from PTTEP's closing share price on the year-end date.

	2022	2023	2024
Financial Ratios			
EBITDA Margin (%)	75	74	73
Debt to Equity (times)	0.28	0.25	0.24
Return on Equity (%)	15.41	15.71	14.68
Return on Assets (%)	8.22	8.57	8.13
Return on Capital Employed (%)	12.54	13.05	12.38

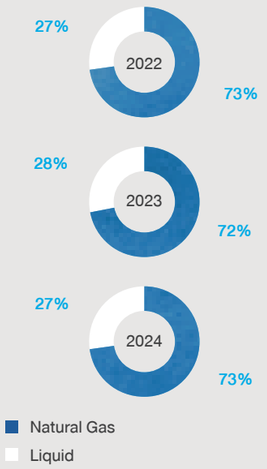
Petroleum Proved Reserves
(MMBOE)



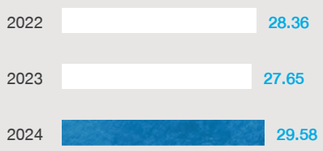
Petroleum and Natural Gas Sales Volume
(BOED)



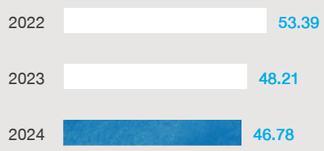
Natural Gas to Liquid Ratio for Sales Volume



Unit Cost
(USD per BOE)



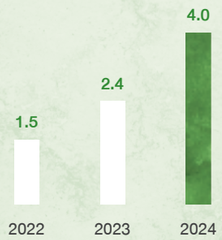
Average Selling Price
(USD per BOE)



Environmental, Social, Governance Highlights

Accumulated greenhouse gas emissions reduction*

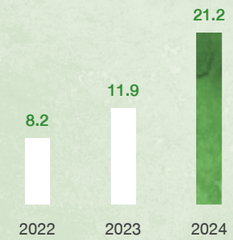
(million tonnes of CO_2 equivalent from base year 2020)



* Calculated from active greenhouse gas emissions intensity reduction performance

Greenhouse gas emissions intensity reduction, against 30% reduction target in 2030

(% reduction from base year 2020*)



* The base year data was updated to align with the Company's additional investments

Capital expenditure (CAPEX) budget allocated to energy transition business

(USD million)

725

GRC maturity level

3.84/5

(Managed—Transform Level)

Hazardous waste to landfill*

(tonnes)

2022
2023
2024
= 0

* For operations in Thailand only

Produced water discharge to environment*

(cubic meters)

2022
2023
2024
= 0

* For operations in Thailand only

CSR project

(no. of projects)

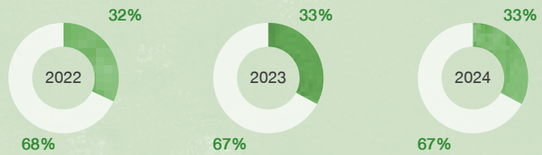
139

Average social return on investment from strategic CSR projects

3.68:1

Ratio of female employees*

(%)



* Better than the average of oil and gas industry

Accumulated completed forest conservation and restoration

(rai of land)

82,947

Accumulated income increased for local communities from forest conservation and restoration activities

(USD million)

4.4

Tree survival rate in PTTEP's plantations in collaboration with government agencies

(%)

89

Lost Time Injury Frequency (LTIF)

(per one million man hours worked)

0.24

(On par with the latest average performance of IOGP)

Total Recordable Injury Rate (TRIR)

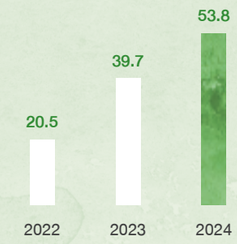
(per one million man hours worked)

0.80

(Better than the latest average performance of IOGP)

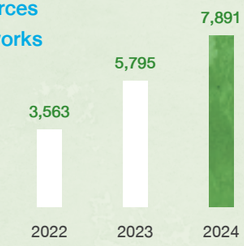
Increased income of focused communities participating in PTTEP projects under Ocean for Life strategy

(% compared to baseline data before project implementation)



Accumulated Marine and Coastal Resources Conservation Nerworks

(no. of networks)



Value Creation

Input

Financial Capital

- Interest-bearing liabilities: USD 3,761 million
- Debt to equity ratio: 0.24 times (Policy <0.5 times)
- Shareholders' equity: USD 15,767 million (Ordinary shares 3,969,985,400 shares)

Production Capital

- Over 50 projects in 12 countries
- Unit cost: USD 29.58 per barrel of oil equivalent
- Net procurement value: USD 2,755 million
- Over 490 initiatives for efficiency improvement and cost reduction
  - Over 65 major active digital solutions

Human Capital

- 5,592 employees of more than 21 nationalities
- Average 53 hours per year for employees' development and training
- Total spending on training and development: more than THB 338 million
- Sustainability awareness building among employees through internal communication, including Sustainability Day, with over 1,500 domestic and international participants
- Sustainability and greenhouse gas emissions reduction training for the board of directors, executives, and employees
- 100% of employees received training and acknowledgement on Good Corporate Governance and Business Ethics (CG&BE)
- IT BCM and incident response procedure testing 5 times
- 2,063 suppliers
- Suppliers, dealers and business partners' skills and experiences

Intellectual Capital

- Total spending on technology and innovation development: USD 13.4 million including technology related to greenhouse gas (GHG) management at USD 1.7 million
- Capital expenditure (CAPEX) budget allocated to energy transition business: USD 725 million
- Collaboration with over 37 external organizations on technology and innovation development

Social and Relationship Capital, and Natural Resources Capital

- Total spending on CSR projects in 4 aspects – basic needs, education, environment and culture: USD 14.6 million (CSR projects and activities, and donations to support stakeholders' expectations)
- Employee volunteering on CSR projects more than 10,186 hours
- Accumulated completed forest conservation and restoration of 82,947 rai of land
- Total spending on Sustainable Ocean Health workstream under Ocean for Life strategy including PTTEP Ocean Data Platform: USD 1.1 million
- Total spending on GHG management: USD 51.1 million
  - GHG emissions reduction projects: USD 45.3 million
  - Offsetting projects through blue carbon: USD 5.8 million
- Total spending on environmental management: USD 30.3 million
- Energy consumption: 54.8 million gigajoules
- Water consumption: 0.9 million cubic meters

Process

Vision

Energy Partner of Choice

through competitive performance and innovation for long-term value creation

Sustainability Framework

HPO, GRC, SVC

Sustainability

Business Strategic Pillars

- Drive Value
- Decarbonize
- Diversify

Output

- Total revenue: USD 9,273 million
- Sale volume: 488,794 barrels of oil equivalent per day
- Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA): USD 6,462 million
- Net income: USD 2,227 million
- Royalty and income taxes: USD 2,123 million
- Dividend payout ratio: 49%, or Dividend yield: 8.09%
- Return on Capital Employed (ROCE): 12.38%
- Credit ratings: BBB+ (S&P), Baa1 (Moody's), BBB+ (Fitch), AAA (TRIS)

- Production volume about 692,000 barrels of oil equivalent per day (historically highest production volume) with 76% natural gas
- Crude oil, condensate and LPG production: 61 million barrels of oil equivalent
- Natural gas production reaching 2,026 billion cubic feet (192 million barrels of oil equivalent)
- Proved reserves: 1,637 million barrels of oil equivalent
- Reserves to Production (R/P) ratio or reserves life at 6.4 years
- Total value generated over USD 346 million from efficiency improvement and cost reduction initiatives
  - Total value generated over USD 159 million from digital solutions

- Lost Time Injury Frequency (LTIF) and Total Recordable Incident Rate (TRIR) at 0.24 and 0.80 (per one million man hours worked) respectively
- Loss of Primary Containment Rate (LOPC) 0.28 per one million man hours worked and Oil and Chemical Spill Rate 0.15 tonnes per million tonnes of production
- SSHE Culture Maturity Level at 4.34/5 (Proactive Level)
- 100% of individual competency reviewed, 90% completing individual development plan
- Employee competency increased by 6.04% compared to 2023 average score
- 75% employee engagement score
- 33% female employee ratio, better than the average of oil and gas industry
- 81% local employment ratio, average from every country where PTTEP operates
- GRC Maturity Level at 3.84/5 (Managed–Transform Level)
- Zero case of information security breaching

- 42 technology projects in development phase
- Accumulated 19 projects implemented with a return of USD 305 million
- Accumulated intellectual properties (31 granted patents, 9 registered software copyrights, 71 pending patent applications)
- Current new businesses: AI and robotics business, eco-tech services, green hydrogen production, and offshore wind including a solar power plant for internal operation
- Expected new businesses: technology services expanding internationally, CCS as a service and blue hydrogen production

- 139 CSR projects in 4 aspects – basic needs, education, environment and culture
- Average social return on investment 3.68:1 from strategic CSR projects
- Stakeholder engagement level at support level
- Accumulated income increased for local communities by over USD 4.4 million through forest conservation and restoration
- Increased income of focused communities participating in PTTEP projects under Ocean for Life strategy: more than 53.8% (compared to baseline data before PTTEP project implementation)
- Accumulated 7,891 of conservation networks of marine and coastal resources established
- PTTEP Ocean Data Platform that includes meteorological and oceanographic data and PTTEP's project implementation with accumulated over 14,000 accesses to the information
- Accumulated GHG emissions reduction by more than 4.0 million tonnes of CO_2 equivalent from base year 2020
- GHG emissions intensity reduction by 21.2% from base year 2020*
- Energy consumption and energy recovery reduction: 3.3 million gigajoules
- Zero produced water discharge to environment**
- Zero hazardous waste and industrial waste to landfill**
- Waste diverted from disposal: 0.4 million tonnes

Stakeholder Groups

Government Agencies and Regulators | Suppliers and Contractors | Customers | Employees and Directors | Shareholders and Financial Institutions | Business Partners and Joint Ventures | Communities and Society | Media

* The base year data was updated to align with the Company's additional investments. ** For operations in Thailand only

Stakeholders' Voices

Mr. Pavich Kesavawong
Deputy Director General
Department of Climate Change and Environment

PTTEP is a leading organization with strong capabilities in driving greenhouse gas reduction and environmental initiatives. With their expertise, financial resources, skilled personnel, and robust network of partners, the Company effectively manages and mitigates environmental impacts.

Mr. Songkran Sorachaisumrit
General Manager
Thai Nippon Steel Engineering & Construction Corporation Limited

PTTEP continuously supports joint capability development, sharing and exchanging beneficial knowledge, including updates of relevant regulations and guidelines. This helps suppliers effectively and sustainably drive their organizations in both social and environmental aspects.

Mr. Chajchai Sarit-apirak
Managing Director, Chief Investment Officer
BBL Asset Management Company Limited

PTTEP stands out as a leader in GRC implementation, especially in risk management and the disclosure of essential information. The approach fosters confidence and supports informed investment decision-making.

Mr. Wiwat Techakijkachorn
Business Development Division Manager
Global Power Synergy Public Company Limited

We are confident that PTTEP prioritizes and upholds high safety standards in their operations while creating opportunities through technological development and innovation. This has led to the expansion into new businesses to support energy transition.

Mr. Satit Jiasiripongkul
Vice President Plant PPP/MT
UAC Global Public Company Limited

As a long-standing customer, we trust in PTTEP's capability to deliver a sufficient supply of natural gas, aligned with our business growth plan, and to efficiently meet the increasing future demands of customers.

General Nithi Chungcharoen
Independent Director, Member of the Nomination and Remuneration Committee and Member of the Risk Management Committee
PTTEP

Compared to international competitors, PTTEP demonstrates strong competitive potential due to their focus on human resource development. This dedication has cultivated a workforce with extensive knowledge and expertise across various fields within the organization.

Mr. Sombat Chitphinit
Chief Executive of the Nikhom Phatthana Subdistrict Administrative Organization

Beyond providing in-kind and financial supports, PTTEP continuously assists our community in promoting health through training programs and health check-ups. Additionally, reforestation projects help enrich the environment, indirectly contributing to improved health.

Miss Chiraporn Morakotchinda
Editor-in-Chief, Economic News Division
Thai News Agency MCOT

PTTEP strives for good corporate governance, prioritizing comprehensive stakeholder engagement. CSR projects are implemented across all areas where the Company operates, both domestically and internationally, with a strong focus on communication and fostering understanding to appropriately address various situations.

Awards of Success

In the year 2024, PTTEP received a total of 36 awards and certifications across all dimensions of sustainability from 24 institutions at both national and international levels.

Sustainability Awards

Listed as a member of the 2024 Dow Jones Sustainability Indices (DJSI) for the 10th year in the DJSI World Index in the Oil and Gas Upstream & Integrated Industry, the S&P Global Sustainability Yearbook 2025 for the 12th consecutive year, and the FTSE4Good Index Series for the 9th consecutive year. Additionally, the Company received rating by various ESG raters, including being rated at BBB Level by the MSCI ESG Ratings, the lowest ESG risk rating (a ranking of 30th among 301 companies in the Oil and Gas Producers industry) by Morningstar Sustainalytics, and AA Level by the SET ESG Ratings.

S&P Global Sustainability Yearbook Member
Corporate Sustainability Assessment (CSA) 2024

FTSE4Good

MSCI ESG RATINGS BBB
CCC B BB BBB A AA AAA

Rated MORNINGSTAR SUSTAINALYTICS

SET AA ESG Ratings 2024

Business Management Awards

SET AWARDS

SET Award of Honor: Best Investor Relations, recognizing companies that have consistently demonstrated excellence in investor relations for 4 consecutive years, and the SET Award of Honor: Best Innovative Company, awards to companies excelling in innovation for three consecutive years

IAA

Best CEO award and Best IR award for the 3rd consecutive year in the Energy and Infrastructure sector from IAA Awards for Listed Companies 2024

IR magazine awards

Best Overall Investor Relations, Best Investor Relations Officer and Best Use of Social Media and Video from IR Magazine Forum & Awards South East Asia 2024

Asia's Best CEO award for the 7th consecutive years, Asia's Best CFO award for the 11th consecutive years, Best Investor Relations Company award for the 12th consecutive years, and Best Investor Relations Professional award for the 4th consecutive years and Sustainable Asia Award for the first time from Asian Excellence Awards 2024

Best Public Company of the Year 2024 on the Stock Exchange of Thailand (SET) and Best Public Company of the Year 2024 in the Energy Sector from Money & Banking Awards 2024

Corporate Governance Awards

Thailand Executive of the Year award and Thailand Employee Engagement of the Year award in the Oil & Gas category from the Asian Management Excellence Awards 2024

Thailand Top Company Awards 2024 in Exploration, Production of Natural Resource and Public Utility Industrial category

Thailand Corporate Excellence Awards in the Leadership Excellence category (Leadership Excellence Award) from the TMA Excellence Awards 2024

Certificate of Thai Private Sector Collective Action Against Corruption's (CAC) certified membership

Gold-level Top-tier Award for 2024 Role Model Organization on Human Rights in the State Enterprise Sector from the Department of Rights and Liberties Protection, Ministry of Justice

Recognition with the highest-level rating of "Excellent" or five symbols, along with Top Quartile placement among the listed companies with a market capitalization of at least THB 10,000 million in the Corporate Governance Report of Thai Listed Companies 2024 (CGR 2024)

Environment and Social Development Awards

Green World Award 2024 – Global Silver awards for Corporate Social Responsibility in the Wildlife and Conservation category and CSR category

Best Environmental Excellence Award - Gold level at the 16th Annual Global CSR & ESG Summit and Awards 2024 from Integrated Waste Management Project.

Sustainability Award 2024 in "Sustainability Initiative of the Year" category from Business Intelligence Group

Top Community Centric Companies award at the Asia Corporate Excellence & Sustainability Awards 2024 (ACES Awards 2024)

Golden Peacock Global Award for ESG 2024 recognizes PTTEP's outstanding performance in Environmental, Social, and Governance (ESG) management

Technology Awards

Thailand Technology Excellence Award for AI – Oil & Gas at the Asian Technology Excellence Awards 2024 from "AI Innovation under the Digital Transformation Project"

National Innovation Award 2024 for Innovation Organization in the Large Enterprise category from the National Innovation Agency (Public Organization)

ASIAN OIL&GAS AWARDS

"Digital Transformation Initiative of the Year – Thailand" award from the Asian Oil & Gas Awards 2024

Part 1

Our Business

Ensuring national energy security remains the core mission of PTTEP as Thailand's leading petroleum exploration and production company, by driving and enhancing the value of our core exploration and production business. However, amid the rapidly changing global trends, coupled with the challenges of the energy transition and addressing climate change, PTTEP continues to focus on strengthening our capabilities and driving the Company towards becoming a sustainable organization including achieving Net Zero Greenhouse Gas Emissions Reduction target and diversifying into new businesses with a focus on innovative technology, decarbonization, and future energy. This transformation is aimed at delivering shared value to all stakeholders and achieving the vision of becoming the "Energy Partner of Choice."

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1. Structure and Business Operations

1.1 Policy and Business Operation Overview

1.1.1 Vision and Mission

PTTEP is a leading Thai E&P company with global business operations, dedicated to supporting Thailand's energy security and the energy demand of the countries where we operate. We proactively prepare for the coming energy transition by focusing on an integrated natural gas business and related ventures in line with PTTEP Sustainability Framework. This includes managing greenhouse gas emissions, investing in future energy ventures to support greenhouse gas emissions reduction, while striving to create sustainable value for all stakeholders. Our vision, mission, and strategy are defined as follows:

Vision:

"Energy Partner of Choice" through Competitive Performance and Innovation for Long-term Value Creation

Mission:

PTTEP operates globally to provide reliable energy supply and sustainable value to all stakeholders

Procedure to Determine the Company's Vision and Mission

PTTEP Board of Directors (Board) annually reviews and approves the Company's vision and mission. The meetings are convened for the Board and management to discuss and redefine the Company's vision and mission including business strategy in alignment with the prevailing business environment. The systematic strategy planning process commences by updating the existing business environment, analyzing the evolving trends within the E&P industry, and assessing their implications on the Company in terms of opportunities and risks as well as integrating stakeholder inputs. In addition, the Company conducts a comprehensive review of our investment portfolio, evaluating both returns and risks. This evaluation serves as a foundation to define the vision, mission, and both short-term and long-term strategic directions to ensure alignment with the changing business landscape. The management will then develop the Company's workplan, budget, and key performance indicators (KPIs), based on the given strategic directions and policies, to be proposed for approval by the Board prior to implementation. Upon approval, they will be cascaded to all relevant functions for detailed plan development to ensure effective implementation.

The Board is accountable for regularly overseeing and monitoring the management's execution of the strategic plans to ensure alignment with the strategic directions while the management is responsible for reporting performance against the strategic plans to the Board for acknowledgment on a quarterly basis.

1.1.2 PTTEP and Sustainability

PTTEP has a firm belief that the “Right Balance” of economic, social, and environmental aspects leads to a strong foundation for business sustainability. We have therefore developed “Sustainability Framework” to steer our business operations. This framework plays a pivotal role in ensuring business continuity to promote energy security while safeguarding both society and the environment. At PTTEP, we realize that it is important to build sustainability from within by fostering strong business performance on a robust business foundation. The goal is to create long-term value for all stakeholders while contributing to the sustainability of society as a whole (From We to World), aligning with our vision to become the “Energy Partner of Choice.” The Sustainability Framework includes the following aspects: High Performance Organization (HPO); Governance, Risk Management, and Compliance (GRC); and Sustainable Value Creation (SVC). The framework supports 17 United Nations Sustainable Development Goals (UN SDGs), focusing on Goals 3, 7, 8, 9, 12, 13, 14, 15 and 16, which are directly related to the Company’s strategies, business operations, and long-term targets.

The Board plays a vital role as the top supervisor and advocates for sustainability to ensure concrete implementation across the organization, guiding PTTEP on the path towards becoming a sustainable organization. The Board has approved the Sustainability Statement as a guideline for all employees and stakeholders, the Corporate Governance and Sustainability Committee to supervise, promote, monitor and review sustainability performance at least four times a year.

In addition, PTTEP has disclosed the Sustainability Policy endorsed by Chief Executive Officer on PTTEP website, under the Sustainability Policy and Guidelines sub-topic. Click here for more information To ensure seamless integration of sustainability across PTTEP's business operations, together with continual improvement and effective communication, the Corporate Sustainability Strategy Function bears the responsibility of ensuring effective implementation across all relevant functions. PTTEP Sustainability Governance and Structure can be found on PTTEP website under Sustainability topic, Sustainability Governance Structure sub-topic. Click here for more information

Sustainability Statement

PTTEP's sustainability means being a responsible and resilient organization. We aim to embrace energy transition and create sustainable value to the Company and our stakeholders with commitment to achieving Net Zero Greenhouse Gas Emissions by 2050. Our Sustainability Framework is based on three pillars: High Performance Organization (HPO); Governance, Risk Management, and Compliance (GRC); and Sustainable Value Creation (SVC).

While growing our business through the gas value chain, we will diversify beyond E&P with focus on technology and innovation, decarbonization, and future energy. Our competitiveness is driven by robust operations and efficiency improvement. We strive to become a GRC role model and zero incident organization. At PTTEP, we operate responsibly to ensure business sustainability with due care for the community, society, and environment.

Approved by PTTEP's Board of Directors on August 19, 2022

Additionally, PTTEP emphasizes the importance of sustainability reporting to publicly disclose the performance of PTTEP's operational control activities in Thailand and overseas, in alignment with the material topics significant to our stakeholders in Environmental, Social, and Governance (ESG) dimensions. This reporting complies with the guidelines of Global Reporting Initiative Standards: GRI Standards "In Accordance" criteria under GRI 11: Oil and Gas Sector 2021, and other international sustainability reporting frameworks. In this report and our website, the information of sustainability reporting contains material topics and outstanding sustainability performance in 2024 in alignment with PTTEP Sustainability Framework and Strategy. Details of the execution and results are published on PTTEP website under Sustainability topic, Click here for more information, which is designed as a centralized information portal for easy online access. The selected information on safety, occupational health and environment, human resource, and supply chain including the execution details was verified for accuracy and completeness according to AA1000 Accountability Principles Standard: AA1000APS (2018) principles concerning stakeholders' engagement, the scope of material topics, and responses to stakeholders' expectations. This information received Limited Assurance from SGS (Thailand) Limited. The assurance statement was shown in Assurance Statement sub-topic on PTTEP website. Click here for more information

1.1.3 Materiality Assessment

In 2024, PTTEP reviewed material topics on sustainability including ESG issues based on Double Materiality approach, considering the significance of topics in terms of impact on PTTEP and impact on environment, society (including impacts on human rights) as well as governance and economy, from the perspective of eight key stakeholder groups: (1) Government Agencies and Regulators, (2) Suppliers and Contractors, (3) Customers, (4) Employees and Directors, (5) Shareholders and Financial Institutions, (6) Business Partners and Joint Ventures, (7) Communities and Society, (8) Media. The material topics were prioritized based on Double Materiality and in line with Global Reporting Initiative Standards: GRI Standards (2021) and AA1000APS (2018). The material topics reflected national and international sustainability trends corresponding with the United Nations Sustainable Development Goals and Sustainability Accounting Standards Board's SASB Materiality Map™ for Oil & Gas – Exploration & Production Industry. The materiality assessment results served as part of the crucial inputs for shaping and improving corporate strategies. These results were also integrated into the Enterprise Risk Management process, empowering PTTEP to proactively address any risks related to the Company's sustainability material topics. The assessment process can be summarized as follows:

1) Understanding the Organization's Context

- Review entire business activities, business relationships, sustainability context, and all stakeholders throughout the value chain.
- Review global trends, conduct peer reviews across the industry, and engage with relevant stakeholders to predetermine material issues.

2) Identifying Actual and Potential Impacts

- Identify actual and potential impacts of material issues encompassing environment, society (including impacts on human rights) as well as governance and economy, which include both positive and negative impacts in the short term and long term, covering all PTTEP's business activities throughout the value chain via conducting an interview session with relevant stakeholders and gathering other perceptions via an online survey.

3) Assessing the Significance of the Impacts

Based on the principles of double materiality, the assessment method is shown as follows:

- Engage with external stakeholders to obtain their perceptions on the Company's impacts on environment, society (including impacts on human rights) as well as governance and economy.

- Engage with internal stakeholders (employee group) to obtain their perceptions on sustainability-related impacts on the Company.
- Assess and determine the significance of identified impacts from stakeholder engagement by considering two dimensions: (1) severity (scale, scope, irremediability) and (2) likelihood of the impacts.

4) Prioritizing the Most Significant Impacts

- Define selection criteria for key material issues.
- Validate key material issues against external professional views covering ESG dimensions. Then, combine the impact score from expert testing with the score obtained from the stakeholders.
- Group interconnected material issues into material topics and submit to the Management Committee for approval and the Corporate Governmence and Sustainability Committee for acknowledgement.
- Incorporate material topics as part of the key inputs for shaping and enhancing the Company's sustainability strategy.
- Gather data on sustainability performance across all material topics for public disclosure through diverse channels to efficiently respond to each stakeholder group. Then, collect feedback and recommendations from relevant stakeholders to improve the efficiency of business operations.

Full details on materiality assessment result can be found on PTTEP website under Sustainability topic, Sustainability Framework and Long-Term Target sub-topic. Click here for more information

1.1.4 Corporate Strategy and Long-Term Target

PTTEP is committed to delivering sustainable value from within to support the wider society (From We to World) and supporting the UN SDGs while considering the benefits of all stakeholders involved. Our corporate strategy is formulated with a focus on ensuring energy security and business resilience to address the ongoing global crisis and navigate the energy transition, together with environmental conservation. Therefore, PTTEP has established a three-pillar strategic framework and long-term targets encompassing ESG dimensions as follows:

Three Business Strategic Pillars	Drive Value	Decarbonize	Diversify

ESG Long-term Target and SDGs in Focus	• Strengthen exploration and production (E&P) business and ensure Thailand energy security, supporting domestic natural gas demand in particular
	  • Maximize natural gas and crude oil production from existing projects
	  • Expedite development of new projects under development phase
	  • Accelerate monetization from recent petroleum discovery projects
	• Enhance unit cost competitiveness
	• Expand gas-weighted portfolio and LNG, especially in upstream and midstream
		• Manage E&P to reach Net Zero Greenhouse Gas (GHG) Emissions target
		• Execute GHG emissions reduction plan by leveraging relevant technology application
		• Accelerate the development of Carbon Capture and Storage (CCS) projects
		• Maximize the use of renewables and explore clean future energy application in operational areas
		• Study and pursue carbon offsetting preparation through initiatives such as forestation and blue carbon to absorb CO_2 in coastal and marine ecosystems under the “Ocean for Life” strategy
			• Scale up AI and Robotics Ventures (ARV)
			• Explore renewable energy opportunities
			• Explore the business in relation to Carbon Capture, Utilization and Storage (CCUS), hydrogen, and future energy

	• Sustain 5 percent average production growth (Compound Annual Growth Rate – CAGR) • Maintain reserves to production ratio (R/P) to be greater than five years • Maintain competitive unit cost for E&P • Allocate 10 percent of PTTEP’s total capital expenditure (CAPEX) budget for transition business during 2024–2030	• Achieve Net Zero GHG Emissions by 2050 (Scope 1 and Scope 2) of E&P business under PTTEP’s operational control • Reduce GHG emissions intensity by at least 30 percent by 2030 and 50 percent by 2040 (from base year 2020) • Reduce methane emission intensity to less than 0.2 percent by 2030 • Reuse at least 50 percent of main structures, with safety awareness and efficient conditions by 2030 • Achieve zero waste to landfill by 2030	• Achieve Net Positive Impact (NPI) on ocean Biodiversity and Ecosystem Services (BES) value for offshore operations by 2030, compared to base year 2019 • Avoid operation in World Heritage sites as defined by UNESCO • Maintain no gross deforestation for E&P projects • Conserve and restore 200,000 rai of forestations by 2030 • Achieve zero oil and chemical spill • Establish 16,000 conservation networks by 2030	• Achieve zero incidents (Target Zero) • Achieve stakeholder engagement level at the highest levels as appropriate for each stakeholder group. • Achieve 50 percent increase in income of focused communities participating in PTTEP projects, compared to baseline data before PTTEP project implementation	• Achieve zero fraud and corruption and zero non-compliance • Achieve high-impact risk identification with effective mitigation • Achieve 100 percent improvement for control deficiency • Increase GRC maturity level to level 4+ (Transform and Advantaged)
	7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION	14 LIFE BELOW WATER 15 LIFE ON LAND	3 GOOD HEALTH AND WELL-BEING	16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Supporting SDGs

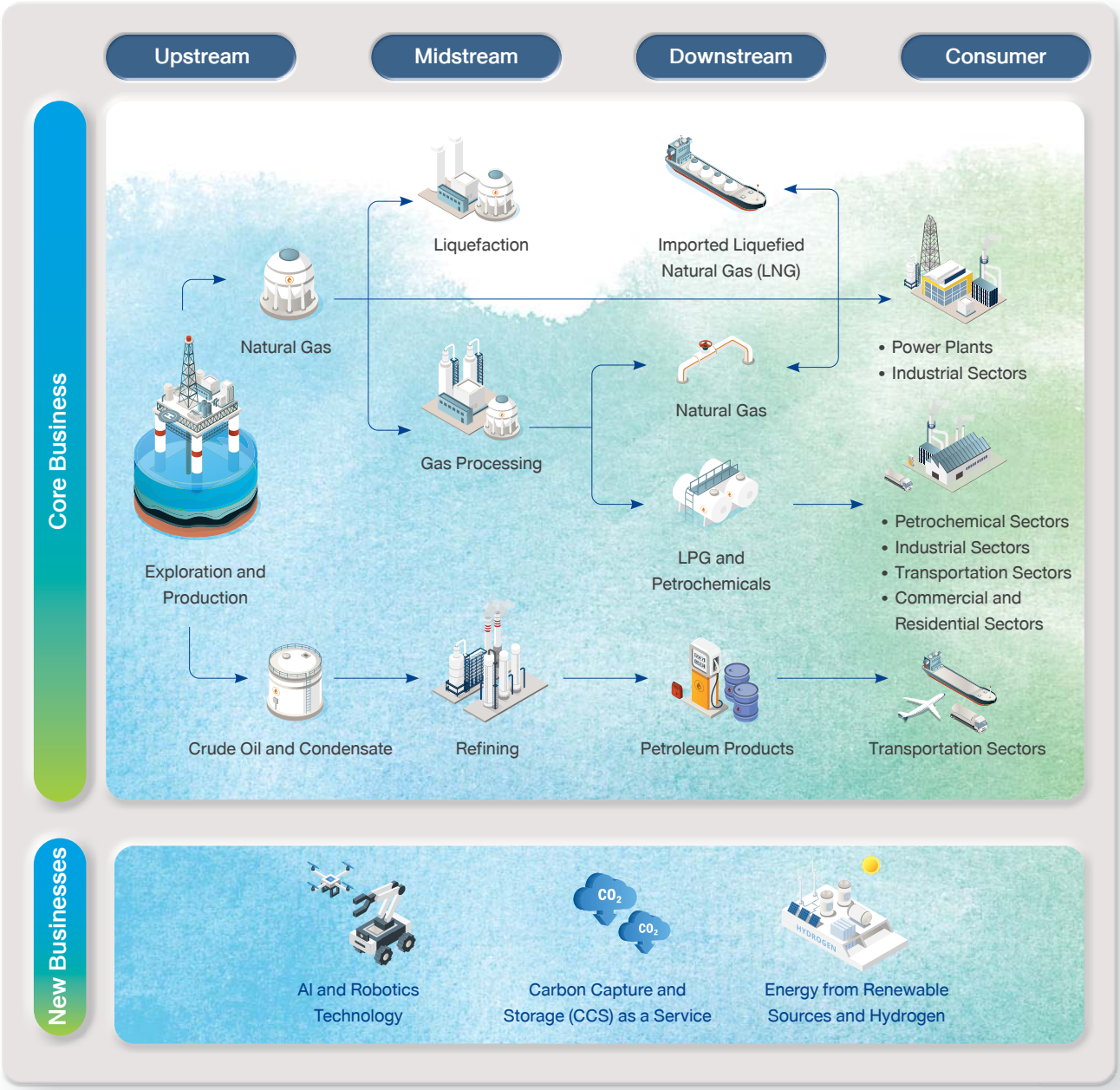
1.2 Nature of Business Operation

1.2.1 Business Value Chain

PTTEP primarily engages in petroleum exploration and production activities both domestically and internationally which are categorized as part of the upstream segment of the Petroleum Value Chain. With its principal petroleum products including natural gas, crude oil, and condensate, PTTEP is committed to its mission of ensuring energy security while delivering sustainable value to all stakeholders.

In addition to its core operations, PTTEP has strategically expanded its portfolio through joint ventures in midstream petroleum operations and international gas pipeline projects. The company emphasizes strategic growth in emerging business areas, such as artificial intelligence and robotics technologies, Carbon Capture and Storage (CCS), renewable energy, and hydrogen to support a sustainable transition towards future energy demands.

Diagram of PTTEP Business



1.2.2 Fueling Energy Security through Petroleum Exploration and Production Business

PTTEP conducts business in petroleum exploration and production primarily to support Thailand's energy security and the energy demand of countries where we operate. For Thailand, PTTEP dedicates ourself to natural gas production where natural gas serves as a primary energy source utilized in domestic electricity generation. Presently, we operate three key projects in the Gulf of Thailand (GoT), namely G1/61, G2/61, and Arthit projects. Increasing natural gas delivery from G1/61 Project has been PTTEP's priority over the past two years. Indeed, PTTEP has put all efforts into speeding up the production rate and improving the integrity of facilities and equipment to ensure safety. To date, additional 12 wellhead platforms and subsea pipelines were installed, along with the drilling campaign of more than 300 production wells. The gas delivery was increased to 800 million standard cubic feet per day (MMSCFD), as targeted, on March 20, 2024, to serve the energy demand and support the Thai economy.

Additionally, with regard to our international operations, PTTEP MENA Limited (PTTEP MENA), a subsidiary of PTTEP, signed a Sale and Purchase Agreement (SPA) to acquire a 10 persent stake in the Ghasha Concession in the United Arab Emirates (UAE) from Wintershall Dea Middle East GmbH. The SPA, including necessary regulatory approval, had completed on June 11, 2024. The Ghasha Concession is a significant natural gas field located in shallow waters off the western coast of Abu Dhabi, UAE, with the Abu Dhabi National Oil Company (ADNOC) as the operator. It encompasses nine petroleum fields where petroleum potential has been discovered, some of which are currently in the development phase under concession. This concession is set to produce over 1,500 MMSCFD of natural gas before the end of 2030, contributing not only to UAE's natural gas self-sufficiency, but also to increase the reserves of PTTEP. This investment aligns with PTTEP's strategy of focusing on prolific areas, including the expansion of its presence in the Middle East, to strengthen PTTEP's future growth.

G1/61 Project Gas Production
Increased to **800** MMSCFD,
to serve the energy demand
and support Thailand's economy.

Average Sales Volume
Increased to **488,794** barrels
of oil equivalent per day
=
6% increased when compared to
the previous year

1.2.3 Key Developments and Changes in the Past Three Years

Year 2022

On January 21, 2022, PTTEP International Limited (PTTEPI), a wholly-owned subsidiary of PTTEP, was notified by TotalEnergies EP Myanmar for its intention to withdraw, as both partner and operator, from Yadana Project and Moattama Gas Transportation Company Limited (MGTC).

On March 1, 2022, the acquisition of a 25 percent stake in the Sharjah Onshore Area C Project in UAE from Eni Sharjah B.V. through PTTEP MENA Limited (PTTEP MENA), a subsidiary of PTTEP, was completed.

On March 14, 2022, PTTEP Group announced the change in operatorship of Yadana Project and Moattama Gas Transportation Company Limited (MGTC) to be PTTEP International Limited (PTTEPI), a wholly-owned subsidiary of PTTEP and a partner in the project, with an effective date of July 20, 2022.

On March 22, 2022, PTTEP HK Offshore Limited (PTTEP HKO), a wholly-owned subsidiary of PTTEP Group, and SapuraOMV Upstream (Sarawak) Inc. were awarded the exploration Block SB412, which is located offshore northwest of Sabah, from the Malaysia Bid Round 2021. The consortium had signed a Production Sharing Contract (PSC) with Petroliam Nasional Berhad (PETRONAS), with the participation interests for PTTEP HKO at 60 percent (the operator) and SapuraOMV at 40 percent.

On March 31, 2022, PTTEP Group dissolved an inactive subsidiary, namely PTTEP Sadang Limited, in order to reduce administrative costs with no impact on PTTEP Group's operations.

On April 1, 2022, PTTEP Group dissolved an inactive subsidiary, namely Partex Services Portugal – Serviços para a Indústria Petrolífera, S.A. (PSP), in order to reduce administrative costs with no impact on PTTEP Group's operations.

On April 5, 2022, PTTEP Treasury Center Company Limited (PTTEP TC), a wholly-owned subsidiary of PTTEP Group, successfully completed the issuance of senior guaranteed debentures with a bondholders' representative to institutional and high net-worth investors, for a total of THB 12,000 million. The debentures have three tranches consisting of five-year tranche totaling THB 5,000 million, seven-year tranche totaling THB 1,000 million, and 10-year tranche totaling THB 6,000 million, carrying coupon rates of 2.09 percent, 2.69 percent, and 3.05 percent per annum respectively, and are fully guaranteed by PTTEP.

On April 19, 2022, PTTEP Energy Development Company Limited (PTTEP ED), a wholly-owned subsidiary of PTTEP and an operator of G1/61 and G2/61 projects, together with the Department of Mineral Fuels as sellers, entered into Gas Sale Agreement, Condensate Sale Agreement, and Crude Sale Agreement with PTT Public Company Limited. PTTEP ED also reached an agreement with MP G2 (Thailand) Limited, a subsidiary of Mubadala Petroleum (Thailand) Holdings Limited (Mubadala), for PTTEP ED to be the sole investment operator and shall recognize all revenues and costs from the petroleum produced with effective date from December 1, 2021. This will ensure continual petroleum production from G1/61 Project per development plan, as well as strengthen the country's energy security.

On April 24, 2022, PTTEP Energy Development Company Limited (PTTEP ED), a wholly-owned subsidiary of PTTEP, became an operator under a Production Sharing Contract of G1/61 and G2/61 projects.

On April 29, 2022, PTTEP International Limited (PTTEPI) and PTTEP Offshore Investment Company Limited (PTTEPO), subsidiaries of PTTEP, notified their decisions to withdraw from Yetagun Project and gas transportation company, Taninthayi Pipeline Company LLC (TPC), to all partners of Yetagun Project, with an effective date on May 31, 2022.

On May 17, 2022, PTTEP Business Center Company Limited (PTTEP BC), a subsidiary of PTTEP, signed the sale and purchase agreement to divest its share in PTT Global LNG Company Limited (PTTGL) to Siam Management Holding Company Limited, a subsidiary of PTT Group.

On June 1, 2022, the Algeria Hassi Bir Rekaiz Project, in partnership with SONATRACH SPA, successfully commenced the production with the crude oil production target at 13,000 barrels per day.

On July 15, 2022, PTTEP Group dissolved an inactive subsidiary, namely PTTEP FLNG Holding Company Limited (PTTEP FH), in order to reduce administrative costs with no impact on PTTEP Group's operations.

On August 1, 2022, PTTEP Group announced a successful gas discovery in a deeper zone, of the first exploration well XF-002 in Abu Dhabi Offshore 2 Project, located in the north-west of Abu Dhabi, UAE. The XF-002 exploration well discovered significant raw gas in place for both shallow and deep targets, totaling approximately 2.5-3.5 trillion cubic feet (TCF). The project will continue drilling nearby prospects to further evaluate the potential of the block.

On August 1, 2022, PTTEP International Limited (PTTEPI), Yangon Branch, a wholly-owned subsidiary of PTTEP, found a leakage at the Zawtika's onshore pipeline which resulted in the gas pressure drop, causing temporary natural gas supply suspension to Thailand. The preliminary investigation found no trace of explosion or fire. The onshore pipeline repair had been completed and gas delivery to Thailand fully resumed from August 14, 2022.

On August 5, 2022, PTTEP Group announced that on August 4, 2022, the Malaysia-Thailand Joint Authority (MTJA), an authority established under an Agreement between the Government of Malaysia and the Government of the Kingdom of Thailand, had concluded the annexation of Production Sharing Contract (PSC) of the Malaysia-Thailand Joint Development Area (MTJDA) with PTTEP International Limited (PTTEPI), a wholly-owned subsidiary of PTTEP, and PETRONAS Carigali (JDA) Limited (PC JDA), a subsidiary of PETRONAS Carigali Sdn. Bhd. The annexation, which has been duly approved by the governments of Thailand and Malaysia, attains the rights to an additional area for exploration and production (Open Area) and a 10-year production period extension until 2039, as well as securing an additional gas volume of at least 30 MMSCFD until 2025 to satisfy Thailand's gas demand.

On August 31, 2022, PTTEP Netherlands Holding Coöperatie U.A. (PTTEP NH) and PTTEP Brazil Investment B.V. (PTTEP BI), subsidiaries of PTTEP, entered into a Sale and Purchase Agreement (SPA) to sell their investments in PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL), which were registered in Brazil, altogether with all obligations to Ubuntu Engenharia e Serviços Ltda. PTTEP BL was holding a 25 percent interest in the Barreirinhas AP1 Project and a 20 percent interest in the Brazil BM-ES-23 Project. The divestment was completed and effective from February 23, 2023, after the fulfillment of conditions prescribed in the SPA. This marks the complete withdrawal of PTTEP Group's investment in Brazil.

On October 25, 2022, the Government of the Republic of the Union of Myanmar (Myanmar) approved the relinquishment of exploration blocks of Myanmar MD-7 project, at a 50 percent participating interest, after fulfillment of the requirements of the Production Sharing Contract, the relinquishment request was submitted in October 2020.

On October 26, 2022, PTTEP MENA Limited (PTTEP MENA), a subsidiary of PTTEP, signed Farm-in/Farm-out Agreement to acquire a 25 percent stake in the Sharjah Onshore Area A Project from Eni Sharjah B.V. (Eni). The completion was on December 23, 2022. After completion, the participation interest for this project would be as follows: Eni (Operator) 50 percent, SNOC 25 percent, and PTTEP MENA 25 percent.

On November 21, 2022, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) reported that it had participated in the mediation process of the class action, as ordered by the Federal Court of Australia, and in line with the normal legal process under Australian Law. PTTEP AAA reached an in-principle agreement with the group of Indonesian seaweed farmers, that PTTEP AAA will pay AUD 192.5 Million (equivalent to approx. USD 129 Million) in full and final settlement of the class action (including PTTEP AAA's appeal). The in-principle settlement was made on a no admission of liability basis.

On November 22, 2022, PTTEP Group established Xplor Ventures Company Limited (XPV) to support future investments.

On December 16, 2022, PTTEP (Angola) Corporation (PANG), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to sell its entire 2.5 percent participation interest in Block 17/06 Project in Angola to SOMOIL BLOCO 17/06 (SU), S.A., a wholly-owned subsidiary of Sociedade Petrolifera Angolana, S.A (SOMOIL). The divestment was completed and effective from December 22, 2023, after the fulfillment of conditions prescribed in the SPA. This marks the complete withdrawal of PTTEP Group's investment in Angola.

On December 22, 2022, PTTEP Group announced successful gas discovery at the second exploration well, Paprika-1, in Malaysia SK410B Project, located in offshore Sarawak, Malaysia. PTTEP Group will conduct further studies in order to evaluate future development plan.

On December 23, 2022, PTTEP Group dissolved an inactive subsidiary, namely Participations and Explorations Corporation (PEC), in order to improve operational efficiency and minimize administrative costs with no impact on PTTEP Group's operations.

On December 30, 2022, PTTEP Group dissolved an inactive subsidiary, namely PTTEP South Sageri Limited (PTTEP SS), in order to improve operational efficiency and minimize administrative costs with no impact on PTTEP Group's operations.

Year 2023

On January 10, 2023, PTTEP Group established subsidiaries to develop artificial intelligence and new technology business, namely Bedrock Analytics Company Limited (Bedrock), in order to support the Geospatial Location Intelligence Platform and AI Technology to provide advanced location insights, and Bind Systems Company Limited (Bind) to support Web 3.0 technology to provide security, privacy, and seamless access to Digital Identity and Personal/Enterprise data.

On January 10, 2023, PTTEP Group established a subsidiary to develop and commercialize Artificial Intelligence business, namely S2 Robotics Company Limited (S2), which provides subsea pipeline maintenance services using AI and Robotics, so called Nautilus, with reduced risks and repair time.

On February 15, 2023, PTTEP Sarawak Oil Limited (PTTEP SKO), a wholly-owned subsidiary of PTTEP Group, along with PETRONAS Carigali Sdn. Bhd. (PCSB), and Petroleum Sarawak Exploration & Production Sdn. Bhd. (PSEP) were awarded the exploration Block SK325 from Malaysia Bid Round 2022. The consortium entered into a Production Sharing Contract (PSC) with Petroliam Nasional Berhad (PETRONAS), with the participation interests for PCSB at 60 percent as the operator, PTTEP SKO at 32.5 percent, and PSEP at 7.5 percent respectively.

On February 23, 2023, the Federal Court of Australia approved an in-principle agreement to settle the class action following the mediation agreement between PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) and the group of Indonesian seaweed farmers, ordered on November 21, 2022. The approach to the distribution of the settlement amount of AUD 192.5 million (equivalent to approx. USD 129 million) to the group members remains the subject of further orders of the Federal Court of Australia. Following the court's determination of those issues, the settlement sum will be paid as per agreed procedures.

On February 23, 2023, the divestment of PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL) was completed after the conditions precedent to completion prescribed in the Sale and Purchase Agreement, which had been entered into on August 31, 2022, had been fulfilled.

On March 3, 2023, PTTEP Group dissolved inactive subsidiaries, namely PTTEP Australia Pty Ltd (PTTEP AU) and PTTEP Australia Offshore Pty Ltd (PTTEP AO), in order to improve operational efficiency and minimize administrative costs. This has no impact on PTTEP Group's operations.

On March 7, 2023, PTTEP Energy Development Company Limited (PTTEP ED), a subsidiary of PTTEP, won the rights for petroleum exploration and production according to the Ministry of Energy's announcement of the result of the 24th Bid Round for Offshore Exploration Blocks in the Gulf of Thailand. On June 1, 2023, PTTEP ED signed the Production Sharing Contract (PSC) for G1/65 and G3/65 Project with 100 percent interest and PTTEP ED as the operator of both blocks, and the PSC would be effective starting from such date. This achievement aligns with PTTEP's investment strategy, which aims to promote growth in strategic focus areas.

On March 29, 2023, PTTEP Group dissolved an inactive subsidiary, namely Partex (Brazil) Corporation (PBC), in order to improve operational efficiency and minimize administrative costs. This has no impact on PTTEP Group's operations.

On May 10, 2023, PTTEP Group successfully completed the issuance of senior guaranteed debentures with a bondholders' representative to institutional investors for THB 1,500 million through PTTEP Treasury Center Company Limited (PTTEP TC), a wholly-owned subsidiary of PTTEP Group, for three-year period carrying the coupon rate of 2.51 percent per annum and is fully guaranteed by PTTEP. The debentures are one of the first issuance via Web Portal under the Digital Infrastructure, developed by the Securities and Exchange Commission, Thailand (SEC), which digitizes bond issuance process, to enhance efficiency and security.

On May 11, 2023, PTTEP Group reported to the Stock Exchange of Thailand that the Company had a plan to manage liability exercise to ensure efficiency in financial management and in response to the current market conditions. The exercise consisted of transferring all outstanding debenture of the USD 490,000,000 Senior Debentures due in 2042 (the 2042 Notes) issued by PTTEP Canada International Finance Limited (PTTEP CIF) and guaranteed by PTTEP to PTTEP Treasury Center Company Limited (PTTEP TC). Concurrently, PTTEP CIF would like to make an offer to partially repurchase the 2042 Notes and PTTEP TC to make an offer to partially repurchase the USD 650,000,000 Senior debentures, guaranteed by PTTEP (the 2059 Notes). On June 12, 2023, the required consents have been obtained from the bondholders to amend the indenture of the 2042 Notes and PTTEP CIF has completed the transfer of all outstanding 2042 Notes to PTTEP TC. In addition, PTTEP Group would like to announce the result of the repurchase: USD 31,894,000 for the 2042 Notes and USD 50,000,000 for the 2059 Notes, resulting in a remaining outstanding principal amount of USD 458,106,000 and USD 600,000,000 for each respective debenture.

On June 21, 2023, PTTEP Group was awarded the Green Hydrogen Concession Block in the Sultanate of Oman (Oman) and entered into the Project Development Agreement and Sub-Usufruct Agreement with Hydrogen Oman SPC (Hydrom) for the exclusive business development and production rights of green hydrogen project in Block Z1-02 for 47 years, together with consortium partners, consisting of the FutureTech Energy Ventures Company Limited (FTEV), a wholly-owned subsidiary of PTTEP Group, together with POSCO Holdings, Samsung Engineering Co., Ltd., Korea East-West Power Co., Ltd., Korea Southern Power Co., Ltd., and MESCAT Middle East DMCC. The consortium will further carry out the feasibility and technical studies, in order to finalize the total capital expenditure requirement for the project.

On August 18, 2023, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to sell its entire interests in petroleum retention lease, Cash Maple (AC/RL7), to INPEX Cash Maple Pty Ltd and TotalEnergies Exploration Australia Pty Ltd. PTTEP AAA was holding 100 percent interests in the retention lease. The sale transaction was completed on December 22, 2023, after the conditions precedent as prescribed in the Sale and Purchase Agreement had been satisfied.

On August 31, 2023, PTTEP Group dissolved an inactive subsidiary, namely PTTEP G7 Limited (PTTEP G7), in order to improve operational efficiency and minimize administrative costs. This has no impact on PTTEP Group's operations.

On September 1, 2023, PTTEP International Limited (PTTEPI), a subsidiary of PTTEP, signed an agreement to acquire a 33.3333 percent stake in block G12/48 from TotalEnergies EP Thailand. After completion, PTTEPI, which is the operator, will hold 100 percent interest in the block.

On September 29, 2023, PTTEP Sarawak Oil Limited (PTTEP SKO), a subsidiary of PTTEP, entered into a Farm-out Agreement to transfer 10 percent of its participating interest in Block SK405B Production Sharing Contract (PSC) to PETRONAS Carigali Sdn Bhd (PCSB). The divestment was completed and effective from April 30, 2024, after the fulfillment of conditions prescribed in the SPA. After completion, the participation interests in the project are PTTEP SKO (Operator) at 49.5 percent, PCSB at 25 percent, and MOECO Oil (Sarawak) Sdn. Bhd. at 25.5 percent.

On December 7, 2023, PTTEP Group announced that New oil and natural gas discoveries had been made in three fields, offshore Sarawak, Malaysia, including Chenda-1 exploration well in Block SK405B, Bangsawan-1 and Babadon-1 exploration wells in Block SK438, especially Babadon-1 revealing massive sweet gas sandstone reservoirs with net thickness approximately 200 meters, considered as a sizable field in the offshore Sarawak region which PTTEP has discovered in Malaysia, following the earlier achievement at the Lang Lebah Field. Furthermore, PTTEP had achieved a positive outcome with Sirung-2 appraisal well in Block SK405B, with affirmed petroleum potential resources. This success followed the prior discovery of oil and gas in Sirung-1 exploration well in 2021. The project is now moving towards the Pre-Front End Engineering Design (Pre-FEED).

On December 11, 2023, PTTEP Group established FutureTech SG Pte. Ltd. (FSG) with a registered capital of USD 50,000, consisting of 50,000 ordinary shares at USD 1 each, to support future investments in the new business for energy transition. This company is wholly owned by the FutureTech Energy Ventures Company Limited (FTEV), a subsidiary of PTTEP. Hence, FSG is also a subsidiary of PTTEP.

On December 21, 2023, FutureTech SG Pte. Ltd. (FSG), a wholly-owned subsidiary of PTTEP Group, entered into a Share Purchase Agreement (SPA) to acquire 50 percent share capital in TotalEnergies Renewables Seagreen Holdco Ltd (TERSH), currently renamed as Renewable Energy Seagreen HoldCo Limited (RESH), from TotalEnergies Renewables UK Ltd (TERUK), a subsidiary in TotalEnergies SE (TotalEnergies), for a total estimated investment of approximately GBP 522 million (equivalent to approximately USD 689 million), subject to customary net working capital and closing adjustments from the signing date until completion. TotalEnergies Group will maintain its holding of the remaining 50 percent shares in RESH. Presently, RESH holds a 51 percent stake in the Seagreen Offshore Wind Farm project, located in the North Sea, off the coast of Scotland, United Kingdom. The project has 114 turbines with a total generating capacity of approximately 1.1 GW, the largest offshore wind farm in Scotland. The project commenced its full operation in October 2023. SSE Renewables Services (UK) Ltd., an experienced renewable energy company from Scotland, is the operator and holds the remaining 49 percent stake in the project. This acquisition was completed and effective from May 31, 2024, after the fulfillment of conditions prescribed in the SPA. After the completion, PTTEP Group and TotalEnergies indirectly hold 25.5 percent and 25.5 percent investment in the project respectively.

On December 22, 2023, PTTEP Group announced that the divestment of 2.5 percent interest in Block 17/06 Project in Angola to SOMOIL BLOCO 17/06 (SU), S.A., renamed as ETU ENERGIAS – BLOCO 17/06 (SU), S.A., a subsidiary of Sociedade Petrolifera Angolana, S.A. (renamed to ETU ENERGIAS, S.A.), had been completed. The conditions precedent, as prescribed in the Sale and Purchase Agreement had already been fulfilled, and the sale transaction was completed. A Sale and Purchase Agreement (SPA) was signed on December 16, 2022.

On December 29, 2023, PTTEP Group dissolved an inactive subsidiary, namely PTTEP South Mandar Limited, in order to improve operational efficiency and minimize administrative costs. This has no impact on PTTEP Group's operations.

On December 31, 2023, PTTEP Group dissolved an inactive subsidiary, namely PTTEP Canada International Finance Limited, in order to improve operational efficiency and minimize administrative costs. This has no impact on PTTEP Group's operations.

Year 2024

On March 2, 2024, PTTEP Group dissolved an inactive subsidiary, namely PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS), in order to improve operational efficiency and minimize administrative costs. This has no impact on PTTEP Group's operations.

On April 5, 2024, PTTEP Group announced that Unocal Myanmar Offshore Company Limited (UMOC), a wholly-owned subsidiary of Chevron Group, had decided to withdraw its investment in the Yadana project. All withdrawal processes were subsequently fulfilled on April 5, 2024. Following the withdrawal, UMOC's participating interest was distributed to the remaining partners, resulting in PTTEP's participating interest of 62.9630 percent in the Yadana project, effective from April 1, 2024.

On April 30, 2024, the partial divestment of 10 percent of participating interest in Block SK405B Production Sharing Contract (PSC) of PTTEP Sarawak Oil Limited (PTTEP SKO), a subsidiary of PTTEP to PETRONAS Carigali Sdn. Bhd. (PCSB) was completed after the conditions precedent as prescribed in the Farm-Out Agreement had been satisfied. With this transfer, the new participating interest shall be as follows: PTTEP SKO (Operator) 49.5 percent, Moeco Oil (Sarawak) Sdn. Bhd. 25.5 percent, and PCSB 25 percent. The Farm-Out Agreement for this divestment was entered into since September 29, 2023

On May 31, 2024, the investment in the Seagreen Offshore Wind Farm project in Scotland, United Kingdom of FutureTech SG Pte. Ltd. (FSG), a wholly-owned subsidiary of PTTEP Group through the acquisition of share capital in TotalEnergies Renewables Seagreen Holdco Ltd (TERSH), currently renamed to Renewable Energy Seagreen HoldCo Limited (RESH), from TotalEnergies Renewables UK Ltd (TERUK), a subsidiary in TotalEnergies SE (TotalEnergies) was completed after the conditions precedent to completion prescribed in the Sale and Purchase Agreement (SPA) had been fulfilled. PTTEP Group and TotalEnergies indirectly hold 25.5 percent and 25.5 percent investment in the project respectively. The SPA had been entered into since December 21, 2023.

On June 10, 2024, PTTEP MENA Limited (PTTEP MENA), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to acquire a 10 percent stake in the Ghasha Concession in United Arab Emirates (UAE) from Wintershall Dea Middle East GmbH. The conditions precedent as prescribed in the SPA, including necessary regulatory approval, had been satisfied, with the completion date of this transaction occurring on June 11, 2024. The Ghasha Concession is a significant natural gas field located in shallow waters off the western coast of Abu Dhabi, United Arab Emirates, with Abu Dhabi National Oil Company (ADNOC) as the operator. It encompasses nine petroleum fields where petroleum potential has been discovered. Some of these fields are currently in the development phase under concession, where reserves addition can be recognized immediately. This Concession is set to produce more than 1.5 billion standard cubic feet per day (BSCFD) of natural gas before the end of 2030.

On August 27, 2024, PTTEP Group established PTTEP Joint Ventures Company Limited (PTTEP JV) with registered capital of THB 1,000,000, divided into 10,000 ordinary shares with a value of THB 100 each. This entity has been set up to support PTTEP's future investment and is wholly owned by PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH), a subsidiary of PTTEP. As a result, PTTEP Joint Ventures Company Limited is also a subsidiary of PTTEP.

On August 28, 2024, PTTEP Group established PTTEP Joint Development Company Limited (PTTEP JD) with a registered capital of THB 1,000,000, divided into 10,000 ordinary shares with a value of THB 100. This entity has been set up to support PTTEP's future investment and is wholly owned by the PTTEP Joint Ventures Company Limited (PTTEP JV), a subsidiary of PTTEP. As a result, PTTEP JD is also a subsidiary of PTTEP.

On September 17, 2024, PTTEP Mexico E&P Limited, S. de R.L. de C.V (PTTEP MEP), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to sell its entire participation interest of 16.67 percent in Mexico Block 29 (2.4) Project, in Mexico, to REPSOL EXPLORACIÓN MÉXICO, S.A. DE C.V. The completion of this transaction is subject to the conditions prescribed in the SPA.

On November 15, 2024, PTTEP Group established PTTEP SG Holding Pte. Ltd. (PTTEP SH) with a registered capital of USD 50,000, divided into 50,000 ordinary shares with a value of USD 1 each. This entity has been set up to support PTTEP's future investment and is wholly owned by PTTEP Business Center Company Limited (PTTEP BC), a subsidiary of PTTEP. As a result, PTTEP SG Holding Pte. Ltd. is also a subsidiary of PTTEP.

On December 20, 2024, PTTEP SG Holding Pte. Ltd. (PTTEP SH), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to acquire 34 percent share capital in E&E Algeria Touat B.V. from ENGIE International Corporation B.V. (ENGIE). The completion of this transaction is subject to the conditions precedent as prescribed in the SPA, including necessary regulatory approval. Upon the completion, PTTEP will indirectly hold a 22.1 percent investment in Touat Project. Other partners in the Project are Eni Energy Touat Holding B.V., a subsidiary of ENI, holding a 42.9 percent share and SONATRACH S.P.A., Algeria's national oil company, with a 35 percent stake. Touat Project is the natural gas

producing field, under the Production Sharing Contract (PSC), located in onshore Timimoun petroleum basin in Algeria, with estimated remaining natural gas reserves and condensate of 1.92 trillion cubic feet and 5.4 million barrels of oil equivalent respectively (as of January 1, 2024). Gas production commenced in 2019 with a current production capacity a approximately 435 MMSCFD with a potential production ramp-up in coming years.

1.2.4 Use of Proceeds

As of December 31, 2024, details on the use of proceeds are as follows:

Domestic Bonds

The funds derived from all baht bonds of PTTEP, PTTEP296A and PTTEP26NA, and of PTTEP TC (guaranteed by PTTEP), PTTEPT274A, PTTEPT294A, PTTEPT324A, and PTTEPT265A, were fully utilized according to the objectives stated in the indenture and offering documents.

Foreign Bonds

The funds derived from all USD bonds of PTTEP TC (guaranteed by PTTEP), consisting of USD 458 million Bond issued in 2012, USD 600 million Bond issued in 2019, USD 350 million Bond issued in 2020, and USD 500 million Bond issued in 2020, were fully utilized according to the objectives stated in the indenture and offering documents.

1.2.5 PTTEP's Obligations According to Bond Issuance

- None -

1.2.6 Revenue Structure

PTTEP and our subsidiaries generate revenues primarily from sales of petroleum products, the prices of which are pegged to the world fuel price in US Dollar. Thus, PTTEP and its subsidiaries' revenue structure of 2022-2024 is presented in US Dollar to reflect the Company's revenue structure. The petroleum exploration and production projects in the production phase of PTTEP and its subsidiaries in 2024 are G1/61, G2/61, Arthit, S1, Contract 4, PTTEP1, L22/43, L53/43 & L54/43, E5, G4/43, Sinphuhorm, B8/32 & 9A, G4/48, G12/48, MTJDA, Zawtika, Yadana, Projects in Malaysia, Vietnam 9-2, Vietnam 16-1, Natuna Sea A, Dunga, Oman Block 61, Oman Block 6, Oman Block 53, Algeria 433a & 416b, and Algeria Hassi Bir Rekaiz.

In addition, PTTEP and our subsidiaries proportionately recognize revenues from gas pipeline transportation from Moattama Gas Transportation Company (MGTC) and Andaman Transportation Limited (ATL). Moreover, there is diversification to Beyond E&P businesses, including Green Hydrogen Project, Offshore Wind Farm Project, Carbon Capture and Storage (CCS) Project, Solar Power Project, together with AI and Robotics Technology Business. The Company has set strategic directions by focusing on the sustainability of E&P business together with venturing into Beyond E&P business during the energy transition and to reduce greenhouse gas emissions.

Revenue Structure of PTTEP and Our Subsidiaries during 2022–2024

Product	Operated by	% of shares held by the Company	2022		2023		2024	
			Revenue (million US dollar)	%	Revenue (million US dollar)	%	Revenue (million US dollar)	%
Revenue from sales								
Crude oil	PTTEP	-	290.46	3.00	382.57	4.20	430.02	4.62
	PTTEPI[1]	100	54.34	0.56	40.87	0.45	64.59	0.69
	PTTEP Siam	100	635.63	6.57	510.36	5.61	528.84	5.68
	PTTEP ED[2]	100	88.52	0.91	178.09	1.96	-	-
	Orange	53.9496	65.08	0.67	28.45	0.31	55.92	0.60
	B8/32 Partners	25.0009	30.16	0.31	13.18	0.14	25.91	0.28
	PTTEP HV	100	28.66	0.30	32.82	0.36	20.61	0.22
	PTTEP HL	100	130.64	1.35	96.30	1.06	78.68	0.85
	Natuna	50	2.47	0.03	2.95	0.03	1.78	0.02
	PTTEP AG	100	86.31	0.89	66.83	0.73	64.28	0.69
	PTTEP SBO	100	403.97	4.17	273.73	3.01	253.22	2.72
	PTTEP SKO[3]	100	216.64	2.24	164.60	1.81	136.20	1.46
	POC	100	468.00	4.83	407.45	4.48	411.85	4.42
	PKC	100	49.92	0.52	38.28	0.42	64.62	0.69
Natural gas	PTTEP Siam	-	2,281.46	23.57	1,447.39	15.91	1,107.23	11.89
	PTTEP ED[2]	100	1,078.50	11.14	1,109.10	12.19	1,190.82	12.79
	Orange	100	51.77	0.53	38.25	0.42	44.32	0.48
	B8/32 Partners	100	278.63	2.88	966.26	10.62	1,390.70	14.94
	PTTEP HV	53.9496	18.85	0.19	10.18	0.11	22.74	0.24
	PTTEP HL	25.0009	8.74	0.09	4.72	0.05	10.54	0.11
	Natuna	100	1.60	0.02	1.23	0.01	1.22	0.01
	PTTEP SP	100	0.71	0.01	0.92	0.01	0.70	0.01
	Natuna	50	72.70	0.75	52.17	0.57	44.60	0.48
	PTTEP SP	100	194.74	2.01	208.08	2.29	237.53	2.55

Product	Operated by	% of shares held by the Company	2022		2023		2024	
			Revenue (million US dollar)	%	Revenue (million US dollar)	%	Revenue (million US dollar)	%
	PTTEP SBO	100	201.31	2.08	155.93	1.71	159.28	1.71
	PTTEP SKO[3]	100	149.04	1.54	130.78	1.44	93.43	1.00
	PTTEP MENA	100	326.04	3.37	225.17	2.47	244.12	2.62
	PKC	100	0.01	0.00	-	-	0.01	0.00
LPG	PTTEP	-	7.41	0.08	7.38	0.08	8.06	0.09
	PTTEP Siam	100	22.24	0.23	22.15	0.24	24.17	0.26
	PGC	100	47.92	0.50	36.62	0.40	38.90	0.42
Condensate	PTTEP	-	1,119.38	11.56	639.44	7.03	480.33	5.16
	PTTEPI[1]	100	123.72	1.31	114.99	1.26	128.74	1.38
	PTTEP Siam	100	1.29	0.01	0.85	0.01	0.88	0.01
	PTTEP ED[2]	100	162.57	1.68	472.75	5.20	743.19	7.98
	PTTEP SP	100	81.29	0.84	66.14	0.73	59.55	0.64
	PTTEP SBO	100	4.09	0.04	2.99	0.03	2.57	0.03
	PTTEP SKO[3]	100	13.48	0.15	11.77	0.14	7.31	0.08
	PTTEP MENA	100	298.47	3.08	149.32	1.64	148.43	1.59
Naphtha	PGC	100	22.37	0.23	18.70	0.21	18.81	0.20
Deemed income for tax payment by the Oman government	PTTEP MENA	100	148.43	1.53	381.32	4.19	352.25	3.78
	POC	100	-	-	-	-	1.49	0.02
Total revenue from sales			**9,270.56**	**95.77**	**8,511.08**	**93.53**	**8,698.46**	**93.41**
Revenue from pipeline transportation								
Pipeline transportation	MGTC[4]	62.9630	99.60	1.03	75.76	0.83	94.85	1.02
	TPC	19.3178	0.21	0.00	-	-	-	-
	ATL	80	51.11	0.53	52.31	0.57	48.99	0.53
Total revenue from pipeline transportation			**150.92**	**1.56**	**128.07**	**1.40**	**143.84**	**1.55**
Other income								
Gain on foreign exchange rates			-	-	48.13	0.53	6.49	0.07

Product	Operated by	% of shares held by the Company	2022		2023		2024	
			Revenue (million US dollar)	%	Revenue (million US dollar)	%	Revenue (million US dollar)	%
Gain on remeasuring of financial instruments			-	-	-	-	11.09	0.12
Gain on disposal of participating interests			-	-	73.24	0.81	-	-
Interest income			44.03	0.45	152.27	1.67	238.34	2.56
Other income			195.14	2.02	144.55	1.59	174.59	1.88
Total other income			239.17	2.47	418.19	4.60	430.51	4.63
Total revenues			9,660.65	99.80	9,057.33	99.53	9,272.81	99.59
Share of profit of associates and joint ventures			19.56	0.20	42.56	0.47	37.75	0.41
Grand total after inclusion of share of profit of associates and joint ventures			9,680.21	100.00	9,099.89	100.00	9,310.56	100.00

Remarks:

1 Unocal Myanmar Offshore Company Limited, a partner of Yadana project with a participating interest of 41.1016 percent, decided to withdraw all investments. As a result, from April 1, 2024, onwards, PTTEP International Limited (PTTEPI), a subsidiary of the Company and an operator of this project, increased the participating interest to 62.963 percent in Yadana project. The withdrawal processes were subsequently fulfilled on April 5, 2024.

2 On June 17, 2024, PTTEP Energy Development Company Limited (PTTEP ED), a subsidiary of the Group, complied with the Production Sharing Contract (PSC) requirement to maintain a production level of 800 million standard cubic feet per day continuously for 90 days. On August 9, 2024, PTTEP ED received a letter of guarantee from the Department of Mineral Fuels.

3 On September 29, 2023, PTTEP Sarawak Oil Limited (PTTEP SKO), a subsidiary of the Group, signed a Farm-Out Agreement with PETRONAS Carigali Sdn. Bhd. (PCSB) to dispose of a 10 percent participating interest in Block SK405B Production Sharing Contract (PSC), located offshore Sarawak in Malaysia. The sale transaction was completed on April 30, 2024, and PTTEP SKO remains the operator with a 49.5 percent participating interest.

4 Chevron Global Ventures Ltd., a shareholder of Moattama Gas Transportation Company Limited (MGTC) with a participating interest of 41.1016 percent, decided to withdraw all investments. As a result, from April 1, 2024, onwards, PTTEP Offshore Investment Company Limited (PTTEPO), a subsidiary of the Company and an operator of this project, increased the participating interest to 62.963 percent in MGTC. The withdrawal processes were subsequently fulfilled on April 5, 2024.

In 2024, PTTEP and its subsidiaries reported total revenues of USD 9,273 million (equivalent to THB 327,415 million), an increase of USD 216 million or two percent compared to the total revenues of USD 9,057 million in 2023 (equivalent to THB 315,216 million). The main reason was an increase in revenue from sales by USD 187 million, according to a higher average sales volume by 6 percent, mainly from the ramp-up in natural gas production of G1/61 Project to 800 MMSCFD in March 2024, along with the increase in participating interest in Yadana Project following a partner's withdrawal in April 2024. However, it was offset with the average selling price decrease by three percent to 46.78 USD/BOE (2023: 48.21 USD/BOE).

1.2.7 Products and Services

(1) Petroleum Exploration and Production

Petroleum Products

Petroleum is defined as a naturally occurring hydrocarbon mixture, including crude oil, natural gas, condensate, related products, and other hydrocarbon products which are naturally occurred and in a free state.

Crude Oil is the portion of petroleum that remains in liquid form at atmospheric pressure and temperature. It is obtained directly from oil wells and separation process, yet to be refined or purified.

Natural Gas is a hydrocarbon mixture in gas or vapor state at atmospheric temperature and pressure. Natural gas usually contains methane as its major component.

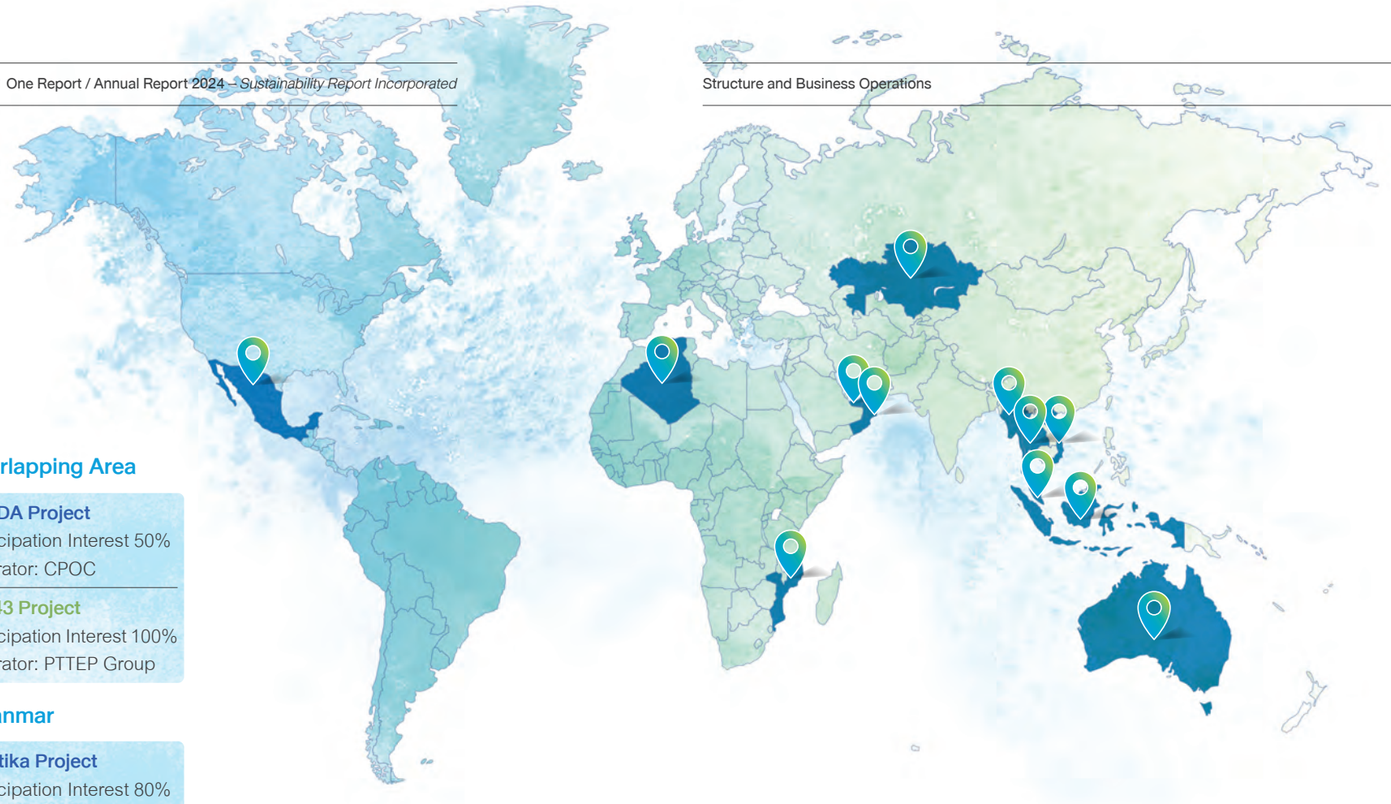
Condensate is a low-density liquid hydrocarbon mixture, as a result of condensation from hydrocarbon gas occurred when the gas is produced at the surface where temperature and pressure are lower than those in the reservoir.

Natural Gas Liquids (NGLs) are components of natural gas that are separated from the gas state in the form of liquid. This separation occurs in a field facility or a gas processing plant. There are several types of natural gas liquids including Liquefied Petroleum Gas (LPG), which is obtained from crude oil refinery or natural gas separation process, and primarily consisting of Butane and Propane.

Crude oil, Condensate, and NGL are measured in barrel, while natural gas is measured in cubic foot at the standard conditions (1 atm at 60 degrees Fahrenheit). All petroleum products can be converted to Barrel of Oil Equivalent (BOE) based on their heat contents. One cubic foot of natural gas has a heating value of approximately 1,000 British thermal units (BTU), whereas one barrel of crude oil has a heating value of approximately 6,000,000 BTU.

Business Overview

PTTEP Group's core business is the exploration and production of petroleum in Thailand and overseas. As of December 31, 2024, PTTEP Group had petroleum exploration and production projects in 12 countries with details as follows:



Thailand[1, 2]

- **G1/61 Project**
  Participation Interest 60%
  Operator: PTTEP Group
- **G2/61 Project**
  Participation Interest 100%
  Operator: PTTEP Group
- **Arthit Project**
  Participation Interest 80%
  Operator: PTTEP Group
- **S1 Project**
  Participation Interest 100%
  Operator: PTTEP Group
- **Contract 4 Project**
  Participation Interest 60%
  Operator: Chevron
- **PTTEP1 Project**
  Participation Interest 100%
  Operator: PTTEP Group
- **B6/27 Project[3]**
  Participation Interest 100%
  Operator: PTTEP Group
- **L22/43 Project**
  Participation Interest 100%
  Operator: PTTEP Group
- **L53/43 & L54/43 Project**
  Participation Interest 100%
  Operator: PTTEP Group
- **E5 Project**
  Participation Interest 20%
  Operator: ExxonMobil
- **G4/43 Project**
  Participation Interest 21.375%
  Operator: Chevron
- **Sinphuhorm Project**
  Participation Interest 80.48%
  Operator: PTTEP Group
- **B8/32 & 9A Project**
  Participation Interest 25.001%
  Operator: Chevron
- **G4/48 Project**
  Participation Interest 5%
  Operator: Chevron
- **G12/48 Project[4]**
  Participation Interest 67.6667%
  Operator: PTTEP Group
- **G1/65 Project**
  Participation Interest 100%
  Operator: PTTEP Group
- **G3/65 Project**
  Participation Interest 100%
  Operator: PTTEP Group

Overlapping Area

- **MTJDA Project**
  Participation Interest 50%
  Operator: CPOC
- **G9/43 Project**
  Participation Interest 100%
  Operator: PTTEP Group

Myanmar

- **Zawtika Project**
  Participation Interest 80%
  Operator: PTTEP Group
- **Yadana Project[5]**
  Participation Interest 62.963%
  Operator: PTTEP Group
- **Myanmar M3 Project**
  Participation Interest 100%
  Operator: PTTEP Group

Malaysia[6]

- **Malaysia Block K Project**
  Participation Interest 7.1666-56%
  Operator: PTTEP Group and Shell
- **Malaysia SK309 and SK311 Project**
  Participation Interest 42-59.5%
  Operator: PTTEP Group
- **Malaysia Block H Project**
  Participation Interest 42-56%
  Operator: PTTEP Group
- **Malaysia SK410B Project**
  Participation Interest 42.5%
  Operator: PTTEP Group
- **Malaysia SK417 Project**
  Participation Interest 80%
  Operator: PTTEP Group
- **Malaysia SK405B Project[7]**
  Participation Interest 49.5%
  Operator: PTTEP Group and shell
- **Malaysia SK438 Project**
  Participation Interest 80%
  Operator: PTTEP Group
- **Malaysia SK314A Project**
  Participation Interest 59.5%
  Operator: PTTEP Group
- **Malaysia SK325 Project**
  Participation Interest 32.5%
  Operator: PCSB
- **Malaysia SB412 Project**
  Participation Interest 60%
  Operator: PTTEP Group

Vietnam

- **Vietnam 9-2 Project**
  Participation Interest 25%
  Operator: HV JOC
- **Vietnam 16-1 Project**
  Participation Interest 28.5%
  Operator: HL JOC
- **Vietnam B & 48/95 Project**
  Participation Interest 8.5%
  Operator: Vietnam Oil and Gas Group
- **Vietnam 52/97 Project**
  Participation Interest 7%
  Operator: Vietnam Oil and Gas Group

Indonesia

- **Natuna Sea A Project**
  Participation Interest 11.5%
  Operator: Harbour Energy

Kazakhstan

- **Dunga Project**
  Participation Interest 20%
  Operator: Dunga Operating GmbH

Oman

- **Oman Block 61 Project**
  Participation Interest 20%
  Operator: BP
- **Oman Block 6 Project (PDO)**
  Participation Interest 2%
  Operator: Petroleum Development Oman
- **Oman Block 53 Project**
  Participation Interest 1%
  Operator: Occidental
- **Oman Onshore Block 12 Project**
  Participation Interest 20%
  Operator: TotalEnergies

UAE[8,9]

- **Ghasha Concession[10]**
  Participation Interest 10%
  Operator: ADNOC
- **Abu Dhabi Offshore 1 Project**
  Participation Interest 30%
  Operator: Eni
- **Abu Dhabi Offshore 2 Project**
  Participation Interest 30%
  Operator: Eni
- **Abu Dhabi Offshore 3 Project**
  Participation Interest 30%
  Operator: Eni

Phase

- Exploration
- Development
- Production

Algeria[12]

- **Algeria 433a & 416b Project**
  Participation Interest 35%
  Operator: GBRS
- **Algeria Hassi Bir Rekaiz Project**
  Participation Interest 49%
  Operator: GHBR

Mozambique

- **Mozambique Area 1 Project**
  Participation Interest 8.5%
  Operator: TotalEnergies

Australia

- **PTTEP Australasia Project[13]**
  Participation Interest 100%
  Operator: PTTEP Group

Mexico

- **Mexico Block 12 (2.4) Project[14]**
  Participation Interest 20%
  Operator: PETRONAS
- **Mexico Block 29 (2.4) Project[15]**
  Participation Interest 16.67%
  Operator: Repsol

1 The concessions of Bongkot Project Block B16 and Block B17, with PTTEP Group's participating interest at 66.6667 percent, ended on March 7, 2023. The operatorship has been transferred to PTTEP Energy Development Company Limited (PTTEP ED) under G2/61 Production Sharing Contract (PSC). However, the concessionaire still has joint decommissioning obligations as required by relevant laws.

2 The concession of Contract 3 Project, with PTTEP Group's participating interest at 5 percent, ended on April 23, 2022. The operator had submitted the block relinquishment. However, all partners in the project still have joint decommissioning obligations as required by relevant laws.

3 On February 5, 2023, the concession of B6/27 Project, which PTTEP Group holds 100% participating interests, has ended. PTTEP Group returned the block. However, the concessionaire still has joint obligations for decommissioning until it has been finished as required by the specific laws.

4 On September 1, 2023, the company entered into a Sale and Purchase Agreement (SPA) to acquire additional interest of 33.3333 percent from TotalEnergies EP Thailand. Upon completion of the acquisition, which is expected in the first quarter of 2025, PTTEP's interest will increase to 100 percent.

5 Unocal Myanmar Offshore Company Limited (UMOC), a subsidiary of Chevron Group, had decided to withdraw its investment in the Yadana Project. All withdrawal processes were subsequently fulfilled on April 5, 2024. Following the withdrawal, UMOC's participating interest was distributed to the remaining partners, resulting in PTTEP's participating interest increase to 62.9630 percent, effective from April 1, 2024.

6 The first exploration period of Malaysia PM407 Project, in which PTTEP Group held 55 percent participating interest and was the operator, ended on March 20, 2024, with no petroleum potential discovered. PTTEP submitted the block relinquishment, which had already been approved by the Malaysian Government.

7 The partial divestment of 10 percent of participating interest in SK405B Project, held by PTTEP Sarawak Oil Limited (PTTEP SKO), a subsidiary of PTTEP, to PETRONAS Carigali Sdn. Bhd. (PCSB) was completed and effective from April 30, 2024, where PTTEP SKO's remaining participating interest is 49.5 percent and is still the operator.

8 The first exploration period of Sharjah Onshore Area A Project in the UAE, in which PTTEP Group holds a 25 percent participating interest, ended on September 30, 2024, with no petroleum potential discovered. The block was then returned to the government, and the concession was terminated.

9 The second exploration period of Sharjah Onshore Area C Project in the UAE, in which PTTEP Group holds a 25 percent participating interest, ended on December 31, 2024, with no petroleum potential discovered. The block was then returned to the government, and the concession was terminated.

10 On June 10, 2024, PTTEP MENA Limited (PTTEP MENA), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to acquire a 10 percent stake in Ghasha Concession Project in UAE from Wintershall Dea Middle East GmbH. The acquisition has been completed and effective from June 11, 2024.

11 The first exploration phase of Abu Dhabi Offshore 1 Project in the UAE, in which PTTEP Group holds a 30 percent participating interest, ended on January 11, 2025, with no petroleum potential discovered. The block was then returned to the government, and the concession was terminated.

12 On December 20, 2024, PTTEP SG Holding Pte. Ltd. (PTTEP SH), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to acquire 34 percent of the share capital in E&E Algeria Touat B.V. from ENGIE International Corporation B.V. (ENGIE). The completion of this transaction is subject to the conditions precedent as prescribed in the SPA, including necessary regulatory approval. Upon the completion, PTTEP will indirectly hold a 22.1 percent investment in Touat Project, located in Algeria.

13 The only remaining project is Oliver Field (AC/RL12), in which PTTEP Group holds 100 percent participating interest. It is currently under the process of block relinquishment to the government, with the completion expected by the second quarter of 2025.

14 The minimum work commitment including exploration well drilling, as required under the concession of Mexico block 12 (2.4) Project, has been completed, with no petroleum potential discovered. The block relinquishment is currently underway, with completion expected by the second quarter of 2026.

15 On September 17, 2024, PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to sell its entire participation interest, at 16.67 percent, in Mexico Block 29 (2.4) Project to REPSOL EXPLORACIÓN MÉXICO, S.A. DE C.V. The completion of this transaction is subject to the fulfillment of conditions prescribed in the SPA, with completion expected by the first quarter of 2025.

Principal Projects in Operation

The following is a summary of the project activities carried out in 2024. The production figures provided below represent the total production (at 100 percent interest) for each respective project.

1) Project Activity Highlights in Thailand: Most of PTTEP Group's projects in Thailand are in the Production Phase, situated both in the Gulf of Thailand and onshore. Below are the key highlights of project activities in Thailand during 2024.

G1/61 Project

The G1/61 Project is a natural gas, condensate, and crude oil producing project located in the Gulf of Thailand. PTTEP Group holds a 60 percent participating interest and has served as the operator under the Production Sharing Contract (PSC) since April 24, 2022.

The daily gas production has been increased from 400 to 800 MMSCFD since March 20, 2024, with ongoing investment for additional wellhead platforms installation and production well drillings. In 2024, the average natural gas and condensate production was 682 MMSCFD (approximately 107,236 BOED) and 22,011 BPD respectively.

G2/61 Project

The G2/61 Project is a natural gas, and condensate producing project located in the Gulf of Thailand. PTTEP Group holds a 100 percent participating interest and has served as the operator under the Production Sharing Contract (PSC) since April 24, 2022.

In 2024, the average natural gas production was 730 MMSCFD (approximately 117,284 BOED), surpassing the production levels stipulated in the Production Sharing Contract (PSC) and Gas Sales Agreement (GSA), with ongoing production platforms construction and installation, and producing wells were also continuously drilled to sustain natural gas production.

Arthit Project

The Arthit Project is natural gas and condensate producing project located in the southern Gulf of Thailand. PTTEP Group holds an 80 percent participating interest in the project and is the operator.

In 2024, the project achieved production target to surpass Daily Contracted Quantity under the GSA and continued to drill the production wells in order to boost production. The average natural gas and condensate production was 292 MMSCFD (approximately 48,012 BOED) and 14,036 BPD respectively.

Block G8/50, located adjacent to Arthit Project in the north, is also operated by PTTEP Group with an 80 percent participating interest. Natural gas from the G8/50 Project is processed through the Arthit Project's central processing platform and sold under Arthit Project's GSA. Gas production of G8/50 Project has been suspended since March 2019. In 2024, the project was in the process of production well drillings, with production resumption anticipated to begin in 2025.

S1 Project

The S1 Project is the largest onshore oil field in Thailand, with the production area covering parts of Kamphaeng Phet, Sukhothai, and Phitsanulok provinces. PTTEP Group is the operator with a 100 percent interest. The project extension was officially approved for another 10 years of petroleum production period, from March 15, 2021, to March 14, 2031.

Products from the S1 Project consist of crude oil, natural gas, and liquefied petroleum gas (LPG). Crude oil produced at S1 is sold to PTT and is transported via truck and rail to the refineries of Thai Oil Public Company Limited, Bangchak Corporation Public Company Limited (Bangchak) refineries, PTT Global Chemical Public Company Limited, and IRPC Public Company Limited. The produced gas from the project is sold to PTT, UAC Global Public Company Limited, and Thai Housewives Product for Climate Change Protection Cooperative

Limited (TCCT), and the other part that undergoes LPG separation will be sold to PTT.

In 2024, the project continuously drilled development and production wells to sustain its production level. Environmental impact assessments were also undertaken in both existing and new production sites. The average crude oil, natural gas, and LPG production were 26,075 BPD, 3 MMSCFD (approximately 690 BOED), and 168 metric tons per day (approximately 1,400 BOED) respectively.

Contract 4 Project

The Contract 4 Project and Block G7/50 are located in the Gulf of Thailand. PTTEP Group holds a 60 percent interest in the project, with Chevron as the operator. All of the natural gas and condensate produced from the project is sold to PTT under long-term gas and condensate sales agreements.

In 2024, the average natural gas and condensate production was 395 MMSCFD (approximately 64,195 BOED) and 14,261 BPD respectively. The project continued to drill additional development wells aiming to sustain the production plateau.

PTTEP1 Project

The PTTEP1 Project is located in Suphan Buri and Nakhon Pathom provinces. PTTEP Group is the sole owner and operator. Crude oil produced from the project is sold to PTT and is transported via truck to the Bangchak refinery. In 2024, the average crude oil production was 115 BPD.

B6/27 Project

The B6/27 Project is located in the Gulf of Thailand, off the coast of Chumphon Province. PTTEP Group is the sole owner and operator. The concession contract ended on February 5, 2023. Currently, the Final Decommissioning Plan (FDP) and Decommissioning Cost Estimation (DCE) have been approved by the Department of Mineral Fuels.

L22/43 Project

The L22/43 Project is a crude oil producing project, located in Phitsanulok and Phichit provinces. PTTEP Group is the sole owner and operator. The project has been under production suspension since 2018.

From October 30, 2024, crude oil production has been resumed and is being processed using S1 Project's production facility, with the crude jointly sold alongside S1 Project's production. In 2024, the average crude oil production was 12 BPD.

L53/43 and L54/43 Project

The L53/43 and L54/43 Projects are located in Suphan Buri, Kanchanaburi, Phra Nakhon Si Ayutthaya, and Ang Thong provinces. PTTEP Group is the sole owner and operator. Crude oil produced from the project is sold to PTT and is transported via truck to the Bangchak refinery.

In 2024, the L54/43 Project has drilled four development wells to increase the field potential and enable the project to maximize oil production. The average crude oil production of the L54/43 Project was 870 BPD while the production of the L53/43 Project has been suspended since 2019.

E5 Project

The E5 Project is located in Khon Kaen Province. PTTEP Group holds a 20 percent participating interest in the project with ExxonMobil as the operator holding an 80 percent participating interest. All natural gas produced by the E5 Project is sold to PTT under a long-term GSA for the duration of the concession. The natural gas is transported via pipelines to EGAT's Nam Phong Power Plant.

In 2024, the average natural gas production was 6.3 MMSCFD (approximately 1,011 BOED).

G4/43 Project

The G4/43 Project is located in the Gulf of Thailand. PTTEP Group holds a 21.375 percent interest in the project with Chevron as the operator. The project has long-term mutual GSA and crude oil sale agreements with the B8/32 & 9A Project.

In 2024, the average crude oil and natural gas production was 5,467 BPD and 3.7 MMSCFD (approximately 646 BOED), respectively.

Sinphuhorm Project

The Sinphuhorm Project is located in Udon Thani and Khon Kaen provinces. PTTEP Group is the operator with an 80.48 percent direct and indirect participating interest, after the acquisition of APICO. The natural gas is supplied via the pipeline to EGAT's Nam Phong Power Plant. The investment and development plan of this project is intended to sustain the sales volume to meet the contracted gas commitment under the new GSA.

In 2024, the average natural gas and condensate production was 105 MMSCFD (approximately 17,226 BOED) and 222 BPD respectively.

B8/32 & 9A Project

The B8/32 & 9A Project is located in the Gulf of Thailand, off the coast of Chumphon Province. PTTEP Group holds a 25.001 percent interest in the project with Chevron as the operator. The project currently has a long-term GSA and annual crude sales agreement with PTT.

In 2024, the project continued the development well drilling and waterflood operations to maintain the crude oil production levels. The average crude oil and natural gas were 10,931 BPD and 50 MMSCFD (approximately 8,892 BOED) respectively.

G4/48 Project

The G4/48 Project is located in the Gulf of Thailand, off the coast of Surat Thani Province. PTTEP Group holds a 5 percent interest in the project with Chevron as the operator. The project has mutual long-term GSA and crude oil sale agreements for spot cargo.

In 2024, the average natural gas and crude oil production was 0.4 MMSCFD (approximately 52 BOED) and 5 BPD respectively.

G12/48 Project

The G12/48 Project, located adjacent to the east of Bongkot South Field, is held and operated by PTTEP Group with a 69.6667 percent participating interest. After Bongkot concession ended on March 7, 2023, the production of the G12/48 Project has been produced through G2/61 Project's central processing platform.

On September 1, 2023, the Company entered into a Sale and Purchase Agreement (SPA) to acquire an additional interest of 33.3333 percent from TotalEnergies EP Thailand. Upon completion of the acquisition, which is expected in the first quarter of 2025, PTTEP's interest will increase to 100 percent.

In 2024, the average production was 7.4 MMSCFD for natural gas (approximately 1,201 BOED) and approximately 109 BPD for condensate.

G1/65 Project

The G1/65 Project is located in the northern Gulf of Thailand. PTTEP Group is the operator with a 100 percent interest. On June 1, 2023, PTTEP Group signed the Production Sharing Contract (PSC), which includes a 6-year exploration period and a 20-year production period.

In 2024, geological studies and petroleum resource assessments were conducted to support exploration drilling plans and 3D seismic processing. Additionally, the 2025 work program and budget were approved by the Department of Mineral Fuels. 3D seismic acquisition and exploration well drilling are scheduled in 2025.

G3/65 Project

The G3/65 Project is located in the northern Gulf of Thailand. PTTEP Group is the operator with a 100 percent interest. On June 1, 2023, PTTEP Group signed the Production Sharing Contract (PSC), which includes a 6-year exploration period and a 20-year production period.

In 2024, geological studies and petroleum resource assessments were conducted to support exploration drilling plans and 3D seismic processing. Additionally, the 2025 work program and budget were approved by the Department of Mineral Fuels. 3D seismic acquisition and exploration well drilling are scheduled in 2025.

Projects Located in Overlapping Areas

Malaysia-Thailand Joint Development Area (MTJDA) Project

The MTJDA Project, where PTTEP Group has a 50 percent participating interest with Carigali-PTTEPI Operating Company Sdn. Bhd. (CPOC) as the operator. PTTEP Group, together with PETRONAS (Malaysia's national oil company) and the Malaysia-Thailand Joint Authority (MTJA) entered into a Gas Sales Agreement (GSA) for the sales of the natural gas from the MTJDA Project to PTT and PETRONAS, while crude oil and condensates produced from the project were sold through auction.

In 2024, the project continuously drilled production wells to maintain the production level, and exploration and development wells for the development of new phases. The average natural gas and condensate production was 290 MMSCFD (approximately 46,784 BOED) and 10,514 BPD respectively.

G9/43 Project

The G9/43 Project is located in the Gulf of Thailand, in the overlapping claims area between Thailand and Cambodia, with PTTEP Group as the sole owner and operator. At present, all activities for this project are suspended, pending the resolution of the boundary dispute between the governments of Thailand and Cambodia.

2) International Projects: PTTEP Group has overseas projects separated into the following regions.

2.1) Project Activity Highlights in Other Southeast Asia Countries

PTTEP Group has projects in this region which are located in Myanmar, Malaysia, the Socialist Republic of Vietnam (Vietnam), and the Republic of Indonesia (Indonesia). The following section highlights the project activities.

Zawtika Project

The Zawtika Project is a natural gas project located in the Gulf of Mottama, Myanmar. PTTEP Group holds an 80 percent participating interest and is the operator, with Myanmar Oil and Gas Enterprise (MOGE) holding the remaining 20 percent interest. The gas produced from this project is sold to PTT under long-term GSA on a Take-or-Pay basis, supplying Thai gas demand. A portion of the gas produced is sold to MOGE under the long-term sales contract for domestic consumption in Myanmar. To transport natural gas from Zawtika Project to Thailand, PTTEP Group and the joint venture partner established Andaman Transportation Limited (ATL), a gas transportation company, responsible for constructing and operating an offshore and onshore pipeline from the project to the Thailand-Myanmar border.

In 2024, despite the local unrest situation in Myanmar, the project continued to deliver gas as committed under the GSA. Nonetheless, the situation is being closely monitored and PTTEP has identified potential risks and ensured asset readiness to maintain an uninterrupted supply of natural gas.

In addition, the project successfully completed production well drilling as per the work plan in July 2024 and began constructing wellhead platforms according to the Field Development Plan for the next phase. In 2024, the average natural gas production was 302 MMSCFD (approximately 47,679 BOED).

Yadana Project

The Yadana Project is a natural gas field located in the Gulf of Mottama, Myanmar. PTTEP Group is the operator, with Myanmar Oil and Gas Enterprise (MOGE) as a partner in the project. The gas produced from this project is sold to PTT under long-term GSA on a Take-or-Pay basis. A portion of the gas produced is sold to MOGE under the long-term sales contract for domestic consumption in Myanmar. Gas from Yadana Project is transported to Thailand through an offshore and onshore pipeline operated by Moattama Gas Transportation Company (MGTC).

Following the withdrawal of the partner in the project, effective from April 1, 2024, PTTEP's participating interest increased from 37.0842 percent to 62.9630 percent, with the remaining interest of 37.0370 percent held by MOGE. In 2024, the average natural gas production was 443 MMSCFD (approximately 55,449 BOED).

Myanmar M3 Project

The Myanmar M3 Project is a natural gas field located in the Gulf of Mottama, Myanmar. PTTEP Group holds a 100 percent participating interest and is the operator. The development of the Aung Sinkha field has been approved by the government, and negotiations for the relevant agreements are currently underway. The final investment decision is expected in 2025.

Malaysia Block K Project

The Malaysia Block K Project consists of Kikeh, Siakap North-Petai (SNP), and Gumusut-Kakap (GK) fields which are producing oil fields located offshore Sabah, Malaysia. PTTEP Group holds a 56 percent participating interest in the Kikeh and a 22.4 percent interest in the SNP field, where it serves as the operator. Shell is the operator of GK field, with PTTEP holding a 7.1666 percent participating interest.

In 2024, the average crude oil and natural gas production was 19,590 BPD and 13 MMSCFD respectively.

Malaysia SK309 and SK311 Project

The Malaysia SK309 and SK311 Projects are crude oil, condensate, and natural gas producing fields located in shallow water offshore Sarawak, Malaysia. PTTEP Group holds a 42 percent participating interest in the East Patricia oil field, and a 59.5 percent interest in all remaining areas, where it operates all the fields.

In 2024, the average crude oil, condensate, and natural gas production was 12,739 BPD, 779 BPD, and 170 MMSCFD respectively.

Malaysia Block H Project

The Malaysia Block H Project is a natural gas field located in the deepwater offshore Sabah, Malaysia. PTTEP Group holds a 56 percent participating interest in Rotan Field and a 42 percent in the remaining areas.

In 2024, the average natural gas production was 244 MMSCFD. The exploration drilling plan is currently underway, with two exploration wells scheduled for drilling in 2025, in line with the minimum work commitment.

Malaysia SK410B Project

The Malaysia SK410B Project is located offshore Sarawak, Malaysia. PTTEP Group holds a 42.5 percent participating interest in the project and is the operator. Currently, the project is in the process of Re-engineering design to strengthen the project's economic viability.

Malaysia SK417 Project

The Malaysia SK417 Project is located in the shallow water of offshore Sarawak, Malaysia. PTTEP Group holds an 80 percent participating interest and is the operator. Following the successful discoveries at the exploration wells Dokong-1 and Nangka-1, preparations are currently underway for drilling one exploration well in 2025, in accordance with the minimum work commitment.

Malaysia SK405B Project

The Malaysia SK405B Project is located in the shallow water of offshore Sarawak, Malaysia. PTTEP Group holds a 49.5 percent participating interest in the project and is the operator. Successful discoveries of crude oil and natural gas reservoirs were reported from the Sirung-1, Sirung-2, and Chenda-1 wells between 2021 to 2024.

In 2024, the Pre Front-End Engineering Design (Pre-FEED) was completed, and a development plan will be established, with completion expected by 2025.

Malaysia SK438 Project

The Malaysia SK438 Project is located in the shallow water of offshore Sarawak, Malaysia. PTTEP Group holds an 80 percent participating interest in the project and is the operator. The massive sweet gas sandstone reservoirs were discovered with thickness up to 200 meters, considered as another sizable field of PTTEP in Malaysia, following the earlier achievement at the Lang Lebah field. Another exploration well will be drilled in 2025, according to the minimum work commitment.

Malaysia SK314A Project

The Malaysia SK314A Project is located in the shallow water of offshore Sarawak, Malaysia. PTTEP Group holds a participating interest of 59.5 percent in the project and is the operator. In 2024, the evaluation of remaining petroleum potential is in progress to plan for further exploration campaign. The two exploration wells will be drilled in 2026, according to the minimum work commitment.

Malaysia SK325 Project

The Malaysia SK325 Project is located in shallow water offshore Sarawak. PTTEP Group holds a participating interest of 32.5 percent and is a joint venture partner. In 2024, the project is in the preparation process for the geophysical study, 3D seismic data acquisition, and evaluating petroleum potential to further plan for the committed exploration wells which are expected to be drilled in 2026.

Malaysia SB412 Project

The Malaysia SB412 Project is located in the shallow to deep water offshore Sabah, Malaysia. PTTEP Group holds a participating interest of 60 percent and is the operator. In 2024, the minimum work commitment was fulfilled. The project is undergoing petroleum potential evaluation for further consideration to proceed with the second exploration phase.

Vietnam 9-2 Project

The Vietnam 9-2 Project is producing natural gas and crude oil located offshore southeast of Vietnam. PTTEP Group has a 25 percent interest in the project with Hoan Vu Joint Operating Company (HV JOC) as the operator. The crude oil produced from the project is sold to domestic refineries while the produced natural gas is sold to Vietnam Oil and Gas Group, a state-owned enterprise, for domestic consumption.

In 2024, the average natural gas and crude oil production was 9 MMSCFD (approximately 1,834 BOED) and 2,791 BPD respectively. The petroleum contract extension has been approved for an additional five years, until 2032. Preparations are currently underway for the contract signing, which is expected to take place in the first quarter of 2025.

Vietnam 16-1 Project

The Vietnam 16-1 Project is producing natural gas and crude oil located offshore southeast of Vietnam. PTTEP Group has a 28.5 percent participating interest in the project, with Hoang Long Joint Operating Company (HL JOC) as the operator. The crude oil production of the project is sold to domestic refineries. Natural gas is sold to the Vietnam Oil and Gas Group, a state-owned enterprise, for domestic consumption.

In 2024, the average natural gas and crude oil production was 4 MMSCFD (approximately 920 BOED) and 9,596 BPD respectively. The petroleum contract extension has been approved for an additional five years, until 2031. Preparations are currently underway for the contract signing, which is expected to take place in the first quarter of 2025.

Vietnam B & 48/95 Project

The Vietnam B & 48/95 Project is located off the coast of Vietnam. PTTEP Group holds an 8.5 percent participating interest in the project with Vietnam Oil and Gas Group as the operator. On May 17, 2024, Final Investment Decision (FID) was approved. It is currently under Phase 1A development, with the first production expected in late 2027. The production, combining the production from Vietnam B & 48/95 & Vietnam 52/97 Project, will gradually ramp up to 490 MMSCFD.

Vietnam 52/97 Project

The Vietnam 52/97 Project is located offshore of Vietnam. PTTEP Group holds a 7 percent of participating interest in the project with Vietnam Oil and Gas Group as the operator. On May 17, 2024, Final Investment Decision (FID) was approved. It is currently under Phase 1A development, with the first production expected in late 2027. The production, combining the production from Vietnam B & 48/95 & Vietnam 52/97 Project, will gradually ramp up to 490 MMSCFD.

Natuna Sea A Project

The Natuna Sea A Project is located to the west of the Natuna Sea in Indonesia. In 2013, PTTEP Group jointly signed a share purchase agreement with Pertamina, on a 50:50 basis, to acquire subsidiaries of Hess Corporation, which held a 23 percent interest in the Natuna Sea A Project. As a result, PTTEP holds an 11.5 percent interest in the project, with Premier Oil, now known as Harbour Energy, as the operator. The crude oil and condensate produced are sold through the National Oil Company (Pertamina), while natural gas produced is sold to Singapore through the subsea pipeline for domestic consumption.

In 2024, the average natural gas and crude oil production was 94 MMSCFD (approximately 16,745 BOED) and 618 BPD respectively.

2.2) Project Activity Highlights in Central Asia

PTTEP Group's project in this region is located in Kazakhstan, with the key project highlights as follows:

Dunga Project

The Dunga Project is a producing oil field located onshore west of Kazakhstan. PTTEP Group holds a 20 percent interest, with Dunga Operating GmbH as the operator. The project is continuing with the development of Phase 3 to increase production capacity, with completion expected in the first quarter of 2025.

In 2024, the average crude oil and natural gas production was 13,311 BPD and natural gas of 1.5 MMSCFD (approximately 255 BOED) respectively.

2.3) Project Activity Highlights in the Middle East

PTTEP Group's projects in this region are located in Oman and UAE, with the key project highlights as follows:

Oman Block 61 Project

The Oman Block 61 Project is a producing onshore gas block situated in central Oman. PTTEP Group has signed a Sale and Purchase Agreement (SPA) to acquire a 20 percent interest from BP Exploration (Epsilon) Limited, which is the operator, and the agreement was completed on March 23, 2021. In 2024, the average natural gas and condensate production was 1,511 MMSCFD (approximately 267,746 BOED) and 56,087 BPD respectively.

Oman Block 6 Project (PDO)

The Oman Block 6 Project (PDO) is the largest producing oil asset in central Oman, covering an area of approximately one-third of the country. PTTEP Group holds a 2 percent participating interest in this project, with Petroleum Development Oman (PDO) as the operator (Operating Consortium). In 2024, the average crude oil production was 699,490 BPD.

Oman Block 53 Project

The Oman Block 53 Project is a large producing onshore oil field located in southern Oman. PTTEP Group holds a 1 percent participating interest in this project, with Occidental as the operator. In 2024, the average crude oil production was 75,227 BPD.

Oman Onshore Block 12 Project

The Oman Onshore Block 12 Project is a large onshore natural gas exploration block with an acreage of around 10,000 square kilometers, located in central Oman. PTTEP Group holds a 20 percent participating interest in the project, with TotalEnergies as the operator. In 2024, the two exploration wells were completed. Currently, geological and geophysical studies are underway.

Ghasha Concession Project

PTTEP MENA Limited (PTTEP MENA), a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to acquire a 10 percent stake in Ghasha Concession Project in UAE from Wintershall Dea Middle East GmbH. The acquisition has been completed and effective from June 11, 2024.

Ghasha Concession Project is a sizable natural gas field, located in the offshore northwest of Abu Dhabi, with Abu Dhabi National Oil Company (ADNOC) as the operator. The project includes nine petroleum fields where petroleum potential has been discovered, with two fields – Dalma Gas and Hail and Ghasha – currently in the development phase. First production from Dalma Gas is expected to commence in 2025, while Hail and Ghasha are expected to begin production in 2028.

Abu Dhabi Offshore 1 Project

The Abu Dhabi Offshore 1 Project is located in the offshore northwest of Abu Dhabi, UAE. PTTEP Group holds a 30 percent participating interest in the project, with Eni Abu Dhabi B.V. as the operator. In 2024, the project completed the petroleum potential evaluation with no discovered prospect that can be commercially developed. The first exploration phase ended on January 11, 2025. The block was then returned to the government, and the concession was terminated.

Abu Dhabi Offshore 2 Project

The Abu Dhabi Offshore 2 Project is located in the offshore northwest of Abu Dhabi, UAE. PTTEP Group holds a 30 percent participating interest in the project, with Eni Abu Dhabi B.V. as the operator. In 2022, the project has successfully made a significant gas discovery in a deeper zone of the exploration well XF-002. The field development plan was approved by the Government in September 2024, and Final Investment Decision (FID) is expected in 2025.

Abu Dhabi Offshore 3 Project

The Abu Dhabi Offshore 3 Project is located in the offshore northwest of Abu Dhabi, UAE. PTTEP Group holds a 30 percent participating interest in the project, with Eni Abu Dhabi B.V. as the operator. Currently, it is in the progress of geological study and further evaluation of petroleum potential for the preparation of appraisal and exploration wells drilling which is planned in 2025–2026.

2.4) Project Activity Highlights in Africa

PTTEP Group's projects in this region are located in Algeria and Mozambique, with the key project highlights as follows:

Algeria 433a & 416b Project

The Algeria 433a & 416b Project is an onshore producing crude oil field, located in eastern Algeria. PTTEP Group holds a 35 percent participating interest in the project, with Groupement Bir Seba (GHBR - Joint Operating Company) as the operator. In 2024, the additional two production wells drilling was completed. The average crude oil production was 15,326 BPD.

Algeria Hassi Bir Rekaiz Project

The Algeria Hassi Bir Rekaiz Project is located onshore in eastern Algeria. PTTEP Group holds a 49 percent participating interest in the project, with Groupement Hassi Bir Rekaiz (GHBR - Joint Operating Company) as the operator. In 2024 the average crude oil production was 17,000 BPD. Currently, a study and plan for the second phase development are underway, aiming to increase production to 30,000 BPD and 60,000 BPD by the end of 2029 and 2030 respectively.

Mozambique Area 1 Project

The Mozambique Area 1 Project, a large LNG project located offshore Mozambique, is currently in the development phase. PTTEP Group holds an 8.5 percent participating interest in the project, with TotalEnergies as the operator.

Since April 2021, the operator has decided to suspend all construction activities following a Force Majeure declaration due to unrest near the project site. Currently, the evaluation of site re-access readiness is underway for further construction resumption.

2.5) Project Activity Highlights in Australasia

The PTTEP Group has a project in this region which is located in the Timor Sea, the Commonwealth of Australia (Australia) with the project highlight as follows:

PTTEP Australasia Project

PTTEP Australasia Project is located in Australia, the only remaining project is Oliver Field (AC/RL12), in which PTTEP Group holds a 100 percent participating interest. It is currently under the process of block relinquishment to the government, with the completion expected by the second quarter of 2025.

2.6) Project Activity Highlights in North and South America

PTTEP Group's projects in this region are located in Mexico. The following are significant activities in this region:

Mexico Block 12 (2.4) Project

The Mexico Block 12 (2.4) Project is located in the Mexican Ridges, western Gulf of Mexico. PTTEP Group holds a 20 percent participating interest and PETRONAS is the operator. The exploration well drilling was completed according to work commitment under the concession, with no petroleum potential confirmed. The relinquishment process to the Government is currently underway and completion is expected by the second quarter of 2026.

Mexico Block 29 (2.4) Project

The Mexico Block 29 (2.4) Project is located in the Campeche basin, southern Gulf of Mexico. PTTEP Group holds a 16.67 percent participating interest, with Repsol as the operator of the project. On September 17, 2024, PTTEP Mexico E&P Limited, S. de R.L. de C.V., a subsidiary of PTTEP, entered into a Sale and Purchase Agreement (SPA) to sell its entire participating interest to REPSOL EXPLORACIÓN MÉXICO, S.A. DE C.V. The completion of this transaction is subject to the fulfillment of conditions prescribed in the SPA, which is anticipated in the first quarter of 2025.

Projects Ended Concession Divestment and Relinquishment in 2024

Malaysia PM407 Project

The Malaysia PM407 Project is located in the shallow water of offshore Peninsular, Malaysia. PTTEP Group holds a 55 percent participating interest in the project and is the operator. In 2024, the project completed the remaining petroleum potential evaluation with no discovered prospect that can be commercially developed. The first exploration period ended on March 20, 2024. PTTEP then submitted the block relinquishment, which had already been approved by the Malaysian Government.

Sharjah Onshore Area A Project

The Sharjah Onshore Area A Project is an onshore field, located in Sharjah, UAE. PTTEP holds a 25 percent participating interest in the project, with Eni Sharjah B.V. as the operator.

In 2024, the project completed the petroleum potential evaluation with no discovered prospect that can be commercially developed. The first exploration period ended on September 30, 2024. The block was then returned to the government, and the concession was terminated.

Sharjah Onshore Area C Project

The Sharjah Onshore Area C Project is an onshore field, located in Sharjah, UAE. PTTEP holds a 25 percent participating interest in the project, with Eni Sharjah B.V. as the operator.

In 2024, the project completed the petroleum potential evaluation with no discovered prospect that can be commercially developed. The second exploration period ended on December 31, 2024. The block was then returned to the government, and the concession was terminated.

(2) Midstream

Oman LNG (OLNG)

PTTEP by PTTEP Oman E&P Corporation (POC), formerly Partex Oman Corporation, has a 2 percent stake in Oman LNG LLC (OLNG) located near Sur, Oman. OLNG has two 3.4 million tons per annum capacity liquefaction trains. The third liquefaction train by a separate company, Qalhat Liquefied Natural Gas SAOC (QLNG) in which OLNG is a joint investor, has an additional capacity of 3.6 million tons per annum. Recent improvements upgraded the installed plant capacity to 11.4 million tons per annum.

The partners in OLNG include the Oman Investment Authority (OIA) 51 percent, Shell 30 percent, TotalEnergies 5.5 percent, Korea Gas Corporation (KOGAS) 5 percent, Mitsubishi Corporation 2.8 percent, Mitsui & Co 2.8 percent, and Itochu 0.9 percent.

For QLNG, The partners in QLNG include the Oman Investment Authority (OIA) 46.8 percent, Naturgy 7.4 percent, Mitsubishi Corporation 3 percent, Itochu 3 percent, Osaka Gas 3 percent, and OLNG at 36.8 percent which makes POC indirectly holds 0.7 percent in QLNG.

ADNOC Gas Processing (AGP)

PTTEP by PTTEP Gas Corporation (PGC), formerly Partex Gas Corporation, owns a 2 percent of ADNOC Gas Processing (AGP) with ADNOC Gas Facilities, the new ADNOC subsidiary responsible for gas business owning a 68 percent stake while Shell and TotalEnergies each own 15 percent.

ADNOC Gas Operations and Marketing, formerly known as GASCO, is an operating company engaged in processing associated and non-associated natural gas from UAE's onshore and offshore fields. Gas is supplied to AGP via pipelines from ADNOC's upstream entities: ADNOC Onshore, ADNOC Offshore, and other non-associated gas fields.

Associated gas supplied from ADNOC Onshore's oil fields is processed in Asab 0/3, Bab and Bu Hasa gas processing facilities. The AGP Joint Venture partners are entitled to the respective share of C3+, i.e. LPG (Propane and Butane) and Paraffinic Naphtha production from this associated gas until the concession ends in 2028.

(3) Gas Transportation Pipeline

PTTEP operates the gas transportation pipeline businesses through PTTEP Offshore Investment Company Limited (PTTEPO), a wholly-owned subsidiary of PTTEP. PTTEPO holds an 80 percent stake in Andaman Transportation Limited (ATL) and a 62.9630 percent stake in Moattama Gas Transportation Company Limited (MGTC). These companies operate gas pipelines that transport gas from the offshore production sites of the Zawtika and Yadana projects in the Gulf of Moattama to Thailand-Myanmar border.

In 2024, PTTEPO's Stake in MGTC increased from 37.0842 percent to 62.9630 percent following the withdrawal of a subsidiary of Chevron Group from Yadana Project, effective from April 1, 2024.

(4) Jetty and Warehouse

Petroleum Development Support Base was established to provide jetty and warehouse services to support PTTEP Group's offshore exploration and production activities both in Thailand and abroad. The following are the key projects that have been accommodated by the Support Base.

- Projects in Thailand, such as Bongkot Project, Arthit Project, G1/61 Project, G2/61 Project.
- International projects operating in Myanmar including Zawtika Project, Yadana Project, and Myanmar M3 Project.

Moreover, the Support Base can also support offshore operating projects of other oil and gas companies, such as PTT, Chevron Thailand Exploration and Production Limited, Carigali-PTTEPI Operating Company Sdn. Bhd. (CPOC).

Currently, our Support Base consists of two sites in the provinces of Songkhla and Ranong.

1) *Petroleum Development Support Base (Songkhla Branch)* (Total area of 121 rais) solely provides marine jetty berthing and warehousing services. It is owned and operated by PTTEP International Limited (PTTEPI), a subsidiary of PTTEP. The jetty is equipped with a 380-meter wharf which is capable of simultaneously berthing six supply vessels with a size of more than 500 gross tonnage each (maximum vessel length 80 meters). The jetty is also equipped with storage facilities and operated with a high standard of material-handling equipment for offshore support bases. The Support Base also operates under an international management system which focuses on safety and security while taking into account the issues of occupational health and the environment. It strictly follows the International Ship and Port Facilities Security Code (ISPS Code) which has been approved by the Marine Safety and Environment Bureau of the Marine Department of Thailand. The jetty is therefore recognized as one of the country's leading shore-based facilities for petroleum exploration and production activities.

   Warehousing service facilities are divided into four sections, namely the storage yard, storage warehouse, free zone storage yard, and free zone storage warehouse for optimal storage of materials and equipment. This facility is also used for certain goods that have been granted tax and duty benefits in its duty-free areas.

2) *Petroleum Development Support Base (Ranong Branch)* (Total area of 25 rais) provides marine jetty berthing and warehousing services which are operated by PTTEPI. However, the jetty berthing service is operated through a multipurpose jetty of the Port Authority of Thailand. The jetty has a 150-meter wharf which is capable of simultaneously berthing two supply vessels with the size of more than 500 gross tonnages each (maximum vessel length 80 meters). The Support Base is also fully equipped with storage facilities and standard material-handling equipment. Warehousing service facilities are divided into four sections as with the Petroleum Development Support Base (Songkhla Branch).

To ensure that the services of both Support Base branches meet high international standards and safety levels, performance audits are continually conducted at both sites, emphasizing safety, security, occupational health, and the environment. The Company has been accredited International Environment Control Program (ISO 14001 certification), and the Occupational Health and Safety Management System (ISO 45001 certification). The Company has also prepared a Business Continuity Plan under the ISO 22301 standard to handle unexpected and emergency cases. The Company regularly conducts drills to ensure that our Support Bases are capable of responding to emergency situations with the adoption of the latest technologies and methods for operational continuity.

(5) Information Technology and Communication Services

PTTEP owns 20 percent of shares in PTT Digital Solutions Company Limited (PTT Digital). PTT Digital has been hired to provide the Company with all information technology and communication services. The agreement covers infrastructure design and implementation, consultancy, procurement, and outsourcing services in accordance with the Holistic Management Strategy of PTT Group which aims to enhance the efficiency of operations. The current service agreement is valid for five years, starting from January 1, 2021.

(6) Property Leasing

PTT and PTTEP have jointly established, constructed, and managed the Energy Complex Investment Project under Energy Complex Company Limited (EnCo). The Complex is considered to be Thailand's energy hub, housing the Ministry of Energy, subsidiaries, and associated companies of PTT Group. The construction of the Complex was fully completed by the end of 2009.

Currently, EnCo provides services across three main business areas: Property Management, Facility Management, and Property Development.

(7) Manpower Services

PTTEP Services Limited (PTTEP Services) was established with the objective of supplying manpower to support PTTEP Group's operational activities and accommodating PTTEP's domestic and international expansions which have a high demand for competent staff.

PTTEP Services has recruited and hired various types of staff, such as specialists, engineers, operators, technicians, etc., both Thais and non-Thais, to serve PTTEP since July 1, 2004. The Company has continuously developed and improved its remuneration, welfare, and benefits to ensure that staff are provided with fair remuneration and good welfare and benefit programs that make them feel motivated. This has also helped improve the Company's competitiveness in the market.

To enhance the staff's capability to effectively support PTTEP's operations, PTTEP Services has provided several training and development programs based on PTTEP's business requirements. The programs focus on compulsory Safety, Security, Health, and Environment (SSHE) training, Functional Training as well as Soft Skills Training in areas of innovation and interpersonal skills. In addition, the Company has provided basic training on subjects including English, digital development, and information technology to assist staff in order for them to perform their jobs effectively.

PTTEP Services' business has continuously grown and expanded. Apart from supplying manpower for PTTEP, the Company has also provided manpower for Carigali-PTTEPI Operating Company Sdn. Bhd. (CPOC), a PTTEP joint venture company in Malaysia.

(8) AI and Robotics Technology

PTTEP established AI and Robotics Ventures Company Limited (ARV) on September 21, 2018 as a wholly-owned subsidiary dedicated to advancing robotics and artificial intelligence (AI) technologies. ARV is committed to enhancing operational efficiency and capabilities in the energy sector, creating innovative solutions that have a positive societal impact, and continuously exploring new business opportunities beyond the energy industry.

Currently, ARV oversees five subsidiaries, covering target industries both domestically and internationally, including Rovula (Thailand) Company Limited (Rovula), Skyller Solutions Company Limited (Skyller), Varuna (Thailand) Company Limited (Varuna), Cariva (Thailand) Company Limited (Cariva), and Bedrock Analytics Company Limited (Bedrock).

ARV is committed to pioneering innovative technologies that elevate the energy industry by integrating AI and autonomous robotics across land, air, and subsea operations via an advanced cloud platform. This innovative approach to offshore operations enhances the efficiency of patrols, inspections of production platforms and subsea structures, and the safe and swift transportation of materials between platforms and onshore facilities, while

reducing personnel risks, cutting costs, and lowering carbon emissions. With up to 75 percent of inspections and maintenance automated, it reduces travel time by 40 percent and saves over 15,000 liters of fuel annually, significantly advancing both efficiency and sustainability.

In 2024, ARV demonstrated its technological capabilities through Proof-of-Concept collaborations with leading energy companies. These included Thailand's first Beyond Visual Line of Sight (BVLOS) drone operation for real-time offshore safety surveillance, capable of rapidly detecting anomalies, and Southeast Asia's first deployment of the autonomous underwater vehicle (AUV), XPLORER equipped with non-contact sensors for cathodic protection (CP) surveys, which successfully inspected over 155 kilometers of subsea pipelines in Malaysia. These key accomplishments highlight ARV's readiness for commercial-scale deployment. In addition, ARV's innovative technologies earned prestigious recognition, including the Spotlight on New Technology Award from OTC Asia 2024 and the Best Innovative Company Award from the SET Awards 2024, reaffirming ARV's commitment to advancing industry potential and driving sustainable, long-term value creation.

ARV continues to relentlessly advance the development and delivery of deep technology, to create sustainable value and business growth with a focus on making a lasting, positive impact on the environment, society, and corporate governance. Notably, the expansion of the "Smart Forest Platform," a comprehensive forest management system, which has been implemented across more than 300,000 rai of forested areas, along with the "Drone Plantation" technology, which autonomously disperses seeds into target areas, improving efficiency and reducing reforestation time. This service has now expanded to Lao PDR, targeting over 50,000 rai, contributing to national and global efforts toward achieving Net Zero targets.

Furthermore, ARV has expanded its services under the "Smart City Digital Data Platform" to over 200 municipalities and launched the "MoreAnama" system, a centralized health information management tool that integrates real-time health data, geospatial technology, health monitoring devices, and AI for symptom analysis. The system, which has been successfully piloted at Subdistrict Health Promoting Hospitals (SHPHs) in Roi Et Province, is set to expand to over 9,800 SHPHs nationwide. This initiative aims to modernize local healthcare institutions, enhance convenience, and increase community access to essential healthcare services, ultimately contributing to an improved quality of life for communities.

ARV's next-phase business development plan focuses on efficiently growing its existing portfolio businesses. This includes expanding technology services to a broader customer base, both domestically and internationally, including Asia and the Middle East. The plan also emphasizes sustainable community development by doubling support for local municipalities compared to 2024. Additionally, ARV is committed to forging strategic partnerships with industry experts to further develop its technologies and expand into new industries. By offering seamless, integrated, end-to-end services, ARV is poised to drive long-term, sustainable growth for its businesses.

(9) Energy Transition Businesses

PTTEP has laid out strategies and growth directions in new businesses to support the energy transition, align with Thailand's future needs for developing a low-carbon society, and create sustainable value for stakeholders.

Considering various internal and external environments and the rapid development of technology today, along with PTTEP's competitiveness and relevance to the value chain it is currently operating, PTTEP has set investment targets in three business areas as follows:

Carbon Capture and Storage as a Service (CCSaaS)

PTTEP is committed to leveraging our knowledge and capabilities in petroleum exploration and production to develop carbon capture and storage projects (CCS) and operate carbon capture and storage projects as a service (CCSaaS) both domestically and internationally. Besides creating a new business line for the Company, it aims to help reduce carbon dioxide emissions into the atmosphere according to the country's greenhouse gas reduction action plan (NDC action plan) and the long-term low greenhouse gas emission development strategy (LT-LEDs) where the goal is to capture and store up to 40 million tons of carbon dioxide per year by 2050 to achieve carbon neutrality.

In 2024, under an international collaboration between the Department of Mineral Fuels and the Japan Organization for Metals and Energy Security (JOGMEC), PTTEP together with INPEX CORPORATION from Japan, conducted activities under a Joint Study Agreement to study and assess the geological potential for carbon storage in the upper part of the Gulf of Thailand. The study results will be crucial in developing the Eastern Thailand CCS Hub, with cooperation from companies within PTT Group to push for relevant legal and policy support.

Low-Carbon Hydrogen

PTTEP emphasizes the importance of the low-carbon hydrogen business as it is a new clean fuel that can store energy and transport it across continents. Currently, many countries in Europe, Japan, and Korea have set targets for using low-carbon hydrogen in various industries. For Thailand, according to the draft Power Development Plan (PDP 2024), the goal is to blend low-carbon hydrogen with natural gas to reduce carbon dioxide emissions from electricity production. This aligns with industries that cannot directly use electricity from renewable energy (electrification), such as steel, refining, and petrochemical industries, which are studying the commercial feasibility of using low-carbon hydrogen. PTTEP is committed to being part of supply for low-carbon hydrogen for the country through investments in high-potential projects located in countries with supportive measures for low-carbon hydrogen production and low production costs.

In 2023, FutureTech Energy Ventures Limited (FTEV), a subsidiary of PTTEP, and five leading global companies, including POSCO Holdings, Samsung Engineering Company Limited, Korea East-West Power Company Limited, Korea Southern Power Company Limited, and MESCAT Middle East DMCC, a subsidiary of ENGIE from France, won a concession bid for a large green hydrogen production project in Oman. Currently, FTEV and its partners have established a joint venture, Hydrogen Duqm LLC (HDL), in Oman and are in the process of assessing wind and solar energy potential (Renewable Resource Assessment) and conducting a feasibility study to evaluate the investment value and profitability of the project prior starting engineering design.

Renewable Power

Renewable energy is seen as the most crucial factor in reducing greenhouse gas emissions from the energy sector. PTTEP has established FutureTech Solar (Thailand) Limited (FST) under FutureTech Energy Ventures Limited to operate a solar power plant business. Currently, it has a production capacity of 9.9 megawatts to supply electricity to S1 Project, replacing electricity production from natural gas.

Additionally, PTTEP also aims to invest in offshore wind energy, a business that can leverage our expertise from offshore operation to support clean electricity production, which is a key component in producing green hydrogen. PTTEP, therefore, invested in Seagreen Offshore Wind Farm project in 2024, holding a 25.5 percent stake with an investment value of approximately USD 689 million. The Seagreen project is the largest offshore wind power plant in Scotland, starting electricity production in October 2023, with a total production capacity of approximately 1.1 gigawatts. SSE Renewables Services (UK) Limited a major renewable energy producer in Scotland, operates the project, with TotalEnergies as a partner.

To achieve sustainable growth, PTTEP recognizes the need for comprehensive and close development of related technologies through in-house technology management and investment in technology start-ups via corporate venture capital (through Explore Ventures Limited or XPV). This aims to enhance competitiveness in both petroleum exploration and production and energy transition-related businesses, supporting the company's goal of net-zero greenhouse gas emissions. This is part of the measures to mitigate the risk of sudden energy business disruptions that could impact PTTEP's business investments. In 2024, the company invested in Zap Energy, a start-up developing nuclear fusion technology, a clean energy source with significant potential to transform the future energy industry.

1.2.8 Permission to Operate, Concession, or Investment Promotion

1.2.8 (1) Petroleum exploration and production business

PTTEP operates a petroleum exploration and production business both domestically in Thailand and internationally. The Company's overseas operations adhere to all relevant laws and regulations, including the stipulations of production sharing contract, concession, or services agreement. In Thailand, the Company maintains full compliance with the Petroleum Act, B.E. 2514 (1971) and its amendments, which govern petroleum exploration, exploitation, and production under concession, production sharing contract, and services agreement regimes. Key aspects of the petroleum business are as follows:

(1) Demarcation of Petroleum Exploration and Production Areas

The Department of Mineral Fuels, Ministry of Energy, as the government authority, is responsible for overseeing petroleum operations in accordance with the petroleum law. It establishes the criteria, methods, terms, and areas for exploration and production (Block). Oil companies can apply for exploration and production rights through concession, production sharing contract, or services agreement. The Petroleum Committee advises the Minister of Energy on approvals, and the Minister, with the approval of the Cabinet, signs the agreements granting these rights. The State carefully considers each applicant's qualifications, including their investment funds, knowledge and technology transfer, employment of Thai nationals, and the utmost benefits of the State, before awarding exploration and production rights.

(2) Characteristics of a Joint Venturer

A petroleum concession, a production sharing contract, or a services contract may be awarded to a single or multiple concessionaires/contractors. Given the inherent high risk in petroleum exploration and production, it is common for concessionaires or contractors to form a joint venture to diversify this risk. In a joint venture, one company is designated the "operator" to conduct the exploration and production on behalf of its partner(s), often under the supervision of a management or an operating committee which is composed of representatives of all parties. Other non-operator companies participate in operational decisions, including technical aspects, work programs, and budgets. The operator requests cash advances (Cash Calls) from all parties for the project expenses. Generally, an oil company's role as a project operator depends on its investment conditions, readiness, and overall business strategy for that project.

(3) Nature of Operations and Investment Decisions

Before investing in petroleum exploration, whether in Thailand or abroad, an oil company must carefully evaluate the probability of success in conjunction with other investment risks. A thorough examination of the available data is conducted to evaluate the area's petroleum potential and the project's commercial feasibility. The success ratio of exploration wells in neighboring areas, as well as other country-specific risk factors, are also considered. If the project is deemed commercially feasible, the company will seek the necessary rights for a right to explore, exploit, and produce petroleum; or, if such rights are already granted, will pursue a "farm-in" agreement with the existing concessionaire.

After the oil company is granted exploration, exploitation, and production rights, an exploration program will commence. This program typically spans 2–3 years. Upon discovery of petroleum reserves within an exploration area, the oil company will assess the development costs and projected sales value based on recoverable reserves. If the assessment indicates profitability, the area will be considered commercially viable. The operator shall then seek approval for the petroleum production area and simultaneously may commence production activities. The operator may continue exploring remaining areas if within the exploration period specified in the concession, the production sharing contract, or the services contract. At this stage, the operator should have a certain degree of confidence in the investment. However, given the substantial investment required for development, the operator should typically secure buyers for the petroleum in advance, ideally with a long-term sales agreement. Currently, PTT Public Company Limited (PTT) is the largest petroleum buyer in Thailand.

The principal elements of petroleum sales agreement generally include the pricing and quantity of petroleum to be delivered. Sales of natural gas from domestic areas are made at the delivery point specified in the contract, while sales of natural gas from foreign areas are made at the Thai borders. PTT is currently responsible for the installation of the gas pipelines needed to transport the gas quantities outlined in the gas sales agreement. Crude oil and condensate sales also take place at the delivery point specified in the contracts.

(4) Description of Laws Relating to the Business

In Thailand, the operation of petroleum business is regulated by two major legislative acts, namely the Petroleum Act, B.E. 2514 (1971) and the Petroleum Income Tax Act, B.E. 2514 (1971) and its amendments. Concessionaires and contractors must be limited companies or equivalent juristic entities, incorporated under either Thailand or foreign laws. Key aspects of these laws in Thailand include:

1) Concession

1.1) The concessionaire(s) and the co-venturer(s) shall pay the royalty, normally in cash. However, the Minister may, with at least six months' notice, request payment in petroleum. The royalty may be credited against income tax (THAILAND I) or deducted as an expense (THAILAND III).

1.2) Petroleum income tax rate is set at a minimum of 50 percent and a maximum of 60 percent of the net profit from the petroleum operations.

1.3) For income tax purposes, interest payments are not deductible.

1.4) Concessionaires may be granted an unlimited number of concessions.

THAILAND I pertains to petroleum concessions granted by the Ministry of Industry[1] from B.E. 2514 (1971) to B.E. 2532 (1989) and to onshore petroleum concessions issued before B.E. 2525 (1982).

THAILAND II[2] pertains to onshore petroleum concessions granted by the Ministry of Industry from B.E. 2525 (1982) to B.E. 2532 (1989).

THAILAND III pertains to the petroleum concessions granted by the Ministry of Industry from B.E. 2533 (1990) onward.

Details of the Terms: THAILAND I, II, and III

Term	THAILAND I	THAILAND II	THAILAND III
Royalty Rates	12.5 percent of income from sales or disposal of petroleum which may be treated as a tax credit	12.5 percent of income from sales or disposal of petroleum which may be treated as a tax credit	progressive rate at sliding scale of 5–15 percent, deemed to be expense which could be deducted in tax calculation
Petroleum Income Tax	50 percent of net profit from petroleum business operation	50 percent of net profit from petroleum business operation	50 percent of net profit from petroleum business operation
Special Benefits	-	annual benefits and annual production bonus	special remunerator benefits which could be deducted in tax calculation
Exploration Period	8 years with a 4-year extension	8 years with a 4-year extension	6 years with a 3-year extension
Production Period	not exceeding 30 years from the exploration's expiration date, with an extension not exceeding 10 years	not exceeding 30 years from the exploration's expiration date, with an extension not exceeding 10 years	not exceeding 20 years from the exploration's expiration date, with an extension not exceeding 10 years
Concession Areas	not exceeding 10,000 sq. km. per exploration block, up to 5 exploration blocks	not exceeding 10,000 sq. km. per exploration block, up to 5 exploration blocks	not exceeding 4,000 sq. km. per exploration block, up to 5 exploration blocks[3]

1 Currently, the Ministry of Energy

2 Under Section 36 of the Petroleum Act (No. 4) B.E. 2532 (1989), all petroleum concessionaires under THAILAND II have applied to be subject to the criteria under THAILAND III.

3 Under Section 28 of the Petroleum Act (No. 6) B.E. 2550, effective on October 18, 2007, there is currently no limitation in terms of number of blocks.

2) Production Sharing Contract

2.1) All petroleum operation expenditure shall be the responsibility of the contractor whereas the contractor shall recover such expenditure by deducting it from the production. The expenditure that can be deducted shall be the actual expenditure according to the work program and budget approved by the Director General of the Department of Mineral Fuels, the Ministry of Energy, but shall not exceed 50 percent of the overall petroleum production.
2.2) The contractor shall pay the royalty to the State at the rate of 10 percent of the overall petroleum production.
2.3) The remaining petroleum production after deducting the royalty and the recoverable expenditure shall be shared to the contractor, but not exceeding 50 percent.
2.4) Petroleum income tax is prescribed at a rate not lower than 20 percent of the net profit from petroleum operations.

3) Services Contract

3.1) Services contract can be either the hiring for exploration and production contract, the hiring for exploration contract, or the hiring for production contract.
3.2) The contractor shall be paid by the State according to the terms and conditions of each services contract.
3.3) All petroleum operation expenditure shall be the responsibility of the contractor.
3.4) Payment shall be made to the contractor after deducting the royalty.

At present, PTTEP has obtained the rights to explore, and produce petroleum in Thailand under concession and production sharing contract regime.

1.2.8 (2) Renewable Power Business

PTTEP established FutureTech Solar (Thailand) Company Limited (FST), a subsidiary of FutureTech Energy Ventures Company Limited (FTEV), to operate a 9.9 megawatt solar power project supplying electricity to S1 Project. The renewable power business operation is mainly governed by the Energy Industry Act, B.E.2550 (2007) including its amendments, regulations, and notifications concerning energy business licenses.

Furthermore, PTTEP has invested in international projects related to the energy transition. These investments and business operations must adhere to the laws of each respective country.

1.2.9 Market and Competition

PTTEP operates in the petroleum exploration and production business, both domestically in Thailand and internationally, in locations including Myanmar, Malaysia, Vietnam, Indonesia, Kazakhstan, Oman, the United Arab Emirates (UAE), Algeria, Mozambique, Australia, and Mexico. The target markets include both domestic and overseas where we have invested in. The Company's petroleum products include natural gas, crude oil, condensate, LPG, and naphtha.

In 2024, the Company and our subsidiaries achieved an average total sales volume of 488,794 barrels of oil equivalent per day (BOED). The sales ratio of natural gas to liquids and other petroleum products (crude oil, condensate, LPG, and naphtha) was 73:27 by volume and 54:46 by value, as shown below.

Product	Volume	Value (Million USD)
Natural Gas	804,132 MMSCF or 129.71 MMBOE	4,547.23
Crude Oil	26.91 MMBBL	2,136.52
Condensate	20.98 MMBBL	1,571.02
LPG	126,609 MT or 1.06 MMBOE	71.14
Naphtha	29,500 MT or 0.25 MMBOE	18.81

(1) Marketing Characteristics

PTTEP primarily sells our outputs from domestic and regional projects, i.e. Myanmar and the Malaysia–Thailand Joint Authority (MTJA) to the Thai market through PTT Public Company Limited, (PTT), the major buyer and processor of all the products. PTT then distributes the processed products into the country's power sector, petrochemical industry sector, transportation sector, industry sector, and household sector.

The marketing of petroleum products varies based on their characteristics and field locations, which in turn influence market segmentation and sales price structures. The details can be summarized as follows:

1) Natural Gas

Due to the capital-intensive nature of gas exploration and production business, Gas Sales Agreements (GSAs) must be agreed upon or signed between buyer and seller before any major investment is made. GSAs are typically long-term contracts, ranging from 15 to 30 years with specified prices, volumes, and delivery points. Currently, the designated transfer points for all domestic sales gas are at the Central Processing Platforms (CPPs), from which the buyer will invest in the transmission system to the CPPs. However, the delivery point of the sales of gas from Myanmar to Thailand is at the Myanmar–Thai border. In this case, the seller is responsible for investing in the transmission pipelines from the CPPs to the border. Gas prices are typically linked to crude or fuel oil prices and several key economic indices to reflect costs and remain competitive compared with fuel oil for the GSA period.

Sales volumes are based on the assessed reserves on the negotiation date. GSAs stipulate obligations between buyer and seller for a committed volume. If the buyer fails to take the specified gas volume as outlined in the GSA, the payment must be made for the committed volume regardless of whether the gas is taken or not (Take-or-Pay). Consequently, the buyer is entitled to take delivery of the paid gas volume free of charge in subsequent years (Make-Up Gas). On the other hand, if the seller fails to deliver the volume nominated by the buyer, the buyer is entitled to receive a discount price of the undelivered volumes as specified in the agreement (Shortfall).

2) Condensate and Crude Oil

Condensate and crude oil prices are determined based on their properties and benchmarked against crude oil prices predominantly traded in the region. Contracts may be either short-term or long-term, with some sales occurring in spot markets.

3) LPG

LPG produced from S1 Project is sold to PTT under a long-term contract, with the price aligned with the government's policy and announcements by the Committee on Energy Policy Administration. Additionally, LPG produced from the ADNOC Gas Processing Project (AGP), the largest onshore gas processing complex in Abu Dhabi, UAE, is sold under a short-term contract, with the selling price referencing the official selling price in the region.

4) Naphtha

Naphtha is produced by ADNOC Gas Processing Project (AGP), the largest onshore gas processing complex in Abu Dhabi, UAE. The sales arrangement is handled by the Abu Dhabi National Oil Company (ADNOC), which acts as the Marketing Agent. The selling price follows the official selling price in the regional market and naphtha is sold under short-term contracts.

Sales of petroleum products from PTTEP's international fields vary by country as follows:

- Zawtika and Yadana projects in Myanmar: Approximately 75 percent of the produced natural gas from both projects is primarily sold to Thailand through PTT, while the remaining 25 percent is sold to Myanmar which is mainly used for its domestic power generation and small volume to industrial sector.
- Malaysia Block K, Malaysia Block H, and Malaysia SK309 and SK311 projects in Malaysia: Crude oil from Malaysia SK309 and SK311 Project, along with crude oil from the Malaysia Block K Project and Malaysia Block H Project, are sold under short-term contracts and on spot markets to buyers both in Malaysia and abroad. Natural gas produced from the Malaysia SK309 and SK311 Project and Malaysia Block H Project is sold under long-term contracts to Petroliam Nasional Berhad (PETRONAS), Malaysia's national oil company, and used as gas supply for the Malaysia LNG (MLNG) Complex.
- Vietnam 9-2 and Vietnam 16-1 projects in Vietnam: All oil output from both projects is sold under short-term and medium-term contracts to a refinery in Vietnam for domestic consumption. The natural gas from both projects is sold to Vietnam Oil and Gas Group, a state-owned enterprise, also for domestic use in Vietnam.
- Dunga Project in Kazakhstan: The Dunga project is an onshore oil field located in western Kazakhstan, and it is operated by Dunga Operating GmbH. Crude oil from the field is sold under a short-term contract to both domestic and export markets.
- Oman Block 6 (PDO), Oman Block 53, and Oman Block 61 projects in Oman: Crude oil from these three blocks is sold under medium-term contracts while natural gas produced from Oman Block 61 Project is sold under long-term contracts to the Government of the Sultanate of Oman (GOSO).
- Algeria 433a & 416b and Hassi Bir Rekaiz projects in Algeria: The Bir Seba Field and Hassi Bir Rekaiz Field have been commercialized their crude oil production under short-term contracts, with the major buyers being European refineries.

For the MTJDA Project in the Malaysia–Thailand Joint Development Area, the produced natural gas is sold to PTT for consumption in Thailand, with a portion also sold to Petroliam National Berhad (PETRONAS), Malaysia's national oil company, since April 2015 for use in Malaysia under the Gas Balancing Agreement between PTT and PETRONAS. Meanwhile, the condensate output is sold in spot markets through an auction process.

(2) Competition

Thailand's E&P industry is characterized by low competition due to high demand and limited domestic supplies, coupled with the industry's capital-intensive nature and the advanced technology it requires. Consequently, the sales agreements are predominantly long-term contracts, particularly for natural gas sales, and often include Take-or-Pay clauses to mitigate investment risks and attract new investment.

As of November 2024, PTTEP's petroleum production represents about 69 percent of Thailand's domestic production, positioning the Company as the leading domestic producer.

Producers	Domestic Production Volume (%)
PTTEP	69
PETRONAS	9
Chevron	8
Hess	5
Valeura Energy	4
Others	5

Source: Department of Mineral Fuels, Ministry of Energy (as of November 2024)

1.2.10 Production

(1) Exploration and Production Stages and Technology

Petroleum exploration and production can generally be divided into four major stages as follows:

1) Exploration stage: This is the first step to identify the areas with reservoir potential. The main activities conducted in this stage include:

   - Primary geological and geophysical surveys
   - Seismic acquisition, processing, and interpretation
   - Exploration well drilling and testing

2) Appraisal/Delineation stage: This stage mainly involves additional study to increase the certainty of estimated size and properties of the reservoirs. The main activities conducted in this stage include:

   - Detailed study of petroleum geology and additional seismic survey (if required)
   - Reservoir formation evaluation and conceptual development design
   - Appraisal/Delineation well drilling and testing

3) Development stage: This is the last stage prior to the production. The main activities conducted in this stage include:

   - Field development plan design and optimization
   - Production facilities design, construction, and installation
   - Development well drilling and completion

4) Production stage: This is the stage where petroleum and associated products flow through the pressure-controlled equipment (wellhead) and processing facilities, including measuring equipment, to obtain the production rates of all productions. The main activities conducted during this stage include:

   - Monitoring of production rate, proportion of produced gas, crude oil, condensate, and water, as well as pressure decline rate
   - Forecasting of the future reservoir performance
   - Well intervention work-over and facilities maintenance

PTTEP is well equipped in terms of manpower, technology, and equipment to operate the exploration and production business efficiently according to the Company's target.

(2) Petroleum Reserves

Petroleum Reserves can be divided into three categories, namely Proved Reserves, Probable Reserves, and Possible Reserves, according to the level of certainty.

1) Proved Reserves are those quantities of petroleum that, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.

2) Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves.

3) Possible Reserves are those additional Reserves that analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves.

The Company's Proved Reserves are inspected and reviewed annually by our earth scientists and reservoir engineers to ensure the industry's rigorous professional standards.

Proved Reserves are reported on a gross basis which includes the Company's net working interest and related host country's interest. As of December 31, 2024, the total amount of Proved Reserves of PTTEP Group's projects[1] was 488 million stock-tank barrels (MMSTB) of crude oil and condensate[2] and 6,999 billion standard cubic feet (BSCF) of natural gas or 1,149 million barrels of oil equivalent (MMBOE). The total amount of Proved Reserves in terms of oil equivalent was therefore 1,637 MMBOE. Details of the Company's Proved Reserves are shown in the following table:

Remarks:
[1] Include APICO Joint Venture project

[2] Include Natural Gas Liquids (NGL)

PTT Exploration and Production Public Company Limited Crude, Condensate, and Natural Gas Proved Reserves[1] As of December 31, 2024									
	Crude and Condensate[2] (million barrels)			Natural Gas (billion cubic feet)			Barrel of Oil Equivalent (million barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
The Company's share of Reserves of consolidated companies									
Proved Reserves as of December 31, 2023	143	210	353	3,697	2,879	6,576	739	690	1,429
1) Revision of previous estimates	33	30	63	435	64	499	103	43	146
2) Improved recovery	3	0	3	3	3	6	4	1	5
3) Extensions and discoveries	16	10	26	353	117	470	72	29	101
4) Purchases/Sales of petroleum in place	-	104	104	-	604	604	-	202	202
5) Production	(37)	(24)	(61)	(809)	(390)	(1,199)	(167)	(86)	(253)
Proved Reserves as of December 31, 2024	158	330	488	3,679	3,277	6,956	751	879	1,630
The Company's share of Reserves of equity companies									
Proved Reserves as of December 31, 2023	0	-	0	44	-	44	7	-	7
1) Revision of previous estimates	0	-	0	9	-	9	2	-	2
2) Improved recovery	-	-	-	-	-	-	-	-	-
3) Extensions and discoveries	-	-	-	-	-	-	-	-	-
4) Purchases/Sales of petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(0)	-	(0)	(10)	-	(10)	(2)	-	(2)
Proved Reserves as of December 31, 2024	0	-	0	43	-	43	7	-	7
Total Proved Reserves as of December 31, 2024	158	330	488	3,722	3,277	6,999	758	879	1,637

Remarks:

[1] Proved Reserves include the Company's net working interest and the related host country's interest.

[2] Includes Natural Gas Liquids (NGL).

Furthermore, in order to improve efficiency, check and balance of the Reserves estimation, reporting, and disclosure, the Company maintains a Reserves Committee which has the following roles and responsibilities:

- Review and endorse the Company's Annual Reserves;
- Review and approve Major Changes of Reserves and Reserves for Newly-Acquired Projects;
- Ensure that all activities related to Reserves estimation and disclosure of Reserves information conform to regulatory and legal requirements as well as to corporate and international standards;
- Approve the appointment of Reserves Auditor and approve Reserves Audit Results to ensure compliance with the Company's framework and continual process improvement.

(3) Petroleum Production

In 2024, the total production of PTTEP Group[1] was 255 MMBOE, consisting of 61 MMSTB of crude oil and condensate[2] and 1,209 BSCF (194 MMBOE) of natural gas. This was equivalent to the average production rate of 696,257 barrels of oil equivalent per day (BOED) which was approximately 57,938 BOED or a 9 percent increase from the previous year. The increase in production mainly comes from G1/61 Project production ramp-up to 800 MMSCFD since March 20, 2024. In addition, production of Yadana project increased according to additional working interest of 25.8788 percent transferred from UMOC since April 1, 2024.

Remarks:
1 Include APICO Joint Venture project
2 Include Natural Gas Liquids (NGL)

1.2.11 PTTEP and Our Subsidiaries' Assets

PTTEP and our subsidiaries' properties are mainly jointly controlled oil and gas properties in each project. These properties comprise land, buildings, construction, equipment and facilities, transportation pipeline, capitalized exploratory and production drilling costs, decommissioning costs, which are estimated by PTTEP Group's engineers and management's judgment, and acquisition costs of petroleum rights or acquisition costs of the portion of properties.

As of December 31, 2024, PTTEP and our subsidiaries' oil and gas properties are represented as share of the investments in individual assets for each project. The details of share of the investments in the project, together with investment in subsidiaries, associates, joint ventures, and joint operations are disclosed in "Financial Report" in Notes to the Consolidated and Separate Financial Statements No. 17 Investments in subsidiaries, associates, joint ventures, and joint operations.

As of December 31, 2024, details of properties' net book value are as follows:

Unit: Million US Dollar

Details of Properties	Historical Cost	Accumulated Depreciation	Allowance for Impairment of Assets	Net Book Value
Oil and Gas Properties	32,952	(23,681)	(275)	8,996
Exploration and Evaluation Assets	2,659	-	-	2,659
Right-of-use Assets	1,589	(697)	-	892
Goodwill	1,938	-	(585)	1,353
Pipeline and Others	1,381	(697)	-	684
Assets under Construction	4,913	-	-	4,913
Total	45,432	(25,075)	(860)	19,497

1.2.12 Backlogs

- None -

1.3 Shareholding Structure of PTTEP Group

1.3.1 Shareholding Structure of PTTEP Group

(1) Operational Policy of PTTEP Group

PTTEP has continuously expanded our E&P business, including in related businesses and non-E&P, domestically and internationally. The establishment of subsidiaries and/or associated companies in various regions is necessary for investing, operational flexibility, improving our operational efficiency to be able to compete with other international oil companies, and adjusting to global economic changes. Several factors, such as laws and regulations, financial structures, tax regimes, business and investment conditions, and risk management need to be taken into consideration in any decision to set up a subsidiary or an associated company.

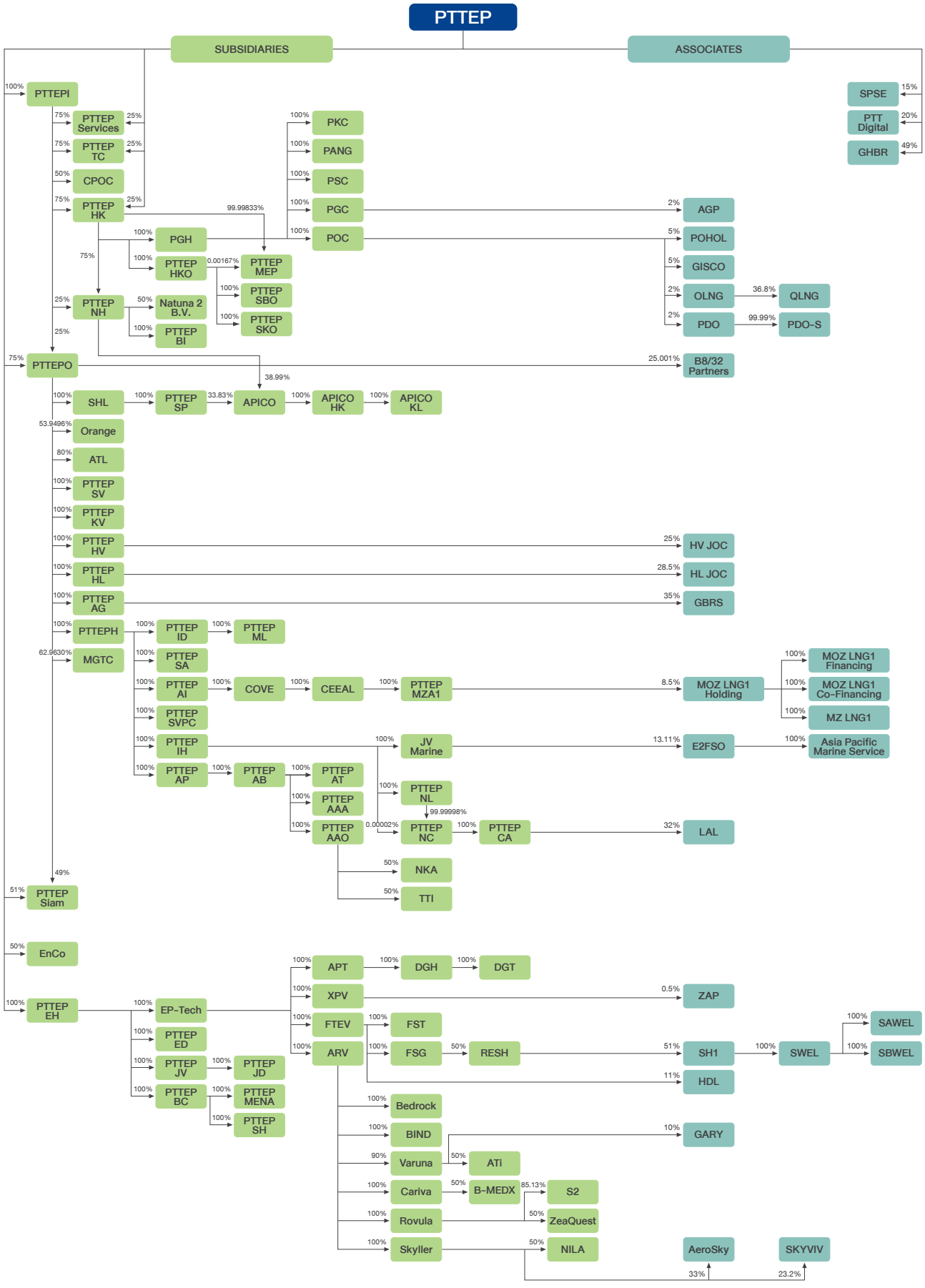
It is our policy to manage PTTEP's subsidiaries in line with PTTEP's business direction and strategy. We designate PTTEP executives and staff to second into key positions of PTTEP's subsidiaries. The strategic direction and financial investment of PTTEP's subsidiaries are overseen by the Company. The Board of Directors of the subsidiaries, especially the non-E&P business, e.g. ARV, possess the authority to make decisions on business management with the aim of achieving the set targets and strategy. As for the associated companies, we nominate PTTEP representatives to serve as shareholders and/or members of the Board of Directors in accordance with the terms of investment, in order to take part in the decision-making of the overall business strategy and policy of these companies. To manage both the subsidiaries and associated companies, we adhere to the Good Corporate Governance and Business Ethics of PTTEP Group, in order to ensure effectiveness, transparency, fairness, and the attainment of our business goals.

With respect to the selection of directors of the Company's subsidiaries and associated companies, we designate PTTEP executives responsible for projects under each relevant subsidiary and associated company as directors of these entities. This ensures they are managed in alignment with the Company's business direction and strategy under PTTEP's governance. We may also appoint a local director, if required by the domestic laws and regulations or investment conditions. The subsidiaries and associated companies, meanwhile, are obligated to report their performance to the Company on a quarterly basis in order to ensure their performance and effectiveness.

PTTEP supervises its subsidiaries and associated companies through the management of PTTEP Group companies. We establish adequate and appropriate monitoring and assessing systems, which include risk management, internal audit and control, compliance with rules and regulations, compliance with good corporate governance and business ethics, and we regularly report the performance to the Corporate Governance and Sustainability Committee. We are also aware of the significance of information disclosure in accordance with the principles of good corporate governance, details as disclosed in "Internal Controls and Connected Transactions" section, "Sufficiency and Suitability of the Internal Control System" topic.

(2) Shareholding Structure of PTTEP Group

As of December 31, 2024, PTTEP invested in 113 legal entities, comprising 83 subsidiaries and 30 associated companies. PTTEP Group Shareholding Structure is illustrated below:


PTTEP
SUBSIDIARIES
ASSOCIATES
100% PTTEPI
75% PTTEP Services 25%
75% PTTEP TC 25%
50% CPOC
75% PTTEP HK 25%
99.99833%
100% PGH
75% 100% PTTEP HKO
0.00167% PTTEP MEP
100% PTTEP SBO
100% PTTEP SKO
25% PTTEP NH
50% Natuna 2 B.V.
100% PTTEP BI
25%
75% PTTEPO
38.99%
100% SHL
100% PTTEP SP 33.83% APICO
100% APICO HK
100% APICO KL
53.9496% Orange
80% ATL
100% PTTEP SV
100% PTTEP KV
100% PTTEP HV
100% PTTEP HL
100% PTTEP AG
100% PTTEPH
62.9630% MGTC
100% PTTEP ID
100% PTTEP ML
100% PTTEP SA
100% PTTEP AI
100% COVE
100% CEEAL
100% PTTEP MZA1
100% PTTEP SVPC
100% PTTEP IH
100% PTTEP AP
100% PTTEP AB
100% PTTEP AT
100% PTTEP AAA
100% PTTEP AAO
100% JV Marine
100% PTTEP NL
99.99998% PTTEP NC
0.00002%
100% PTTEP CA
49%
51% PTTEP Siam
50% EnCo
100% PTTEP EH
100% EP-Tech
100% PTTEP ED
100% PTTEP JV
100% PTTEP JD
100% PTTEP BC
100% PTTEP MENA
100% PTTEP SH
100% APT
100% DGH
100% DGT
100% XPV
100% FTEV
100% FST
100% ARV
100% FSG
50% RESH
50% NKA
50% TTI
100% Bedrock
100% BIND
90% Varuna
50% ATI
100% Cariva
50% B-MEDX
85.13% S2
100% Rovula
50% ZeaQuest
100% Skyller
50% NILA
SPSE 15%
PTT Digital 20%
GHBR 49%
2% AGP
100% PKC
100% PANG
100% PSC
100% PGC
100% POC
5% POHOL
5% GISCO
2% OLNG 36.8% QLNG
2% PDO 99.99% PDO-S
25.001% B8/32 Partners
25% HV JOC
28.5% HL JOC
35% GBRS
8.5% MOZ LNG1 Holding
100% MOZ LNG1 Financing
100% MOZ LNG1 Co-Financing
100% MZ LNG1
13.11% E2FSO
100% Asia Pacific Marine Service
32% LAL
0.5% ZAP
51% SH1
11% HDL
10% GARY
100% SWEL
100% SAWEL
100% SBWEL
33% AeroSky
23.2% SKYVIV

(3) Information of PTTEP

Company Name	PTT Exploration and Production Public Company Limited (PTTEP)
Headquarters Address	555/1 Energy Complex Building A, Floors 19–36, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900, Thailand
Type of Business	Exploration and production, renewable energy, and new forms of energy
Registration Number	0107535000206
Telephone	+66 2537 4000
Facsimile	+66 2537 4444
Website	www.pttep.com
Email	Independent Director: IndependentDirector@pttep.com Investor Relations: IR@pttep.com Company Secretary: CorporateSecretary@pttep.com
Registered Capital	3,969,985,400 ordinary shares with THB 1 per share (THB 3,969,985,400)
Paid-Up Capital	3,969,985,400 ordinary shares with THB 1 per share (THB 3,969,985,400) as of December 31, 2024

(4) vSubsidiaries and Associated Companies Information

- Subsidiaries Information[1]

As of December 31, 2024, there were 83 subsidiaries that have the same contact address, telephone, and facsimile numbers as PTTEP as in 1.3 (3) Details of the directors designated by PTTEP Group for each subsidiary are disclosed in Attachment 2 as follows:

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
E&P						
1	APICO	APICO LLC	338,278 389,937	Ordinary Share	PTTEP SP PTTEP HK	33.83% 38.99%
2	APICO KH	APICO Khorat (Holdings) LLC	-	-	APICO	100%
3	APICO KL	APICO (Khorat) Limited	5,885,168	Ordinary Share	APICO KH	100%
4	CEEAL	Cove Energy East Africa Limited	205,000	Ordinary Share	COVE	100%
5	COVE	Cove Energy Limited	1,272,020	Ordinary Share	PTTEP AI	100%
6	CPOC	Carigali-PTTEPI Operating Company Sdn Bhd	350,000	Ordinary Share	PTTEPI	50%
7	EP-Tech	EP-Tech Ventures Holding Company Limited	88,415,846	Ordinary Share	PTTEP EH	100%
8	JV Marine	JV Marine Limited	50,000	Ordinary Share	PTTEP IH	100%
9	Natuna	Natuna 2 B.V.	90,000	Ordinary Share	PTTEP NH	50%
10	Orange	Orange Energy Limited	1,000,000	Ordinary Share	PTTEPO	53.9496%
11	PANG	PTTEP (Angola) Corporation	50,000	Ordinary Share	PGH	100%
12	PGC	PTTEP Gas Corporation	2,000,000	Ordinary Share	PGH	100%

[1] Notification of the Securities and Exchange Commission No. Kor Jor. 17/2551 Re: Determination of Definitions in Notifications relating to Issuance and Offer for Sale of Securities

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
13	PGH	PTTEP Group Holding B.V.	100,000	Ordinary Share	PTTEP HK	100%
14	PKC	PTTEP (Kazakhstan) Corporation	500	Ordinary Share	PGH	100%
15	POC	PTTEP Oman E&P Corporation	2,500	Ordinary Share	PGH	100%
16	PSC	Partex Services Corporation	2,300	Ordinary Share	PGH	100%
17	PTTEP AAA	PTTEP Australasia (Ashmore Cartier) Pty Ltd	1,700,000	Ordinary Share	PTTEP AB	100%
18	PTTEP AAO	PTTEP Australasia (Operations) Pty Ltd	106,686,517	Ordinary Share	PTTEP AB	100%
19	PTTEP AB	PTTEP Australia Browse Basin Pty Ltd	50,000	Ordinary Share	PTTEP AP	100%
20	PTTEP AG	PTTEP Algeria Company Limited	50,000	Ordinary Share	PTTEPO	100%
21	PTTEP AI	PTTEP Africa Investment Limited	50,000	Ordinary Share	PTTEPH	100%
22	PTTEP AP	PTTEP Australia Perth Pty Ltd	50,000	Ordinary Share	PTTEPH	100%
23	PTTEP AT	PTTEP Australia Timor Sea Pty Ltd	50	Ordinary Share	PTTEP AB	100%
24	PTTEP BI	PTTEP Brazil Investment B.V.	50,000	Ordinary Share	PTTEP NH	100%
25	PTTEP CA	PTTEP Canada Limited	3,812,732,290	Ordinary Share	PTTEP NC	100%
26	PTTEP ED	PTTEP Energy Development Company Limited	421,019,233	Ordinary Share	PTTEP EH	100%
27	PTTEP EH	PTTEP Energy Holding (Thailand) Company Limited	744,357,431	Ordinary Share	PTTEP	100%
28	PTTEP HK	PTTEP HK Holding Limited	10,000	Ordinary Share	PTTEP PTTEPI	25% 75%

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
29	PTTEP HKO	PTTEP HK Offshore Limited	10,000	Ordinary Share	PTTEP HK	100%
30	PTTEP HL	PTTEP Hoang-Long Company Limited	50,000	Ordinary Share	PTTEPO	100%
31	PTTEP HV	PTTEP Hoan-Vu Company Limited	50,000	Ordinary Share	PTTEPO	100%
32	PTTEP ID	PTTEP Indonesia Company Limited	50,000	Ordinary Share	PTTEPH	100%
33	PTTEP IH	PTTEP International Holding Company Limited	50,000	Ordinary Share	PTTEPH	100%
34	PTTEP JD	PTTEP Joint Development Company Limited	10,000	Ordinary Share	PTTEP JV	100%
35	PTTEP JV	PTTEP Joint Ventures Company Limited	10,000	Ordinary Share	PTTEP EH	100%
36	PTTEP KV	PTTEP Kim Long Vietnam Company Limited	50,000	Ordinary Share	PTTEPO	100%
37	PTTEP MENA	PTTEP MENA Limited	500	Ordinary Share	PTTEP BC	100%
38	PTTEP MEP	PTTEP Mexico E&P Limited, S. de R.L. de C.V.	3,000	Ordinary Share	PTTEP HK PTTEP HKO	99.99% 0.01%
39	PTTEP ML	PTTEP Malunda Limited	50,000	Ordinary Share	PTTEP ID	100%
40	PTTEP MZA1	PTTEP Mozambique Area 1 Limited	205,000	Ordinary Share	CEEAL	100%
41	PTTEP NC	PTTEP Netherlands Coöperatie U.A.	-	-	PTTEP IH PTTEP NL	0.00002% 99.99998%
42	PTTEP NH	PTTEP Netherlands Holding Coöperatie U.A.	-	-	PTTEP HK PTTEPI	75% 25%
43	PTTEP NL	PTTEP Netherland Holding Limited	50,000	Ordinary Share	PTTEP IH	100%
44	PTTEP SA	PTTEP South Asia Limited	50,000	Ordinary Share	PTTEPH	100%

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
45	PTTEP SBO	PTTEP Sabah Oil Limited	250,000	Ordinary Share	PTTEP HKO	100%
46	PTTEP SKO	PTTEP Sarawak Oil Limited	250,000	Ordinary Share	PTTEP HKO	100%
47	PTTEP SH	PTTEP SG Holding Pte. Ltd.	50,000	Ordinary Share	PTTEP BC	100%
48	PTTEP SP	PTTEP SP Limited	61,279,587	Ordinary Share	SHL	100%
49	PTTEP SV	PTTEP Southwest Vietnam Company Limited	50,000	Ordinary Share	PTTEPO	100%
50	PTTEPH	PTTEP Holding Company Limited	50,000	Ordinary Share	PTTEPO	100%
51	PTTEPI	PTTEP International Limited	2,000,000,000	Ordinary Share	PTTEP	100%
52	PTTEPO	PTTEP Offshore Investment Company Limited	6,667	Ordinary Share	PTTEP PTTEPI	75% 25%
53	PTTEPS	PTTEP Siam Limited	1,000,000	Ordinary Share	PTTEP PTTEPO	51% 49%
54	SHL	Sinphuhorm Holdings Limited	100	Ordinary Share	PTTEPO	100%
E&P Related						
55	APT	Asia Power and Transportation SG Holding Pte. Ltd. (investments in power and gas pipeline projects for overseas projects)	5,850,000	Ordinary Share	EP-Tech	100%
56	ATL	Andaman Transportation Limited (investments in gas pipeline projects for overseas projects)	62,500	Ordinary Share	PTTEPO	80%
57	DGH	Delta Gas Transportation SG Holding Pte. Ltd. (investments in gas pipeline projects for overseas projects)	5,600,000	Ordinary Share	APT	100%

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
58	DGT	Delta Gas Transportation Limited (investments in gas pipeline projects for overseas projects)	5,350,000	Ordinary Share	DGH	100%
59	PTTEP BC	PTTEP Business Center Company Limited (business center for PTTEP and subsidiaries)	2,249,178,269	Ordinary Share	PTTEP EH	100%
60	PTTEP Services	PTTEP Services Limited (personnel services support)	1,000,000	Ordinary Share	PTTEP PTTEPI	25% 75%
61	PTTEP SVPC	PTTEP Southwest Vietnam Pipeline Company Limited (investments in gas pipeline projects for overseas projects)	50,000	Ordinary Share	PTTEPH	100%
62	PTTEP TC	PTTEP Treasury Center Company Limited (treasury center for PTTEP and subsidiaries)	1,000,000	Ordinary Share	PTTEP PTTEPI	25% 75%
Other Businesses						
63	ARV	AI and Robotics Ventures Company Limited (research and development and providing service for AI and robotics)	45,006,250	Ordinary Share	EP-Tech	100%
64	ATi	ATI Technologies Company Limited (development and provision of technologies for the agricultural sector)	4,000,000	Ordinary Share	Varuna	50%
65	B-MED X	B-MED X Company Limited (services for health care digital platforms)	200,000	Ordinary Share	Cariva	50%
66	Bedrock	Bedrock Analytics Company Limited (development and provision of a platform and spatial data analysis with AI and machine learning technology under the name of the location intelligence platform)	28,000,000	Ordinary Share	ARV	100%

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
67	BIND	Bind Systems Company Limited (development of digital identity systems)	500,000	Ordinary Share	ARV	100%
68	Cariva	Cariva (Thailand) Company Limited (development and provision of AI and robotic technologies for personal health, safety, and exercise)	25,803,413	Ordinary Share	ARV	85%
69	EnCo	Energy Complex Company Limited (property leasing)	180,000,000	Ordinary Share	PTTEP	50%
70	FSG	FutureTech SG Pte. Company Limited (investment in renewable energy business and various forms of power)	96,050,000	Ordinary Share	FTEV	100%
71	FST	FutureTech Solar (Thailand) Company Limited (renewable energy business and electric power)	1,494,090	Ordinary Share	FTEV	100%
72	FTEV	FutureTech Energy Ventures Company Limited (renewable energy business and various forms of power)	37,303,686	Ordinary Share	EP-Tech	100%
73	MGTC	Moattama Gas Transportation Company (gas pipeline in overseas project)	1,000,000	Ordinary Share	PTTEPO	62.9630%
74	NKA	North Kimberley Airport Pty Ltd (air base operations)	600	Ordinary Share	PTTEP AAO	50%
75	Nila	Nila Solutions Company Limited (development and provision of drone services, AI and robotic technologies for air logistics, explore and collect data about buildings)	200,000	Ordinary Share	Skyller	50%
76	RESH	Renewable Energy Seagreen HolCo Limited	150,000,000	Ordinary Share	FSG	50%
77	Rovula	Rovula (Thailand) Company Limited (development and provision of AI and robotic technologies for subsea engineering)	122,280,490	Ordinary Share	ARV	100%

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
78	S2	S2 Robotics Company Limited (development and provision of robotics and artificial intelligence technologies for inspecting and repairing underwater oil and natural gas pipelines)	2,314,997	Ordinary Share	Rovula	85.13%
79	Skyller	Skyller Solutions Company Limited (development and provision of drone services, AI and robotic technologies for air logistics)	36,412,270	Ordinary Share	ARV	100%
80	TTI	Troughton Island Pty Ltd (air base operations)	100	Ordinary Share	PTTEP AAO	50%
81	Varuna	Varuna (Thailand) Company Limited (development and provision of drone services, AI and robotic technologies for agriculture and forestry)	38,979,766	Ordinary Share	ARV	81.82%
82	XPV	Xplor Ventures Company Limited (venture capital in technologies and innovation business or mutual fund in energy and technologies business or digital asset)	4,064,835	Ordinary Share	EP-Tech	100%
83	ZeaQuest	ZeaQuest Company Limited (development and provision of AI and robotic technologies for subsea engineering)	1,550,000	Ordinary Share	Rovula	50%

- Associated Companies Information[1]

As of December 31, 2024, PTTEP had 30 associated companies as follows:

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
1	Aerosky	Aerosky Solutions Co., Ltd. (drone solutions for infrastructure and equipment inspection)	300,000	Ordinary Share	Skyller	33%
2	AGP	Abu Dhabi Gas Industries Limited (gas processing facility)	8,000	Ordinary Share	PGC	2%
3	Asia Pacific Marine Services	Asia Pacific Marine Services (EF) B.V. (FSO vessel rental service)	18,000	Ordinary Share	E2FSO	100%
4	B8/32 Partners	B8/32 Partners Limited (petroleum exploration and production)	110,000	Ordinary Share	PTTEPO	25.001%
5	E2FSO	Erawan 2 FSO Pte. Ltd. (FSO vessel rental service)	100	Ordinary Share	JV Marine	13.11%
6	GARY	Green Aranya Company Limited (trading carbon credits to support environmental sustainability)	33,335	Ordinary Share	Varuna	10%
7	GBRS	Groupement Bir Seba (petroleum exploration and production)	-[2]	-	PTTEP AG	35%
8	GHBR	Groupement Hassi Bir Rekaiz (petroleum exploration and production)	-[3]	-	PTTEP	49%
9	GISCO	Gas Investments and Services Company Limited (financial investment and petroleum technical service in overseas project)	12,000	Ordinary Share	POC	5%
10	HDL	Hydrogen Duqm LLC (exclusive development and production rights of green hydrogen project)	4,072,931	Ordinary Share	FTEV	11%

[1] Notification of the Securities and Exchange Commission No. Kor Jor. 17/2551 Re: Determination of Definitions in Notifications relating to Issuance and Offer for Sale of Securities

[2] No share was issued. The percentage of shareholding is subject to participation interest in the concession.

[3] No share was issued. The percentage of shareholding is subject to participation interest in the concession.

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
11	HL JOC	Hoang Long Joint Operating Company (petroleum exploration and production)	-[4]	-	PTTEP HL	28.5%
12	HV JOC	Hoan-Vu Joint Operating Company (petroleum exploration and production)	-[5]	-	PTTEP HV	25%
13	LAL	Leismer Aerodrome Limited (air base operations)	200	Ordinary Share	PTTEP CA	32%
14	MOZ LNG1 Co-Financing	MOZ LNG1 Co-Financing Company, LDA (financial investment in overseas project)	1,000,000	Ordinary Share	MOZ LNG1 Holding	100%
15	MOZ LNG1 Financing	MOZ LNG1 Financing Company Ltd. (financial investment in overseas project)	550,856,200	Ordinary Share	MOZ LNG1 Holding	100%
16	MOZ LNG1 Holding	MOZ LNG1 Holding Company Ltd. (petroleum exploration and production)	858,145,600	Ordinary Share	PTTEP MZA1	8.5%
17	MZ LNG1	Mozambique LNG 1 Company Pte. Ltd. (petroleum exploration and production)	2,500	Ordinary Share	MOZ LNG1 Holding	100%
18	OLNG	Oman LNG LLC (LNG liquefaction plant)	1,209,877	Ordinary Share	POC	2%
19	PDO	Petroleum Development Oman LLC (petroleum exploration and production)	1,720	Ordinary Share	POC	2%
20	PDO-S	Petroleum Development Oman Services LLC (petroleum technical service)	500,000	Ordinary Share	PDO	99.99%
21	POHOL	Private Oil Holdings Oman Limited (holding of participating interests in oil and gas)	649,152	Ordinary Share	POC	5%
22	PTT Digital	PTT Digital Solutions Company Limited (information technology and communication services)	15,000,000	Ordinary Share	PTTEP	20%
23	QLNG	QALHAT LNG SAOC (LNG liquefaction plant)	1,795,000	Ordinary Share	OLNG	36.8%

[4] No share was issued. The percentage of shareholding is subject to participation interest in the concession.
[5] No share was issued. The percentage of shareholding is subject to participation interest in the concession.

No.	Abbreviation	Company Name	Number of Shares Sold		Total Direct/ Indirect Holding	
24	SAWEL	Seagreen Alpha Wind Energy Limited	100	Ordinary Share	SWEL	50%
25	SBWEL	Seagreen Bravo Wind Energy Limited	100	Ordinary Share	SAWEL	100%
26	SKYVIV	SkyVIV Company Limited (distribution and service for engineering and integrated agriculture drone)	403,648	Ordinary Share	Skyller	23.20%
27	SH1	Seagreen HoldCo 1 Limited	386,728,888	Ordinary Share	RESH	51%
28	SPSE	Sarn Palung Social Enterprise Company Limited (social enterprise)	1,000,000	Ordinary Share	PTTEP	15%
29	SWEL	Seagreen Wind Energy Limited	269,305,715	Ordinary Share	SH1	100%
30	ZAP	ZAP ENERGY, INC.	53,490	Ordinary Share	XPV	0.5%

1.3.2 Parties with Potential Conflicts

- None -

1.3.3 Relationship with the Major Shareholder

The Company's petroleum exploration and production business is part of the business group of PTT Public Company Limited (PTT), our major shareholder, the national energy company which engages in fully integrated petroleum and petrochemical businesses by strategically investing directly and indirectly through its group of companies, both in the upstream and downstream businesses.

Currently, PTT holds (both directly and indirectly) approximately 65.29 percent of PTTEP's registered and paid-up capital with PTTEP's petroleum exploration and production business, effectively making PTT Group the only full-scale natural gas business operator in Thailand. As the major buyer of the Company's petroleum products, PTT, in turn, refines and processes the products and supplies them as energy and raw materials for the power, petrochemical, and transportation sectors as well as other industries and households.

In 2024, PTTEP supplied crude oil, natural gas, LPG, and condensate to PTT. Conditions and price settings of all transactions between PTTEP and PTT follow the normal business practices at the arm's length basis conditions for businesses conducted with external partners. Details of connected transactions between PTTEP and PTT are disclosed under the "Connected Transactions" topic.

1.3.4 Shareholders

(1) Major Shareholders*

As of August 14, 2024, top 10 shareholders of PTTEP were as follows:

Rank	List of Major Shareholders	Number of Shares	% of Total
1	PTT PUBLIC COMPANY LIMITED[1]	2,532,340,489	63.79
2	THAI NVDR COMPANY LIMITED	322,001,351	8.11
3	STATE STREET EUROPE LIMITED	110,530,468	2.78
4	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	65,864,142	1.66
5	SIAM MANAGEMENT HOLDING COMPANY LIMITED[2]	59,520,000	1.50
6	CITIBANK NOMINEES SINGAPORE PTE LTD-A/C GIC C	41,838,053	1.05
7	SOCIAL SECURITY OFFICE	34,809,577	0.88
8	BNY MELLON NOMINEES LIMITED	32,077,605	0.81
9	STATE STREET BANK AND TRUST COMPANY	14,059,276	0.35
10	BNP PARIBAS NEW YORK BRANCH	12,714,000	0.32
	Total number of shares held by major shareholders	3,225,754,961	81.25
	Total fully-paid capital as of August 14, 2024	3,969,985,400	100

Remarks:
* Updated information can be accessed through PTTEP website. Click here for more information
1 The Ministry of Finance, Thailand, is the major shareholder of PTT Public Company Limited (PTT).
2 A wholly-owned subsidiary of PTT

(2) NVDR Holders**

Rank	NVDR holders, as of August 14, 2024 (Top 3)	Number of NVDR issues	% of total outstanding shares
1	STATE STREET EUROPE LIMITED	73,901,769	1.86
2	STATE STREET BANK AND TRUST COMPANY	36,213,680	0.91
3	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	26,753,079	0.67
	Total shares	136,868,528	3.44

Remark:

** Since January 18, 2010, Thai NVDR Co., Ltd. has changed its rule to require disclosure of names of NVDR holders having over 0.50 percent of paid-up capital of the underlying securities.
Updated information can be accessed through PTTEP website. Click here for more information

(3) Major Shareholder with Significant Influence over PTTEP's Policies or Operations

PTT, a major shareholder of PTTEP, takes part in determining PTTEP's policy and operations under the Board's approval. As of December 31, 2024, 2 out of the Company's 15 directors were either directors or executives from PTT.

(4) The Company Enters into Shareholders' Agreement with Effect to Security Offering and Issuance or Management Power of the Company

- None -

1.4 Registered and Paid-up Capital

As of December 31, 2024, PTTEP's capital structure consisted of USD 3,761 million in interest-bearing debt and USD 15,767 million in shareholders' equity, amounting to debt-to-equity ratio of 0.24 Details of the capital structure are as follows:

1.4.1 Ordinary Shares

As of December 31, 2024, PTTEP's registered and paid-up capital was THB 3,969,985,400, consisting of 3,969,985,400 ordinary shares at a par value of THB one per share.

1.4.2 Other Shares with Different Terms or Rights from Ordinary Shares

- None -

1.4.3 Number of Shares and the Effects of NVDR Issuance on Shareholders' Voting Rights

An NVDR or Non-Voting Depository Receipt is a trading instrument issued by the Thai NVDR Company Limited, a wholly-owned subsidiary of the Stock Exchange of Thailand (SET). NVDRs are treated as listed securities (Automatic Listing) on the SET. The objective of NVDRs is to promote trading activities in the Thai stock market by removing obstacles such as foreign investment limits and other impediments faced by international institutional investors investing in listed securities on the SET. NVDR investors are entitled to receive all financial benefits, such as dividends, right issues, and warrants, as if they invest in ordinary shares. The major difference between investing in NVDRs and ordinary shares is the lack of voting rights of the former. NVDR holders generally are not allowed to participate and vote in shareholders' meetings except only in the case where the company wishes to delist itself from the SET. In addition, although NVDRs are designed mainly to ease foreign investment barriers; the SET does not prohibit Thai investors from investing in the instrument. Details of the total PTTEP shares held by NVDRs are disclosed in the "Shareholders" topic.

1.5 Issuance of Other Securities

1.5.1 Convertible Securities

- None -

1.5.2 Debt Securities

Debentures

PTTEP has investment-grade credit ratings of Baa1, BBB+, and BBB+ from reputable international credit-rating agencies, namely, Moody's Investors Service (Moody's), Standard & Poor's Ratings Services (Standard & Poor's), and Fitch Ratings (Fitch) respectively. In addition, the Company has also been given a rating of AAA, the highest credit rating, by TRIS Rating Co., Ltd. (TRIS) which is a credit-rating agency in Thailand.

As of December 31, 2024, PTTEP had the following outstanding debentures:

1) Details of THB debentures (total outstanding amount: THB 30,900 million)

Debt Security	Issue Date	Maturity Date	Tenor	Outstanding (Unit: THB Million)	Rate per Annum	Credit Rating[1]
						TRIS
THB senior debentures	June 6, 2014	June 6, 2029	15 years	11,400[2]	Fixed 4.82%, coupon payment: semi-annually	AAA
	November 5, 2021	November 5, 2026	5 years	6,000[3]	A step-up fixed interest rate of 2.00%–2.75% per annum, averaging to 2.25% per annum, coupon payment: semi-annually	AAA
	April 5, 2022	April 5, 2027	5 years	5,000[4]	Fixed 2.09%, coupon payment: semi-annually	AAA
	April 5, 2022	April 5, 2029	7 years	1,000[5]	Fixed 2.69%, coupon payment: semi-annually	AAA
	April 5, 2022	April 5, 2032	10 years	6,000[6]	Fixed 3.05%, coupon payment: semi-annually	AAA
	May 10, 2023	May 10, 2026	5 years	1,500	Fixed 2.51%, coupon payment: semi-annually	AAA

Remarks:

1 The latest credit ratings were issued by TRIS on March 21, 2024.

2 Issued by PTTEP; and in 2014, PTTEP entered into a CCS to swap THB 11,400 million for USD 349.05 million with an interest rate of 4.99 percent per annum.

3 Issued by PTTEP; and in 2021, PTTEP entered into a CCS to swap THB 6,000 million for USD 181.82 million with an interest rate of 2.54 percent per annum.

4 Issued by PTTEP TC, and fully guaranteed by PTTEP, and in 2022, PTTEP TC entered into a CCS to swap THB 5,000 million for USD 148.15 million with an interest rate of 2.88 percent–3.26 percent per annum.

5 Issued by PTTEP TC, and fully guaranteed by PTTEP, and in 2022, PTTEP TC entered into a CCS to swap THB 1,000 million for USD 29.76 million with an interest rate of 3.68 percent per annum.

6 Issued by PTTEP TC, and fully guaranteed by PTTEP, and in 2022, PTTEP TC entered into a CCS to swap THB 5,720 million for USD 170.75 million with an interest rate of 4.05 percent–4.16 percent per annum.

2) Details of USD debentures (total outstanding amount: USD 1,908 million)

Debt Security	Issue Date	Maturity Date	Tenor	Outstanding (Unit: USD Million)	Rate per Annum	Credit Rating[1]		
						Moody's	Standard & Poor's	Fitch
USD debentures, unsecured, senior	June 12, 2012	June 12, 2042	30 years	458[2]	Fixed 6.350%, coupon payment: semi-annually	Baa1	BBB+	BBB+
	December 6, 2019	December 6, 2059	40 years	600[3]	Fixed 3.903%, coupon payment: semi-annually	Baa1	n/a	BBB+
	January 15, 2020	January 15, 2030	10 years	350[4]	Fixed 2.993%, coupon payment: semi-annually	Baa1	n/a	BBB+
	June 10, 2020	June 10, 2027	7 years	500[4]	Fixed 2.587%, coupon payment: semi-annually	Baa1	n/a	BBB+

Remarks:

1 The latest credit ratings were issued by Moody's on February 2, 2024, Standard & Poor's on July 3, 2024, and Fitch on June 14, 2024.

2 Issued by PTTEP CIF, and fully guaranteed by PTTEP; repurchased in the amount of USD 10 million and 32 million in 2013 and 2023. As a result, the outstanding principal amount has been decreased from USD 500 million to USD 458 million. Moreover, it has been novated from PTTEP CIF to PTTEP TC in June 2023.

3 Issued by PTTEP TC, and fully guaranteed by PTTEP; repurchased in the amount of USD 50 million in 2023. As a result, the outstanding principal amount has been decreased from USD 650 million to USD 600 million.

4 Issued by PTTEP TC, and fully guaranteed by PTTEP.

During the past year, the Company did not hold the bondholders' meeting.

1.6 Dividend Payment Policy

Under normal circumstances, according to the Company's policy, PTTEP's Board of Directors generally recommends to the shareholders an annual dividend payment of not less than 30 percent of the net income after tax. The Board of Directors, as appropriate, may also resolve to pay interim dividends and subsequently inform the shareholders accordingly in the next shareholders' meeting. For the Company's subsidiaries, the dividend policy is subject to cash flow, future investment plans, and other factors necessary for the continuity of their operations and must comply with related laws and regulations.

Five-year dividend payment history of PTTEP is as follows:

Year	2020	2021	2022	2023	2024
Earnings per Share (THB)	5.65	9.70	17.94	18.89	19.86
Dividend per Share (THB)	4.25	5.00	9.25	9.50	9.625
Dividend Payout Ratio	77%	50%	53%	49%	49%

2. Risk Management

At PTTEP, Risk Management is regarded as a key component of Governance, Risk Management, and Compliance (GRC) under the Sustainability Framework to ensure the achievement of our vision, mission, strategy, and business objectives as well as to respond appropriately to stakeholders' expectations. The main aim is to promote sustainable growth and create short-term and long-term values for stakeholders. Therefore, to ensure robust risk governance, PTTEP has established a risk management framework and policy for all management members and employees to strictly observe.

2.1 Risk Management Policy and Plan

Risk Governance

PTTEP's Board of Directors oversees risk management by approving a Risk Governance Framework which determines the oversight responsibilities and authorities on risk management, demonstrating strong coordination, collaboration, and communication in managing risks effectively at the Board, the management, and business unit levels. In addition, the Board also approves a Risk Appetite Statement and Risk Metrics & Limits to be used as a framework for PTTEP to effectively execute business operations and seek business opportunities within acceptable levels of risks.

In addition, the Board appoints and delegates risk oversight authorities to the Risk Management Committee. The Risk Management Committee approves the Enterprise Risk Management Policy and Framework. The risk management unit has been established to implement the Enterprise Risk Management Policy and Framework company-wide and foster risk management as a core element of corporate culture in all business units to achieve effective risk management. Key risks, especially strategic risks, corporate risks, and emerging risks shall be periodically reported to the management, the Management Committee, the Risk Management Committee, and the Board of Directors to ensure that key risks are well managed and to prevent the rise of negative surprises, reduce potential losses, and minimize recurrence of risks in a timely manner.

In 2024, PTTEP reviewed the Risk Management Committee Charter, the Risk Governance Framework, the Risk Appetite Statement, Corporate Level Risk Metrics and Limits, and the Enterprise Risk Management Policy, ensuring that they continue to reflect the implementation of the strategic plan and align with the evolving business objectives. The improvements were based on three sources, i.e. (1) the current practices and recommendations from the Risk Management Committee (RMC) and the Management Committee (MC); (2) the Enterprise Risk Management Maturity Assessment (ERM MA); and (3) the Institute of Risk Management (IRM) Advisory in accordance with relevant international risk management standards.

PTTEP has established a Risk Management Structure in accordance with the Three Lines Model provided by the Institute of Internal Auditors (IIA) that promotes strong risk governance and effective risk management. The first line roles involve all business units with the duty of operating business activities while managing risks (risk owners) at the same time. The risk owners work in conjunction with those in second line roles, which involve risk management units and other units that perform supporting functions (Subject Matter Experts or SMEs), e.g. Governance, Compliance, Internal Control, and Subsidiary Management unit; Safety, Security, Health, and Environment (SSHE) unit. They provide advice and assistance on risk management. Lastly, the internal audit unit, being in the third line roles, performs an independent audit and provides recommendations. The risk management unit and internal audit exchange information to support effective and efficient implementation of risk management, ensuring that all significant risks are identified and appropriately managed.

Risk Management Policy and Plan

The Risk Management Committee approves Enterprise Risk Management Policy and Framework which emphasize proactive risk management and promote risk management as a core element of the corporate culture. They support the establishment of a systematic risk management process that is aligned with the international standard ISO 31000:2018. In addition, risk management frameworks of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), Enterprise Risk Management – Integrating with Strategy and Performance (COSO ERM 2017), and COSO Enterprise Risk Management – Applying Enterprise Risk Management to Environmental, Social, and Governance-related Risks (COSO ESG 2018), have been applied to enhance the integration of enterprise risk management, strategic planning, and ESG-related risk management. PTTEP's directors, management, and employees at all levels have the responsibility to manage risks and promote comprehensive risk management to contractors, suppliers, and business partners to ensure the achievement of our vision, mission, strategy, and business objectives.

In accordance with the Enterprise Risk Management Policy and Framework, the risk management unit is responsible for establishing and designing an effective risk management system, promoting, encouraging, and supporting company-wide risk management implementation both at the corporate level and operational level. Risk management strategy and plans have been formulated, with the aim of integrating risk management into business activities and decision-making processes covering core business activities in PTTEP, such as strategic planning management, investment and divestment decision-making, capital project management, operations, and business process management, including business continuity management and ESG management, taking into account also the costs and benefits resulting from risk management. At the same time, the progress of risk mitigation plans is monitored together with the key risk indicators (KRIs) as an early warning tool in order to set up additional mitigation measures in a timely manner.

Furthermore, the risk management unit shall report strategic risks and escalate key risks with high impact at the corporate level and emerging risks to formulate a Corporate Risk Profile (CRP) in order to report to the management, the Management Committee, and the Risk Management Committee on a regular basis with prompt alert to the related committees should there be any significant changes.

PTTEP remains committed to leveraging technology to improve the efficiency of risk management. The web-based Risk Register System (RR System) was developed to enable risk owners to systematically and quickly identify and analyze risks in the Event Risk Profile while improving risk information communication throughout the organization. It also facilitates the Company to easily consolidate and escalate key risks to corporate risks. In 2024, the Company enhanced the Risk Register system by introducing a strategic risk module, offering a higher-level perspective on risks beyond those arising from work plan implementation. This improvement has enabled the Company to effectively manage risks and avoid any major issues (No Surprise Problems) due to unregistered risks.

PTTEP has developed a Business Continuity Management System (BCMS), which is part of the enterprise risk management. A business continuity framework has been developed in accordance with the international standard for business continuity management ISO 22301:2019 to build the organization's capability to be resilient and to develop a Business Continuity Plan (BCP) to prepare the Company to operate under emergency or crisis situations. The Business Continuity Plan (BCP) is regularly and annually reviewed and exercised to ensure relevance and that those involved are able to apply the plan in an accurate and timely manner. Since 2023, PTTEP has strengthened our BCMS by centralizing it through the establishment of the PTTEP ONE BCMS to enhance efficient business continuity management. The system is certified by the British Standards Institution (BSI). In 2024, we began leveraging the BCMS Digital Platform to further enhance our business continuity management capabilities.

Risk Culture

PTTEP is committed to promoting risk management as an integral part of the corporate culture by fostering risk awareness among all PTTEP personnel together with competency development via training courses and various activities. The management at all levels is determined to serve as leaders and role models, as well as promote the implementation of risk management as a corporate culture. In addition, the management also supports employees on regular reviews and improvement of risk management by applying lessons learned and knowledge management for continual development of efficient and effective risk management. Risk coordinators are assigned to each business unit and project both domestic and international to work in coordination with risk owners and risk management units to drive the implementation of risk assessment and management throughout the organization.

Throughout 2024, PTTEP continued its communication campaigns to foster an understanding of risk management and business continuity management for all employees in the organization through training courses and workshops. The GRC is in You Roadshow activities were organized at the headquarters and across various domestic and international locations, including in the Republic of the Union of Myanmar (Myanmar) and Malaysia, engaging employees working in both offshore and onshore premises. Various online media channels, such as the series of the podcast "Low Risk High Return," poster and e-learning materials together with live broadcast channels were also utilized to share important information on issues, such as the background of the Overlapping Claims Area (OCA) issue, to increase employees' awareness of the current global issues that may be the cause of risks to the Company.

2.2 Risk Factors for Business Operations

Internal and external factors, such as energy transition, unpredictable and drastic climate change, natural disasters, disruptive technologies and innovations, rising geopolitical tensions, fluctuations in oil prices and exchange rates, and evolving cyber threats, can all impact the Company's business. PTTEP is committed to managing all aspects of risks, namely strategic risks, operational risks, and emerging risks.

2.2.1 Current and Emerging Risks Facing Businesses of PTTEP and PTTEP Group

(1) Strategic and Portfolio Risks

1) New Investment Risks

PTTEP drives the value of E&P business by maximizing the values of its exploration and production (E&P) business both domestically and internationally, supporting Thailand's energy security mission while also expanding its overseas investments by seeking business opportunities with global strategic partners in core areas. The Company's core areas comprise Southeast Asia, the Middle East, and North Africa where the Company has a full range of expertise. The core areas are also the regions that have acceptable geopolitical risks and relatively low costs of development and production. PTTEP has established a risk management process to assess each investment in various aspects, ranging from the size of petroleum fields, project scale, acquisition of petroleum assets and additional reserves, operational performance, the capability of the operators, terms and clarity of profit-sharing, compliance with contractual obligations, geographical conditions, relevant laws and regulations, political stability, international relations, to economic and financial stability. Moreover, the Company also seeks

advice from consultants who have expertise in such countries. Risk management measures are determined in advance of the selection of projects. Such risks are then integrated into a return-on-investment analysis or a sales and purchase agreement/joint venture agreement. Moreover, PTTEP considers new investments that align with the Net Zero GHG Emissions target, with a focus on natural gas investments, where greenhouse gas intensity is taken into account in the decision-making process.

PTTEP diversifies investment opportunities into environmentally friendly energy businesses that adopt new technology and processes addressing concerns on the environment, society, and corporate governance (ESG) for stable and sustainable growth. Examples include business opportunities in low-carbon energy such as offshore wind, hydrogen, Carbon Capture, Utilization and Storage (CCUS), etc. to support a low-carbon future. The Company has drawn up plans to mitigate those risks that may potentially affect our operations and investment growth, such as adopting strict due diligence within the Company's investment risk limit, monitoring, and analyzing situational changes for strategy review and adjustment in a timely manner, considering regulatory requirements and economic feasibility as well as counterparty risks in order to develop clear mitigation plans in advance to reduce impact and likelihood of risks.

In summary, PTTEP has established a thorough screening process for new investments, including farm-in joint ventures, mergers and acquisitions, as well as the withdrawal or divestment from existing projects. This process involves assessing risks, opportunities, and valuations to ensure that each project aligns with the Company's investment direction and strategy. All investments and divestments are screened by the Investment Committee, the Management Committee, and the Risk Management Committee prior to the final approval of the Board of Directors.

2) Organizational Capability Risks

Organizational capabilities such as human resources, business processes, and technology and innovation readiness are key factors in the achievement of the Company's targets. In this regard, PTTEP has accelerated efforts to enhance our knowledge management, business processes, human resource capabilities, and technology to support the Company's operations and business expansions to reap benefits from new opportunities while mitigating risks resulting from a lack of experts or knowledge, ineffective and inefficient work processes, and technological expansion and advancement. Some of the actions that have been taken by PTTEP are as follows:

- Knowledge management is the Company's strategic tool designed to create, share, and apply valuable knowledge across our operations. This strategy supports innovation, drives sustainable growth, enhances staff competency, supports strategic direction, and prepares the Company for the energy transition. To achieve these objectives, the Knowledge Management policy and framework have been developed, positioning PTTEP as an Innovative and High-Performance Learning Organization. The Company has identified experts in various fields to provide guidance and recommendations to staff and actively organizes and executes knowledge exchange activities involving employees, stakeholders, and external specialists. PTTEP assesses its knowledge and innovation management in accordance with the American Productivity & Quality Center (APQC), Southeast Asia Most Innovative Knowledge Enterprise Award (SEA MIKE Award), and Global Most Innovative Knowledge Enterprise Award (Global MIKE Award). Additionally, the Company has benchmarked its practices against leading organizations with best practices in knowledge management, and technology and innovation development. These efforts have led to PTTEP formulating the Capability and Technology Development Roadmap and studying the technology foresight that has been implemented in order to support

the Company's growth strategy and prepare for the energy transition. Moreover, the technology research and development process has been continually improved to enhance efficiency and reduce risks in technological development projects.

- The Company has undertaken measures on digital transformation to enhance operational potential through cutting-edge technologies such as Generative AI, Machine Learning, and the Internet of Things (IoT). PTTEP also improves work processes and leverages an efficient enterprise digital ecosystem, while collaborating with the world's leading digital companies. These efforts aim to enhance accuracy, speed, and success in the exploration and production of petroleum while developing efficient and sustainable business operations. Moreover, PTTEP has developed an information technology system to become an IT Global Platform, while maintaining system stability and control of confidential information, such as the use of cloud platforms. The Company also develops staff competency to align with our strategies and plans, e.g. arranging in-house training called Digital Academy training for staff to prepare them for adaptation to agile work process and establishing DCOE (Digital Center of Excellence) to be the center for the development of technology capabilities for our staff, such as data scientists and data engineers.

- The Company remains committed to adjusting its management processes to become more efficient and resilient. There is a focus on enhancing employees' capabilities to adapt to digital transformation processes and fostering a collaborative working mindset. Additionally, the Company aims to cultivate a suitable corporate culture to ensure that PTTEP is an organization that quickly and timely adapts to every changing circumstance.

Regarding organizational structure and work processes, PTTEP has reviewed and improved its organizational structure, operating model, and work processes periodically according to standards and good internal control principles, to be in line with PTTEP's strategic plans and sustainable business growth in both E&P and Beyond E&P Business. These include the review of the Delegation of Authority and Signatures (DAS) to increase organizational agility while maintaining sufficient control. PTTEP analyses and improves various work processes to cope with the fast-growing and fast-changing nature of business. The Company also emphasizes the need to effectively manage the workforce by enhancing multi-skills among personnel while also applying digital technology in work processes to maximize work effectiveness in the organization.

To prepare our human resources to support investments in both our core business and new business opportunities, as well as to ensure smooth operations domestically and internationally, the Company has initiated human resource development plans to recruit qualified staff members to support targeted operations. The plans focus on developing staff capabilities and leadership skills through the Blended Learning approach, combining various learning methods, including online e-learning approach, which supports unlimited self-learning. The Company also leverages digital technologies to help save time and increase work effectiveness. The Company also emphasizes the importance of human resource development to support Environmental, Social, and Governance (ESG) target, as well as recruiting external personnel for key positions where internal human resource development cannot keep up within a short period of time. Meanwhile, the Company retains high-potential employees to continue working for the Company are part of the key measures. PTTEP conducts the Employee Engagement Survey every two years to provide employees with the opportunity to express their opinions and suggestions, leading to improvements in human resource management. This, in turn, results in employees working with happiness, with increased efficiency, and being part of the organization's growth. The recent result in 2024 has found that the level of employee engagement of PTTEP stood at 75 percent which was higher than the 2022 results and benchmarks including Thailand's Market Average, Thailand's Oil, Gas, Exploration, and Production companies, APAC's Oil, Gas, and Consumable Fuels companies, and Fortune 500 companies. PTTEP remains committed to its Employee Engagement improvement plan approved by the Chief Executive Officer to

continuously enhance employee engagement over a two-year period, with the next assessment scheduled for 2026. To support the realization of PTTEP's vision, mission, and strategies, PTTEP has also instilled our core values and corporate culture – *EP* SPIRIT in projects in Thailand and all affiliated companies overseas. PTTEP is proceeding to further promote desirable *EP* SPIRIT behaviors for executives and employees through various activities and communications to ensure that all staff understand *EP* SPIRIT through Change Agent or *EP* SPIRIT Transformer. PTTEP organized the "Train the *EP* SPIRIT Trainers" program for nominated local staff in Myanmar and Malaysia to enhance their knowledge and skills on leadership, core value promotion, and promotion of Corporate Culture workplan to production projects abroad with an understanding of country-specific contexts. PTTEP also reviews core values and corporate culture to accommodate our investments in core businesses and new business opportunities by encouraging employees to exhibit *EP* SPIRIT expected behaviors, so they can work with the same standard of expected behaviors, resulting in a common working culture, which in turn are fundamental for the development and growth of the Company with efficiency and sustainability.

(2) Financial and Market Risks

1) Financial Risks

PTTEP Group has established a financial management framework under an acceptable financial risk limit. This framework is applied to the evaluation of funding sources and liquidity management, ensuring a robust and efficient capital structure. The policy is aligned with the current investment environment and supports the Company's short-term and long-term investment plans. The Risk Management Committee regularly monitors its implementation and effectiveness.

The Company's key financial risks include counterparty credit risk and liquidity risk. To manage counterparty credit risk, PTTEP Group conducts transactions exclusively with reputable and financially sound partners, regularly assessing and reviewing their creditworthiness. Most of PTTEP Group's products are sold to PTT Public Company Limited (PTT), a reliable partner. To address liquidity risk, which involves the potential inability to secure adequate working capital within a certain period, PTTEP Group prepares detailed cash flow forecasts and maintains both committed and uncommitted credit facilities with various financial institutions, ensuring access to necessary funds when required.

2) Petroleum Marketing and Distribution Risks

PTTEP's revenue stream mainly comes from the sales of domestic natural gas, for which PTT is the main customer. The gas sales are arranged through the establishment of long-term gas sales agreements (GSAs), with terms lasting 15–30 years. If any of our projects have potential reserves beyond the volumes specified in the GSA, PTTEP will analyze and re-negotiate the GSA with buyers to accommodate such additional volume, either in the forms of additional gas sales or an extension of contract period. Moreover, to mitigate market risks which may result in refusals from buyers to purchase contracted volumes of natural gas to safeguard the Company's revenue stream, PTTEP has negotiated to include obligations for buyers and sellers to commit to the annual minimum volumes in the GSAs. Buyers shall pay for the minimum committed volumes of gas, whether the full amount is taken (Take-or-Pay arrangement).

Since 2022, the National Energy Policy Council (NEPC) has approved the quota for PTT to import liquefied natural gas (LNG) to feed its existing natural gas power plants. This quota will not affect PTTEP's gas sales because it allows only LNG import for additional volume over the committed gas sales in current GSAs, and the current GSAs with PTT also include Take-or-Pay obligations as mentioned above. Moreover, PTTEP closely monitors the economic outlook and Thailand's energy demand by coordinating with PTT and related government agencies to collectively outline an optimized supply plan as well as prepare project development plans to develop and increase reserves in various projects in accordance with the country's energy demand that might change according to economic conditions, both in the short and long terms.

3) Risks from Major Client Dependency

The petroleum exploration and production business requires substantial investments for exploration, drilling, production facilities and platform construction, before the production process and earning revenues from selling petroleum products until the required returns can be achieved. Therefore, it is imperative to execute long-term sales contracts with well-established clients who have demands and possess long-term financial stability to manage revenue risks over the project's timespan. There are only a few numbers of potential buyers who are qualified for long-term sales contracts. Most of them are national oil companies or companies that have gas separation plants or gas supply chain businesses with stable financial status and the ability to add value to natural gas in the long term. For crude oil and liquefied petroleum gas (LPG), PTTEP conducts a competitive bidding process for short-term contracts. There are various bidders from overseas including trading companies and regional refineries. The bidding prices are usually referenced with major crude oil prices in the global market.

For Thailand, PTTEP's major and most important client is PTT which purchases most of PTTEP's petroleum products from domestic projects not only natural gas but also crude oil and condensate. Revenue from PTT is considered a key income stream for PTTEP. Currently, PTT is the sole buyer who buys natural gas from all producers in the Gulf of Thailand where the gas will be transported through subsea pipelines to gas separation plants before delivery to PTT's customers. The gas prices shall require approval by the Petroleum Committee with consent from the Minister of Energy in accordance with the requirement from the Petroleum Act, to ensure reasonable benefits for all stakeholders – government, investors, and people.

In Thailand, taking into account the overall demand and supply of natural gas in Thailand, it can be concluded that the country's demand tends to grow, in contrast with domestic production which has started to decline continuously. Therefore, having PTT as the major client is considered a low risk in client dependency. Moreover, PTTEP has other international customers and follows our strategy to expand investment in other countries, especially in Southeast Asia and the Middle East regions, to enhance petroleum production and sales, as well as enlarge our client base.

4) Petroleum and Oil Price Risks

Prices of PTTEP's petroleum products are based on global crude oil prices, which are highly volatile due to several key factors, including demand, supply, global economic conditions, and actions taken by central banks of various countries. The main risk factors to watch are as follows:

1. OPEC+ production control policies and group unity;
2. Increased crude oil production from non-OPEC+ countries;
3. Geopolitical conflicts between countries, which, if they expand, could affect crude oil supply. Examples include the conflicts of Russia–Ukraine and Israel–Hamas and allies, as well as tensions in the Red Sea;
4. Global economic situation, particularly in the United States and China;
5. The U.S. Federal Reserve and European Central Bank's adjustments to interest rates;
6. Economic stimulus policies and oil demand from China;
7. Economic and foreign policies of Donald Trump, the new U.S. president.

Changes in global crude oil prices directly and immediately impact PTTEP's crude oil and condensate prices. At the same time, the selling price of natural gas, PTTEP's main product, adjusts in line with changes in crude oil reference prices. Natural gas prices are adjusted periodically – such as every 3, 6, or 12 months – according to the pricing formula outlined in each project's sales agreement. This results in natural gas prices being more stable than crude oil and condensate prices.

PTTEP closely monitors oil price trends and considers entering oil price hedging contracts to mitigate the impact of price volatility on the Company's cash flows and overall performance.

5) Exchange Rate Risks

PTTEP Group designates the U.S. Dollar (USD) as its functional currency for operations and reporting, in accordance with Thai Financial Reporting Standards (TFRS). This is because the USD serves as the primary currency for transactions involving PTTEP Group's petroleum products, such as natural gas and crude oil. However, PTTEP Group faces exchange rate risk from fluctuations between the Thai Baht (THB) and the USD. While most of the Company's cash inflows from product sales are received in THB from key domestic customers, a significant portion of its operational and investment expenses are denominated in USD. This creates exposure to foreign exchange volatility. To manage this risk, PTTEP Group employs a risk management policy that includes natural hedging by matching THB revenues with THB expenses. Additionally, the Company uses financial instruments such as forward contracts and options to hedge exchange rate risks. PTTEP Group also considers exchange rate risk management transactions tied to its Environmental, Social, and Governance (ESG) performance, which helps reduce risk management costs while aligning with its sustainable development goals and mitigating risks from exchange rate fluctuations.

The use of the USD as the functional currency also impacts PTTEP Group's financial performance due to the translation of non-USD denominated assets and liabilities, such as those in THB, into USD during each accounting period. PTTEP Group copes with such issues by maintaining an appropriate balance of non-USD assets and liabilities, thereby reducing the effects of exchange rate fluctuations.

6) Interest Rate Risks

PTTEP Group is exposed to interest rate risk due to fluctuations in market interest rates, which are influenced by central banks of major global economies, such as the U.S. Federal Reserve. These changes can impact the Company's future cash flows and the fair value of its financial instruments. To address this risk, PTTEP Group has implemented a risk management policy that maintains an appropriate balance between fixed and floating interest rates. The Company also ensures that such balance corresponds with the Company's business operations. In addition, PTTEP Group considers the use of financial instruments to manage interest rate risk. The financial risk management activities are conducted under conditions of necessity and appropriateness, taking into account costs, market conditions, and acceptable risk levels.

(3) Political and Legal/Regulatory Risks

1) Political Risks in Investment Countries

PTTEP focuses on expanding investments in strategically important target areas to support long-term growth, while also being aware of the geopolitical risks that may be relevant in these areas. Hence, in determining the expansion strategy, PTTEP stipulates not only the acceptable levels of political, economic, investment, legal, and regulatory risks but also closely monitors such risks by a unit that has been tasked with gathering information related to these countries and preparing monthly reports on the situation and geopolitical risks.

PTTEP has continued to analyze, assess, and monitor risks arising from the diverse political landscapes of the target regions, both in terms of political stability and state security as well as the overall economic, laws and regulations, security, and creditability outlook. Specific regions identified as having political risks include countries in the Middle East region. Over the past year, the conflict between Israel and Hamas has persisted. Although fighting between Israel and Hamas was confined to the Gaza Strip, the conflict has involved Hamas allies, with Hezbollah forces backed by Iran launching attacks on northern Israel. This prompted Israel to retaliate against Hezbollah forces, escalating the response to include Iran, leading to the deaths of senior leaders from both Hamas and Hezbollah forces. As of November 2024, Israel has shown no signs of ending the conflict despite international calls, particularly from Western nations like the United States, for a ceasefire agreement and hostage rescue to de-escalate the situation. PTTEP has been monitoring the situation and assessing the impact and has not found direct or indirect damage or impact on

the Company's investment projects. However, the Company has a business continuity plan in place for all projects to address potential impacts, ensuring continued operations.

In the People's Democratic Republic of Algeria (Algeria), the internal situation of the country, particularly the stability of the government, has improved continuously. The government has been able to implement its policies, and the economy has improved accordingly. Although there may be high inflation rates, as seen in many countries, this has not affected the stability of the government. The overall risk index of the country has decreased continuously, and the Company's projects have not been directly or indirectly affected by the situation.

In Myanmar, PTTEP has continued to closely monitor the situation, analyzing and assessing risks using scenario planning methodology to accommodate various circumstances that may emerge in the future. Relevant agencies evaluate the situation, risk factors, and significant changes together in order to adjust or supplement risk management plans and review the business continuity management plan to cover any new situations that may arise. This ensures the confidence in the continued operation of the project.

In the Republic of Mozambique (Mozambique), the situation near the Mozambique LNG project site is under the control of government forces, together with support forces from member countries of the Southern African Development Community (SADC). This has led to stability in the project area, posing no obstacles to resuming operations in the region. However, the project operator is currently assessing readiness in all aspects, in addition to security factors in the area. It is expected that after the election of a new president of Mozambique, the operator will consider returning to work in the coastal area. The Company expects that a decision will be made on the continuation of operations in the near future.

For other target countries, the Company has continued to follow the investment and project management process consistently. PTTEP evaluates geopolitical risks and the risk landscape of each country whenever significant events occur. This information is crucial for management and relevant departments to prepare efficient and effective response plans in case of various potential events.

Furthermore, the Company maintains close coordination with the Ministry of Foreign Affairs and Thai embassies in countries where it invests or plans to invest, promoting good relations and ensuring government support as well as aligning the Company's operations with the policies of the respective countries.

2) Compliance Risks

Compliance Risks generally arise from various factors, such as the enactment of new laws or amendments to existing laws and regulations that impact business operations of PTTEP Group. Other factors include the complexity of certain laws, particularly those requiring the exercise of reasonable discretion, which may lead to misinterpretation of laws, and eventually result in non-compliance. Such incidents could result in penalties, including monetary damages and operational challenges such as fines, revocation or suspension of licenses, and possible damage to PTTEP Group's reputation and image. To mitigate these risks, the Compliance Section is tasked with assuring that all business units of PTTEP Group strictly adhere to the applicable laws, thereby building confidence among the Company's shareholders, Board of Directors, management, and employees that our operations are conducted in full compliance with the relevant legal requirements. To achieve this, the Compliance Section closely and regularly monitors the Cabinet's resolutions, bills, and relevant applicable laws that may affect PTTEP Group's operations. In addition, PTTEP Group places significant emphasis on managing anti-corruption risks. Relevant monitoring programs are in place, with details provided in the "Corporate Governance" section, under the sub-topic of "Anti-Corruption."

(4) Operational Risks

1) Exploration Risks

Exploration with the aim of finding new petroleum sources is essential to E&P business. In addition to finding petroleum reserves to replace those that have already been produced, PTTEP is also looking for new reserves to support long-term revenue growth and bolster Thailand's energy security, while simultaneously addressing the ever-growing global energy demand.

The primary objective of exploration is to identify sizable, commercially viable petroleum resources. For exploration activities, the key risks include geological risks (e.g. geological specific characteristics, reservoir presence, and petroleum properties) and resource volume uncertainty. Effective management of risks for prudent exploration then pivots around detailed technical and commercial evaluations. Key factors influencing investment decisions of petroleum exploration include the chance of geological success, evaluation of the type and characteristics of petroleum, pre-drill development plan, resources estimates, exploration and production period, and anticipated expenditures consisting of exploration, development, operating, and decommissioning costs, and terms of contracts with regards to returns and tax payment to the government. Various subsurface activities are typically performed to understand and mitigate exploration risks, such as geological studies, seismic acquisition and processing, and appraisal and development wells.

PTTEP employs a clear and systematic approach to exploration and production (E&P) project evaluation, ensuring that each phase of the E&P lifecycle is underlined by clear processes, guidelines, and criteria to maximize exploration success and minimize risks. The approach comprises potential petroleum basin evaluation and selection, in-depth subsurface studies of targeted blocks, and above-ground investment risk analysis. The Geosciences, Subsurface, and Exploration Group of PTTEP is to evaluate worldwide target areas to identify those with the highest potential for selection in bidding or joint venture opportunities. Once projects are secured, both short-term and long-term exploration plans are formulated within the exploration budget set by the Company. These processes are reviewed annually, with target areas and exploration strategies adjusted to align with the results of previous exploration activities.

In addition, PTTEP has established a Technical Assurance Committee as an additional layer of review and oversight in the exploration preparation process. This ensures that key technical aspects are thoroughly analyzed and that exploration assessments align with PTTEP's internal standards and guidelines, supporting well-informed investment decisions that contribute to production targets.

To align with the Company's strategy, PTTEP has a policy to diversify exploration investment by determining investment proportions and considering investment across various areas around the world, sharing risks and rewards with strategic partners who have proven exploration expertise to enhance the probability of the Company's exploration success.

2) Project Development Risks

PTTEP applies skills and expertise in project planning and management to develop commercially viable resources to be able to carry out construction and commencement of production within the determined schedule and budget. However, the construction and development projects are faced with a number of risk factors which can affect project development. Such factors include reservoir performance, commercial negotiation with partners and governments, domestic and international political issues, war, fluctuations in oil prices, contractor and service providers' performance, cost overruns, and unforeseen technical difficulties/complexities. In addition to consistently implementing value assurance systems in project management to enhance the Company's capability to manage those factors with preventive measures and risk assessment, PTTEP has placed great importance on continuously improving the abilities and personnel competency to achieve milestones so that they are able to carry out various projects in the most efficient ways. Details are as follows:

Project Management: To achieve project completion in a timely manner and within budget, the Company focuses on the stipulation of policy and value assurance measures in critical stages of projects, including project organization, project planning and proper engineering system designs, management of procurement contracts and other contracts, and construction monitoring.

Personnel and Process: The Company focuses on the development of human resources on skills and capability in project planning and management for both operating and non-operating projects of PTTEP, while providing due attention to the preparation for competitive personnel recruitment to acquire knowledgeable and experienced personnel in the competitive employment market. Information and experience from previous projects are gathered and formulated as an in-house database and performed benchmarking with the market industrial average to improve the accuracy of the evaluation process for new development projects. Ultimately, the overall evaluation process of all new projects will be carried out under the Company's Project Realization Process (PREP) to ensure the success of projects in all aspects, including safety, quality, timeliness, and the project's determined budget.

Commercial Contracts: In the process of project development, it is imperative for the Company to work closely with contractors to ensure success. In this regard, the Company focuses on careful negotiation of terms and conditions and contract administration by experts from various relevant departments, such as those related to construction, engineering, procurement, finance, accounting, and legal aspects. Such work will improve efficiency in management and mitigate the risks arising from non-compliance and disputes with contracting parties. Prudent contract management also lessens the risks that may impact operational plans and the Company's performance at large.

3) Production Risks

In every production process, PTTEP has to face various potential risks, starting from the construction of the wellhead platform and production well drilling through the production process until the point of sale. These risks include higher prices of wellhead platform and well drilling, well potential, ability to maintain petroleum production and sales as per commitment, and decommissioning liability for transferred assets. All of which can directly impact the corporate goals as well as production and sales targets.

Mitigation of production risks focuses on areas of process planning and platform design, production process, production control systems, preventive maintenance, and maintenance activities. Operational Excellence Management System – Reliability & Asset Integrity (RAI), which is a part of the Operational Excellence Project, has been adopted and continuously improved to ensure the highest standards of production in terms of integrity and safety. The RAI has been designed specifically to minimize production losses due to worn-out equipment and improve equipment efficiency through preventive maintenance and inspection, to achieve zero unplanned shutdowns.

In terms of increasing the ability to produce petroleum to meet the target, the Company has managed the number of drilling rigs to be at a proper level, especially during the period of increased production capacity or expansion of project areas for additional drilling to maintain the targeted petroleum production levels. In terms of the management of onshore production areas, the scope of areas has been reviewed with relevant government agencies. Measures have been put in place to restore finished production areas to their original condition, including having protection laws in some areas to enable continuous petroleum production. In addition, PTTEP has a Crisis Management Plan, as well as a Business Continuity Plan (BCP) with a risk assessment to mitigate the impacts along with coordinating with all sectors, including government agencies and customers and stakeholders regularly, in the event of an abnormal situation. Announcements will be made to temporarily stop operations due to force majeure in some projects to ensure the safety of employees and contractors. Moreover, the Company will establish a special working group to study the impact of such situation and determine the next course of action.

4) Safety, Security, Health and Environmental Risks

PTTEP has continued to assess Safety, Security, Health, and Environment (SSHE) risks regularly to reduce the likelihood and impacts of unexpected events. The analysis comprises the identification of internal and external factors to prevent Major Accident Events (MAEs), as well as to reduce the risks that would affect PTTEP Group's employees, stakeholders, assets, environment, and reputation to become a Zero Incident Organization as per PTTEP's SSHE Vision.

PTTEP has managed SSHE risks through the Company's SSHE Management System (SSHE MS) by determining SSHE policies, standards, guidelines, and procedures for employees and contractors to perform their operations efficiently and to comply with applicable legal requirements of the countries where PTTEP operates. In addition, PTTEP has been fostering SSHE awareness and SSHE culture by encouraging and promoting various SSHE campaigns and activities, such as the Human Factor Clinic aiming at preventing work-related errors from human factors, the Safeguarding our Future – Preventing MAEs emphasizing everyone's responsibility in protecting critical safeguards to prevent MAEs, the SSHE Culture Survey, the Spill Responses Readiness and Enhancement through spill capability assessment and collaboration with both national and international emergency response units, and the annual emergency exercise, etc. Furthermore, there are constant internal and external process verification and risk re-assessments at worksites to ensure that SSHE risks are As Low As Reasonably Practicable (ALARP).

PTTEP has also monitored SSHE Risk Management at various levels through the Company's Risk Management Committee with a variety of key risk indicators and trackers, for example, Lost Time Injury Frequency (LTIF), Total Recordable Injury Rate (TRIR), Loss of Primary Containment Rate (LOPCR), Spill Rate, audit findings and close-out status, natural disasters, security status, pandemic, and health infection in high-risk countries, to ensure that all situations are being monitored to determine suitable mitigation, corrective and preventive actions, and business continuity plans towards achieving even higher social and business sustainability in a holistic manner.

5) Social and Community Risks

In operating businesses both domestically and internationally, PTTEP adheres to social and community responsibilities including human rights according to human rights principles in line with laws, regulations, and international standards, and always considers that all employees must be treated equally and have their rights to express opinions. There is a channel for employees to complain if they are wrongfully treated. The Company takes into account risks and impacts in every operating area. With this, PTTEP thus emphasizes social development, local environment and living standard improvement, natural resources, and environment conservation, as well as value creation for our stakeholders. These are in line with PTTEP's policy on community relations and social responsibilities. Communities and stakeholders will then trust, accept, and support the operations, fulfilling the aim of the Company to grow together with communities and society in a sustainable manner.

At present, effective stakeholder management is crucial for achieving business sustainability, as it helps minimize risks and mitigate the impacts of the Company's operations while fostering positive relationships with stakeholders. Recognizing this significance, PTTEP has developed a comprehensive stakeholder management strategy, including defined levels of engagement and stakeholder group classifications. These efforts align with the Company's Stakeholder Management Guideline, serving as a key mechanism to strengthen stakeholder relationships and support the Company's strategy.

In addition, the Company has developed an Issue and Stakeholder Management System (ISMS) to analyze potential social impacts and concerns within communities. Community relations teams across all operational areas review the analysis and report through the system annually, creating a centralized database. This approach enhances the efficiency of monitoring social and community risks and aids in developing tailored engagement plans to foster relationships and implement suitable social development initiatives for each specific area. PTTEP has also set guidelines for complaints handling, allowing communities to report concerns directly to on-site officers. Complaints will be recorded and tracked through the Grievance and Issue Monitoring System to ensure that such complaints are managed appropriately. An assessment of social returns on investment and the stakeholder commitment survey are conducted. This data is utilized to design social development projects that effectively address stakeholder needs and expectations. For more information on stakeholder management, please visit PTTEP website under the "Sustainability" topic, "Stakeholder Management" sub-topic. Click here for more information

PTTEP prioritizes the management of potential salient human rights issues from its direct operations covering areas of workplace; safety, security, health, and environment; supply chain; and community and vulnerable groups. In 2024, the Company conducted an annual human rights risk review, covering 100 percent of our operating assets and joint ventures, then integrated the salient issues as part of enterprise risk assessment. This year, the identified human rights salient issues have been: (1) workplace safety for both employees and contractors and (2) environmental impact on communities from PTTEP operations. All medium-to-high-level risks are actively monitored to prevent and mitigate the potential human rights violations. For more details about human rights management system and risk assessment, please visit PTTEP website, "Sustainability" topic, "Human Rights" sub-topic. Click here for more information

6) Cybersecurity Risks

Cyber threats regularly occur and spread across multiple business sectors through various forms and complexities, which can potentially lead to severe damage and business disruption whereby computer or network systems do not function. PTTEP recognizes the importance of safeguarding against cyber threats and includes the risk of digital security threats in the Company's Corporate Risk Profile to closely monitor the development as well as to implement necessary measures. These measures include raising cybersecurity awareness, conducting phishing simulation for the Company's staff, establishing a Cyber Security Operations Center (CSOC) responsible for monitoring cybersecurity incidents 24/7, Security Information and Event Management (SIEM) responsible for collecting and providing real-time analysis of security alerts, conducting Cyber Security Response Drills, regularly performing data backup, and reviewing the Disaster Recovery Plan. The results are subsequently reported to the Risk Management Committee and the Board of Directors respectively to ensure prompt responses to disruptive and emergency situations. Since 2023, PTTEP has implemented CSOC – Tier 2 for both Information Technology (IT) and Operational Technology (OT) provided by Mandiant, a global cybersecurity consulting company. Furthermore, a proactive cyber defense activity, Threat Hunting, has been implemented to monitor the cybersecurity situation of all company data and systems both IT and OT. This is to reduce the chance of occurrence and damage that may be caused by cyber threats by more than 80 percent.

Since 2014, PTTEP has referred to the National Institute of Standards and Technology (NIST) for a standard framework to manage cybersecurity. Risk assessment has been carried out based on the ISO 27001:2013 standard for the electronic mail system and data center facility. PTTEP has a risk assessment plan based on the ISO 27001:2013 standard for every system. PTTEP is confident in the readiness to participate in the test and report significant cyber threats to government agencies as required by law.

To reduce cybersecurity risks, PTTEP has implemented Multi-Factor Authentication (MFA) to enhance the identity verification of the staff other than conventional usernames and passwords to support the Company's data and system access from anywhere and anytime as per PTTEP's direction of New Way of Working to promote work–life balance of its employees. Furthermore, PTTEP has also implemented Data Classification and Labeling with Microsoft Azure Information Protection (AIP) to support permission and sharing management of document confidentiality.

PTTEP has continuously invested in technology and used services from PTT Digital to prevent and respond to cybersecurity risks. PTTEP established Cyber Security Operations Center (CSOC) that completely connected Security Information and Event Management (SIEM) with the Network Firewalls across all petroleum development bases to ensure cybersecurity protection in the Company's operation. As a result, in 2024 PTTEP received from the British Standards Institution (BSI) an ISO/IEC 27001:2022 certificate for the Company's management of information security relating to its data centers and supporting facilities. This certification underlines PTTEP's commitment to the security of information of our stakeholders.

(5) Emerging Risks

Changes in the environment, technology, laws, and regulations, as well as in the global energy crisis, affect business operations. PTTEP, therefore, keeps monitoring situations and assessing emerging risks that may affect the Company's business operations in the future and then reports them to relevant executives and committees to follow up and update risk mitigation plans to be consistent with the changing context that may affect our three key operational strategies – Drive Value, Decarbonize, and Diversify – and be able to strengthen the petroleum exploration and production business while expanding into new forms of energy and maintaining sustainable growth. The above efforts play a key role in responding to emerging risks promptly, increasing competitiveness and business opportunities, and achieving the Energy Trilemma, consisting of energy security, affordability, as well as environmental and social responsibility.

Currently, PTTEP has identified and monitored two emerging risks as follows:

1) Risk from Extreme Weather Events

Extreme weather events, such as heatwaves, heavy rainfall, tropical cyclones, droughts, and water resource-related challenges, are increasingly becoming significant risks due to their growing frequency, intensity, and unpredictability. This trend, driven by global climate change, introduces cascading challenges that extend beyond immediate operational disruptions to long-term systemic impacts on infrastructure, supply chains, and financial stability.

PTTEP identifies extreme weather events as an emerging risk due to their rapid escalation in frequency, intensity, and unpredictability. These events pose challenges and systemic impacts driven by global climate change, requiring the adoption of new models, tools, and collaborative approaches for effective mitigation. This highlights the importance of integrating climate resilience and adaptive strategies into the PTTEP's broader risk management framework.

The intensifying effects of climate change pose critical challenges to operational stability, asset integrity and safety, financial performance, and supply chain management. These challenges manifest in several key areas:

- Operational Disruptions: The increasing severity and unpredictability of extreme weather events, such as tropical cyclones and heavy rainfall, could disrupt onshore and offshore operations in key regions, including Thailand, Malaysia (Sabah and Sarawak), and Myanmar. Additionally, prolonged heatwaves and droughts may result in water scarcity, a serious concern since water is a critical resource for operational processes.

- Asset Integrity and Safety: Extreme weather conditions subject infrastructure to substantial physical stress, threatening infrastructure's integrity, for example, cyclones, heavy rainfall, and other adverse conditions can weaken infrastructure over time. Furthermore, workplace safety is at risk during extreme climate events, underscoring the need for comprehensive employee protection measures. To address these challenges, PTTEP requires a significant amount of resource allocation toward advanced monitoring systems, infrastructure upgrades, and emergency response mechanisms.

- Financial Impacts: The financial implications of climate change are significant. Increased expenditures on repairing and maintaining infrastructure to withstand heightened extreme weather risks are inevitable. Moreover, downtime or reduced operational capacity during adverse conditions can result in revenue losses.

- Supply Chain Disruptions: Extreme weather events can severely disrupt supply chain continuity, especially when critical materials or services are sourced from the affected regions. These disruptions can cascade across operations, impacting production schedules and delivery timelines.

These impacts underscore the need for PTTEP to adapt the strategy and business model to remain resilient in the face of extreme weather events while capitalizing on opportunities for innovation and sustainability.

Mitigation Plan: PTTEP develops and implements a Climate Management Plan to proactively address the risks posed by extreme weather events, ensuring personnel safety, asset protection, and operational continuity. This plan involves a multifaceted approach, combining advanced technology, strategic infrastructure adaptations, robust risk management practices, and collaborative efforts with stakeholders to enhance resilience across all aspects of PTTEP's businesses. Key mitigation measures include:

- Infrastructure Readiness: Conducting regular site monitoring and inspections, considering incorporating climate scenarios into the design phase for new projects, and performing site-specific risk assessments to refine predictive models for weather patterns and their operational impacts.

- Emergency Preparedness, Response, and Recovery: Developing proactive resource pre-positioning plans and streamlined recovery processes, implementing safety systems to remotely and automatically secure facilities during severe weather, leveraging insurance as a financial tool to support resilience and recovery efforts, and establishing Business Continuity Plans (BCPs) to maintain critical operations with minimal disruption.

- Stakeholder Engagement: Collaborating with governments, insurers, local communities, and relevant organizations to strengthen disaster preparedness and response efforts.

These measures are part of PTTEP's broader approach to maintaining resilience against extreme weather events while leveraging opportunities for adaptation and long-term sustainability.

2. Flawed Decisions from AI Misinterpretation

Utilizing AI technology in organizations to enhance operational efficiency, while presenting new opportunities, also introduces new risks that organizations must adequately address. This is particularly crucial in the Oil & Gas industry, characterized by its complexity and demand for high data accuracy. PTTEP acknowledges these risks and has implemented AI risk management to continuously monitor, establish preventative measures, respond to, and mitigate these risks as follows:

1. Data Security Risks: Similar to general cyber threats, AI usage increases the possibility of novel cyberattacks, such as direct attacks on AI models (Model Poisoning, Adversarial Attacks) or utilizing AI to attack other systems. PTTEP prioritizes the security of data used for AI training and the resulting AI output. Comprehensive preventative measures are in place, ranging from access control and data encryption to verifying the accuracy of data input into AI models. 24/7 cyber threat monitoring is conducted through the Cyber Security Operation Center (CSOC), connected to the Security Information and Event Management (SIEM) System.

2. Credibility and Accuracy Risks: AI can generate content that appears credible but is inaccurate, potentially leading to flawed decision-making. PTTEP emphasizes rigorous verification of the data used for AI training and the resulting output. The PTTEP AI Platform serves as the central platform for controlling and managing AI models, from data retrieval and training to monitoring and evaluating model quality. Guidelines for human–AI collaboration (Human Oversight) are also established to ensure human involvement in verifying and validating AI results before practical application.

3. Data Privacy Risks: AI usage may involve processing personal data which relates to laws and regulations. PTTEP has established a comprehensive Data Governance framework encompassing data access, quality control, and privacy protection to ensure that AI usage complies with all applicable regulations and laws.

4. Bias Risks: AI can learn and reflect biases present in training data, potentially leading to unfair outcomes. PTTEP is collaborating with consultants to develop policies and guidelines for ethical and responsible AI usage to mitigate bias risks and promote fairness in AI applications.

5. Human–AI Collaboration Risks: Collaboration between humans and AI can lead to misunderstandings or communication errors. PTTEP focuses on fostering understanding and developing necessary skills through training programs for working with AI. Clear roles and responsibilities are to be defined for human–AI collaboration.

6. Operational Risks: Risks from inappropriate decisions based on incorrect AI recommendations can impact various operational processes. PTTEP emphasizes the importance of Human Oversight, ensuring human involvement in reviewing and validating AI recommendations before implementation. Collaboration guidelines (Human Oversight) are defined to ensure a significant human role in supervision and final decision-making.

7. Revenue Loss Risk: Incorrect AI decisions can lead to revenue or profit loss. PTTEP prioritizes careful evaluation of the impact of AI usage. AI models are tested and evaluated in simulated real-world data before deployment. Continuous monitoring and evaluation of AI performance are conducted through the PTTEP AI Platform.

PTTEP has begun monitoring these AI-related risks to ensure the organization can effectively control situations and respond to risks arising from AI usage.

2.2.2 Risks of Investors in the Company's Securities

Risks from the Major Shareholder's Management

As of August 14, 2024, PTT Public Company Limited, or PTT, is the major shareholder of the Company with a shareholding percentage of 65.29 percent (both direct and indirect) in the paid-up capital. PTT is therefore able to control most of the resolutions of the Shareholders' Meeting, including the Director's appointment and approval on other matters that require a majority vote from the Shareholders' Meeting. However, this is not applicable for matters related to laws or the Articles of Association of the Company, which require three-fourths of the votes of the Shareholders' Meeting.

However, PTTEP values compliance with the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET)'s rules and criteria while taking seriously the perennial stewardship of minor shareholders' rights. In this regard, the Company has set a clear organizational structure to manage its business. There are 10 independent directors from a total of 15 directors who provide opinions and beneficial recommendations with prudence and independence. The Company has also appointed members of the Audit Committee consisting of four independent directors, who do not have any conflict of interest in order to monitor and review the Company's operations and protect the interests of minority shareholders, resulting in appropriate checks and balances and verifiable systems to achieve business transparency and good corporate governance.

Risks of Uncertain Returns on Investment for Shareholders

PTTEP's share price may rise or fall in a volatile manner which may cause losses or lower-than-expected returns to the investors. Key factors which are beyond PTTEP's control include global oil prices, economic situations, geopolitical risks which are the cause of crises such as oil price war, as well as changes in policy, regulation, requirement, or terms affecting the industry.

Risks from Dividend Payback Ability that is below Investors' Expectation

There may be a risk that PTTEP's ability for annual and/or interim dividend payback is lower than investors' expectations. This depends on several factors including operating cashflows, investment budgets, capital reserved for business expansion, and debt repayment. However, the Company has continued to adhere to its dividend policy of paying not less than 30 percent of its net profit after income tax deduction.

2.2.3 Risks Facing Investing in Foreign Securities (If the Issuer is a Foreign Company)

- None -

3. Management Discussion and Analysis of Operating Results

3.1 Overall Performance of PTTEP

Table of Key Financial Results

(Unit: USD million)	2024	2023	Inc. (Dec.) YTD
Total revenues	9,273	9,057	216
Revenue from sales*	8,698	8,511	187
EBITDA**	6,462	6,433	29
Profit for the period	2,227	2,208	19
Basic earnings per share (Unit: USD)	0.56	0.54	0.02
Profit (Loss) from normal operation	2,262	2,322	(60)
Profit (Loss) from non-operating items	(35)	(114)	79

* Included deemed income for the tax payment by Oman government but excluded from the calculation of the average sales volume and selling price.
** Excluded write-off assets of petroleum retention lease AC/RL12 (Oliver) and Mexico block 29 (2.4) Project during the periods.

Overall Operating Results

Comparisons between 2024 numbers and those of 2023

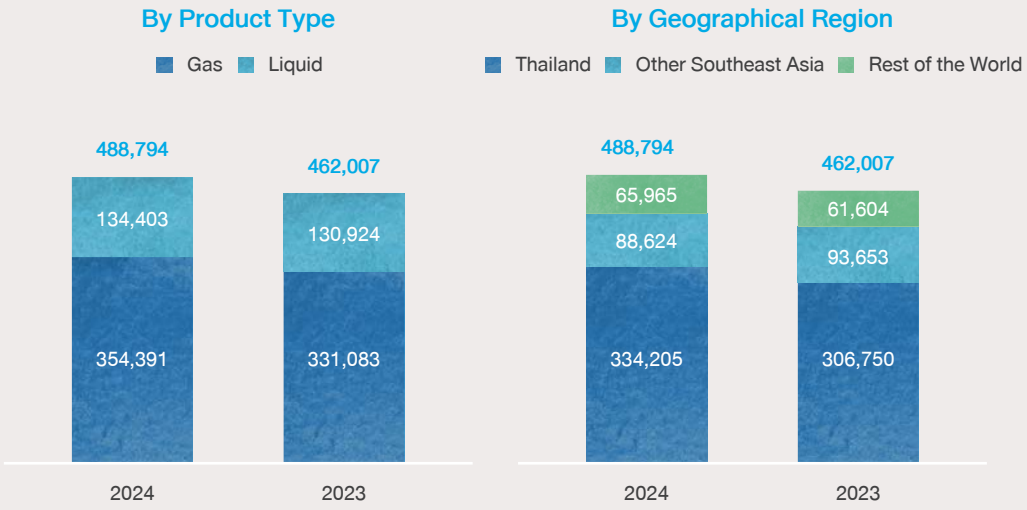
In 2024, PTTEP and its subsidiaries (the Group) had a net profit of USD 2,227 million. An increase of USD 19 million, or 1% from a net profit of USD 2,208 million in 2023, was primarily from an increase in revenue from sales of G1/61 Project due to natural gas production ramped up, offset with higher depreciation, depletion and amortization, and operating expenses. Additionally, an impairment loss on assets was recognized in the previous year. The net profit of USD 2,227 million in 2024 can be elaborated further as follows:

The profit from normal operation in 2024 was USD 2,262 million, a decrease of USD 60 million, compared with a profit of USD 2,322 million in 2023. Despite gaining higher revenue from sales due to higher average sales volume of G1/61 Project and Yadana Project, the lower profit was primarily due to an increase in depreciation, depletion and amortization from G1/61 Project due to higher sales volume. While Zawtika Project and S1 Project had additional completed assets. Meanwhile, operating expenses increased, primarily due to higher maintenance activities from G1/61 Project, Arthit Project, and Malaysia Project, together with lower decommissioning costs than the provision of Contract 4 Project and B8/32 & 9A Project in the previous year. Amidst such background, income taxes decreased following lower profits mainly from Thailand and Malaysia.

The loss from non-operating items in 2024 was USD 35 million. A decrease of USD 79 million, compared with a loss of USD 114 million in 2023, was primarily from impairment loss on assets of Mozambique Area 1 Project last year.

Average Sales Volume and Selling Price

Unit: Barrels of Oil Equivalent per Day (BOED)



Average selling price and Dubai crude oil price (Unit: USD)	2024	2023	Inc. (Dec.) YTD
Average selling price (/BOE)	46.78	48.21	(1.43)
Liquid price (/BOE)	77.20	79.09	(1.89)
Gas price (/MMBTU)	5.87	6.00	(0.13)
Average Dubai crude oil price (/BBL)	79.58	82.09	(2.51)

Remark: The average sales volume and selling price excluded deemed income for tax payment by the Oman government.

Comparisons between 2024 numbers and those of 2023

In 2024, the average sales volume of the Group increased to 488,794 barrels of oil equivalent per day (BOED) or 6% when compared with 462,007 BOED in 2023, primarily from G1/61 Project ramped up the natural gas production to 800 MMSCFD in March 2024, together with the increase in participating interest in Yadana Project following the partner's withdrawal in April 2024. Meanwhile, the average selling price decreased by 3% to 46.78 USD/BOE (2023: 48.21 USD/BOE) due to a decrease in market crude prices, and lower gas prices, primarily from G1/61 Project and G2/61 Project.

Operating Results by Segments

Net Profit (Loss) (Unit: USD million)	2024	2023	Inc. (Dec.) YTD
Exploration and Production	2,399	2,513	(114)
Thailand	1,530	1,608	(78)
Other Southeast Asia	570	669	(99)
Middle East	204	223	(19)
Africa	144	(6)	150
Others	(49)	19	(68)
Head Office and Others	(172)	(305)	133
Profit for the period	**2,227**	**2,208**	**19**

Comparisons between 2024 numbers and those of 2023

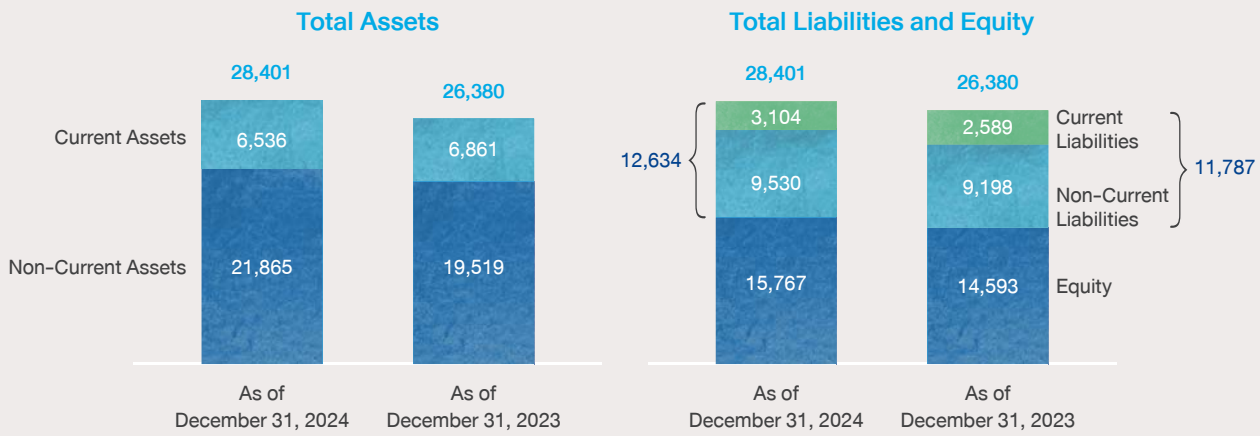
For 2024, the Group reported a net profit of USD 2,227 million. An increase of USD 19 million from a net profit of USD 2,208 million in 2023, despite a lower net profit of USD 114 million from Exploration and Production segment, a net loss from Head Office and Others segment decreased by USD 133 million.

Exploration and Production segment reported a net profit of USD 2,399 million in 2024. A decrease of USD 114 million, compared with a net profit of USD 2,513 million in 2023, was primarily from Other Southeast Asia with a decrease in net profit of USD 99 million mainly from Zawtika Project due to lower sales volume, and higher depreciation, depletion, and amortization from the additional completed assets, together with Thailand reported a net profit decrease of USD 78 million from a decrease in revenue from sales due to lower sales volume and lower selling prices from Arthit Project. In addition, Others segment reported a change of USD 68 million due to gains on the disposal of participating interest of AC/RL7 (Cash-Maple) in 2023. However, Africa reported an increase in net profit of USD 150 million due to the impairment loss on assets of Mozambique Area 1 Project in 2023, together with an increase in revenue from sales due to higher sales volume from Algeria Hassi Bir Rekaiz Project.

Head Office and Others segment reported a net loss of USD 172 million in 2024. A decrease of USD 133 million, compared with a net loss of USD 305 million in 2023, was primarily from an increase in interest income due to the higher cash balances, and interest income from long-term loans to related parties. In addition, there was an increase in net gain on foreign exchange and foreign exchange forward contracts compared to the previous year, primarily from a gain on foreign exchange forward contracts of accounts receivable due to the depreciation of THB against USD in Q4/2024.

Financial Position

Unit: USD million



(1) Assets

As at December 31, 2024, the Group had total assets of USD 28,401 million, an increase of USD 2,021 million from total assets as at December 31, 2023, of USD 26,380 million. The increase was primarily due to:

1.1) Current assets, which primarily comprised cash and cash equivalents, trade, and other current receivables and inventories, decreased by USD 325 million, primarily due to additional investment in various projects.

1.2) Non-current assets, which primarily comprised exploration and production assets in joint venture projects being recognized as part of the property, plant and equipment, exploration and evaluation assets, goodwill, and right-of-use assets, increased by USD 2,346 million, primarily due to additional investments in G1/61 Project and G2/61 Project, together with investments in Seagreen Offshore Wind Farm Project and Ghasha Concession Project.

(2) Liabilities

As at December 31, 2024, the Group had total liabilities of USD 12,634 million, an increase of USD 847 million from total liabilities as at December 31, 2023, of USD 11,787 million. This was primarily due to:

2.1) Current liabilities, which primarily comprised trade and other current payables and corporate income tax payable, increased by USD 515 million, primarily due to higher trade and other current payables, as well as corporate income tax payable.

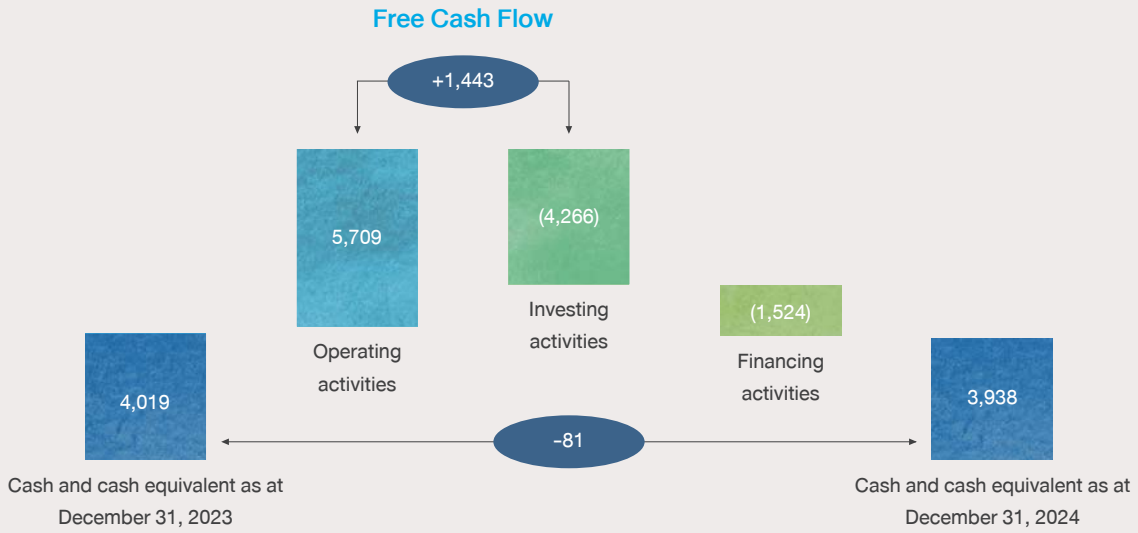
2.2) Non-current liabilities, which primarily comprised non-current provisions for decommissioning costs, debentures, deferred tax liabilities, and lease liabilities, increased by USD 332 million, primarily due to higher provision for decommissioning costs, mainly from G1/61 Project, G2/61 Project, and Arthit Project.

(3) Equity

As at December 31, 2024, the Group had a total equity value of USD 15,767 million, an increase of USD 1,174 million from the number as at December 31, 2023 at USD 14,593 million. This was primarily due to the net profit for the year 2024 offsetting by dividend payments in April and August 2024. The equity included a non-controlling interest of USD 8 million from the group of AI and Robotics Ventures Company Limited (ARV).

Cash Flows

Unit: USD million



As at December 31, 2024, the Group had cash and cash equivalents of USD 3,938 million. A decrease of USD 81 million compared with cash and cash equivalents as at December 31, 2023 of USD 4,019 million.

Net cash flows provided by operating activities of USD 5,709 million, primarily from the positive net cash flow from revenue from sales, offseting by cash paid for expenses and income taxes.

Net cash flows used in investing activities of USD 4,266 million, primarily from additional capital expenditures in exploration and production assets, mainly from G1/61 Project, G2/61 Project, S1 Project, and Zawtika Project, together with cash paid for investing in Seagreen Offshore Wind Farm Project and Ghasha Concession Project.

Net cash flows used in financing activities of USD 1,524 million, primarily from dividend payments for the second half of 2023 and the first half of 2024, as well as payments for lease liabilities and interests during the year 2024.

3.2 Factors That May Impact Future Operations

Operational Highlights

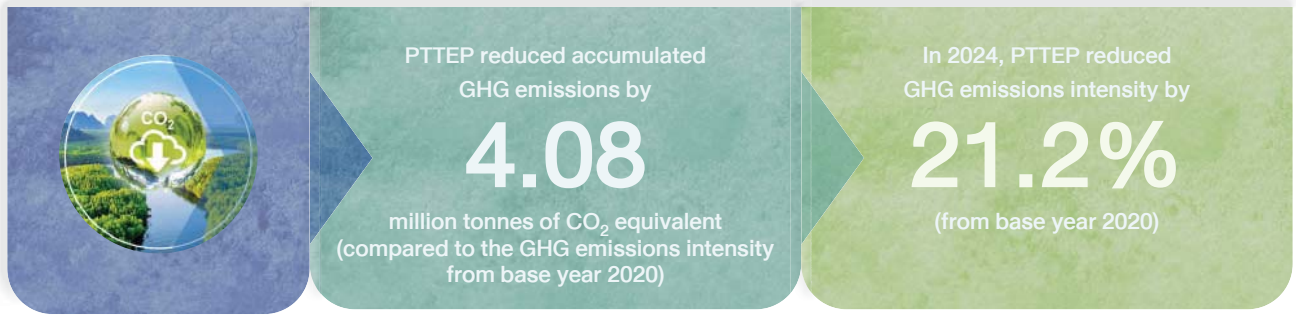
(1) Drive Value

At the end of 2024, PTTEP has over 50 projects with domestic and international operations in 12 countries. The key project highlights are disclosed in the "Structure and Business Operations" section, "Products and Services" topic, "Principal Projects in Operation" sub-topic.

Significant developments were reported for core E&P business in 2024. G1/61 Project has successfully ramped up its production to 800 MMSCFD since March 20, 2024, ahead of plan, which mitigates the impact of high energy prices and enhance Thailand energy security, with a plan to install additional wellhead platforms and continue drilling campaigns to sustain the production level. Regarding the progress of overseas projects; (1) the partner of Yadana Project in Myanmar had decided to withdraw its investment, resulting in a change of PTTEP's participating interest from 37.0842% to 62.9630%, effective from April 1, 2024; (2) For Abu Dhabi Offshore 2 Project which is located in the northwest offshore of Abu Dhabi, United Arab Emirates (UAE), the field development plan was approved by the Government and the Final Investment Decision (FID) for this project is expected in 2025; (3) PTTEP acquired 10% interest in the Ghasha Concession Project in the UAE with the transaction completion effective from June 11, 2024. The project is a large natural gas field in the development phase, which will immediately add to the Company's petroleum reserves; (4) PTTEP acquired 34% of the share capital in E&E Algeria Touat B.V. from ENGIE International Corporation B.V. (ENGIE). The completion of this transaction is subject to the conditions precedent as prescribed in the Sale and Purchase Agreement (SPA). Upon completion, PTTEP will indirectly hold a 22.1% investment in Touat Project, which is the natural gas–producing field, located in Algeria, and started production since 2019. Therefore, it will immediately generate the return when the transaction is completed.

(2) Decarbonize

For our decarbonization efforts, we have made progress in 2024 as follows:



The Company achieved GHG emission reduction (Reduce) by optimizing its E&P portfolio and implementing appropriate well management practices. Additionally, PTTEP is continuously implementing greenhouse gas reduction projects and promoting various emission reduction initiatives. In 2024, the progress includes the following:

Carbon Capture and Storage (CCS)	PTTEP plans to develop a carbon capture and storage (CCS) project at the Arthit natural gas field in the Gulf of Thailand. The Front-End Engineering Design (FEED) has been completed, and various agreements are being prepared in anticipation of the Final Investment Decision (FID) by the first half of 2025. Following the investment decision, the project is expected to take approximately three years before the first carbon injection. The expected full storage capacity ranges from 0.7 and 1 million tonnes of CO_2 equivalent per year.
GHG Reduction Initiatives	In 2024, PTTEP continued its commitment to reducing greenhouse gas emissions from its operations by initiating eight new emission reduction projects. These include the "Membrane Replacement for Enhancing Hydrocarbon Separation and Reducing Flaring" at Arthit Project, the "Fuel Gas Optimization in Turbo Compressors" at Yadana Project, and the "Low BTU Flare Installation" at G2/61 Project. These newly implemented reduction initiatives reduced GHG emissions by approximately 124,000 tonnes of CO_2 equivalent in 2024, on top of the currently implemented emissions reduction activities. Additionally, the Company enhanced its Leak Detection and Repair (LDAR) program to manage and control methane emissions. PTTEP also began reporting methane emissions to Oil and Gas Methane Partnership (OGMP 2.0) for the first time in May 2024, in accordance with the Memorandum of Understanding (MoU) under the OGMP 2.0 and its commitment to the Oil & Gas Decarbonization Charter (OGDC).
Additional Verification of GHG Inventory Reporting	PTTEP has strengthened the credibility of its greenhouse gas emissions reporting by undergoing third-party verification of its measurement and reporting processes against the ISO 14064-1 standard in 2024. This effort is in addition to its annual reporting under the Global Reporting Initiative (GRI) standard. The verification confirmed that the Company's practices align with the ISO 14064-1 standard, demonstrating the reliability of its GHG emissions reporting. In addition, this initiative equips the Company for reporting under the upcoming Climate Change Act, set to take effect in the future.

The progress of GHG offsetting initiatives (Offset) to absorb GHG from the atmosphere in 2024 is as follows:

Mangrove Forestation	PTTEP has accumulated a total of 5,007.15 rai of land for mangrove forest areas, with reforestation and maintenance carried out according to the plan, achieving an average tree survival rate of over 85%. Additionally, the mangrove reforestation project covering 4,007.15 rai of land has been registered under the Thailand Voluntary Emission Reduction Program (T-VER) with the Thailand Greenhouse Gas Management Organization (Public Organization) or TGO.

Land Forestation	PTTEP has collaborated with various networking organizations, including: Royal Forest Department (RDF): PTTEP has been approved for reforestation on a total of 18,253 rai of land under the authority of the Royal Forest Department, of which 8,410 rai of land have already been reforested, with an average tree survival rate of over 85%. Additionally, PTTEP supports the conservation and restoration of the Ban Khong Tabang community forest in Phetchaburi Province, covering 1,397 rai of land, and has been awarded 4,500 tonnes of CO_2 equivalent in carbon credits. Department of National Parks, Wildlife, and Plant Conservation: PTTEP has been approved for reforestation on a total of 6,110 rai of land under the authority of the Department of National Parks, Wildlife, and Plant Conservation. Reforestation has been carried out according to the plan, achieving an average tree survival rate of over 85%. Additionally, PTTEP is in the process of registering a T-VER project with the Thailand Greenhouse Gas Management Organization (TGO), covering 5,530 rai of land. Mae Fah Luang Foundation under Royal Patronage (MFLF): PTTEP has been continuously restoring and managing 80,000 rai of land for community forests under the authority of the Royal Forest Department in collaboration with the MFLF.
Study on GHG Reduction, Absorption, and Sequestration from Agricultural Sector	In 2024, PTTEP conducted a study on the efficiency of reducing, absorbing, and sequestering greenhouse gases in the agricultural sector through the management of rubber plantations under the Forest Stewardship Council (FSC) standard. This standard promotes sustainable forest management and the utilization of forest resources with consideration for environmental and social impacts. Additionally, PTTEP studied the conversion of cassava rhizomes into biochar as part of a collaborative social project to reduce environmental impacts, in partnership with the Office of Natural Resources and Environmental Policy (ONEP) and the Department of Climate Change and Environment (DCCE).

(3) Diversify

On the new business for energy transition, in 2024, Green Hydrogen Project in the Sultanate of Oman is currently in the phase of wind and solar potential assessment, as well as conducting a feasibility study to determine the amount of required capital expenditure and economic return before proceeding to the engineering design phase in 2025, with the first production of green hydrogen anticipated in 2030. Furthermore, Rovula (Thailand) Company Limited, a subsidiary of AI and Robotics Ventures Company Limited (ARV), has successfully completed a Paid Trial with a leading energy company to deploy XPLORER, an autonomous underwater vehicle (AUV) equipped with non-contact sensors, on contactless cathodic protection (CP) surveys for the first time in Asia. This project successfully inspected over 155 kilometers of subsea pipelines in Malaysia. With regard to Carbon Capture and Storage (CCS) project, PTTEP, together with PTT Group, engaged with the relevant government agencies to seek advice and guidance on the development of the CCS project in Thailand. Lastly, the Seagreen Offshore Wind Farm acquisition was completed on May 31, 2024, where PTTEP holds an indirect 25.5% interest.

Business Outlook

(1) Energy Outlook

Geopolitical conflicts and the worsening effects of global warming have sparked a global energy crisis, leading to global energy shortages and surging energy prices. Alongside inflation and a slowing global economy or potential recessions, countries around the world are striving to balance energy security with investments in renewable energy to drive the Energy Transition and meet future Net Zero greenhouse gas emissions targets.

According to S&P Global Commodity Insights, the energy transition is expected to unfold gradually. Natural gas demand is projected to keep growing, as it serves a key role as a transition fuel, helping to replace coal in electricity generation. At the same time, renewables energy is expanding, with future business opportunities in Southeast Asia, including Thailand, aligning with the energy transition framework. In the short term from now to 2030, the focus will be on transitioning to natural gas, which emits less CO_2 than coal and oil, alongside increased use of renewables for electricity generation, biofuels in transportation, and efforts to improve energy and fuel efficiency. The industrial sector will also focus on material substitution and reuse. Additionally, initiatives like Carbon Capture, Utilization, and Storage (CCUS) projects are being implemented to further reduce CO_2 emissions. In the medium to long term (post-2030), the shift will increasingly favor low-carbon fuels, driven by technological innovations in renewable energy technologies. CCUS and hydrogen technologies are expected to play pivotal roles across all sectors, including industry, electricity generation, and transportation.

(2) Oil Price Outlook

On the demand side, crude oil demand in 2025 is expected to increase by an average of 0.8–1.0 million barrels per day compared to 2024, reflecting a slower growth rate year-on-year. The majority of this demand will continue to be driven by economic growth in large developing countries such as China and India, while economies in developed regions, including the United States (U.S.) and the EU, are expected to remain stable. However, analysts are closely monitoring the U.S., as the new president in 2025 has introduced policies to increase international trade tariffs, which could exert downward pressure on the global economy as a whole.

On the supply side, crude oil production in 2025 is expected to rise by 1–1.2 million barrels per day, primarily driven by non-OPEC+ countries such as the U.S., Canada, Brazil, Norway, and Guyana, which are projected to continue expanding production. This increase may result in a market surplus, leading to lower crude oil prices compared to 2024. Meanwhile, OPEC+ has yet to reach a clear decision on increasing production. However, on December 5, 2024, OPEC+ resolved to extend its production cut of 2.2 million barrels per day until March 2025. Other factors, such as geopolitical conflicts between Russia–Ukraine and Israel–Hamas, have had limited impact and are not expected to significantly affect the current crude oil supply.

PTTEP forecasts crude oil prices in 2025 to be in the range between 70–80 USD/barrel, lower than in 2024. This decline is primarily driven by concerns over high interest rates in Western economies and the continued increase in crude oil production from non-OPEC+ countries. In Q2/2025, demand may soften due to seasonal refinery maintenance, before rising in Q3/2025 with seasonal demand growth. However, there are several key factors to closely monitor, including (1) the economic growth outlook of the U.S., China, and India; (2) OPEC+ crude oil production controls; (3) geopolitical tensions in the Middle East and oil supply stability in the region; (4) the prolonged war between Russia and Ukraine; and (5) the new U.S. president's policies on monetary policy, foreign relations, and domestic oil production support, which could influence future oil supply and price trends.

(3) LNG Market Outlook

On the demand side, global LNG demand in 2025 is expected to grow by approximately 5% from 2024, reaching 431 MTPA. This increase is primarily driven by economic growth in large developing countries such as China and India. Additionally, the expiration of the Russia–Ukraine Transit Agreement on December 31, 2024, will lead to increased LNG imports in Europe. Demand in Asia is also projected to rise due to potentially colder-than-average winters in Japan and South Korea (Source: FGE, December 2024).

On the supply side, LNG production from new projects is expected to grow by approximately 19 MTPA, or 3% from 2024, bringing total production in 2025 to 424 MTPA. This increase will mainly come from the U.S., Qatar, and Canada (Source: FGE, December 2024).

Key factors to monitor for LNG prices in 2025 include weather conditions that may impact energy demand in Europe and Asia, natural gas inventory levels in various countries, the economic recovery of China, concerns over economic conditions in Europe and the U.S., global central banks' interest rate policies to control inflation, geopolitical tensions in the Middle East, conflicts among major powers such as Russia, China, and the U.S., and the policies of the new U.S. president, which may bring changes to energy policy, international trade, and the global economic outlook, ultimately influencing LNG market prices.

In summary, PTTEP forecasts that LNG prices in 2025 will remain high, with the average price expected to range between 12–15 USD/MMBTU (Source: Woodmac/Platts/FGE, December 2024).

(4) Environmental, Social, and Governance (ESG)

PTTEP is committed to operating responsibly under its sustainability framework, addressing challenges to drive the energy transition and achieving Net Zero Greenhouse Gas Emissions by 2050. The Company emphasizes creating internal sustainability through robust operations based on a strong business foundation, delivering long-term value to all stakeholders, and benefiting society as a whole or "From We to World" under its vision to become the "Energy Partner of Choice." PTTEP operates through a sustainability framework focused on becoming a High Performance Organization (HPO), ensuring good governance, risk management, and compliance (GRC), and enhancing sustainable value creation (SVC). The Company aligns its sustainability initiatives and long-term goals with both national and UN Sustainable Development Goals (UN SDGs), particularly Goals 3, 7, 8, 9, 12, 13, 14, 15, and 16, in line with its business strategies and key sustainability priorities. These initiatives emphasize environmental, social, and governance (ESG) aspects as the foundation for driving sustainable business growth.

PTTEP evaluates and reviews key sustainability issues under ESG principles using the Double Materiality approach, considering their impacts on the Company, the environment, society (including human rights), governance, and the economy. This assessment is conducted in accordance with the Global Reporting Initiative Standards (GRI Standards: 2021) and AA1000 AccountAbility Principles (AA1000AP: 2018). It integrates insights from internal and external stakeholders, as well as national and global sustainability trends aligned with the UN SDGs and the SASB Materiality Map™ of the Sustainability Accounting Standards Board (SASB) for the oil and gas exploration and production industry. In 2025, PTTEP identified 13 key sustainability issues namely: (1) Energy Transition and Business Model Resilience; (2) Governance, Risk Management and Compliance; (3) Safety, Security and Occupational Health; (4) Climate Change and Net Zero; (5) Technology Development, Innovation and Digitalization; (6) Human Resource Management; (7) Environmental Management and Operational Eco-Efficiency; (8) Contribution to Communities and Society; (9) Human Rights; (10) IT Security, Cybersecurity and System Availability; (11) Stakeholder Management; (12) Biodiversity and Ecosystem Services Management; and (13) Supply Chain Management. The results of the sustainability materiality assessment are incorporated into key data used to develop and enhance PTTEP's organizational strategies. These findings are also integrated into the Company's enterprise risk management processes, enabling PTTEP to respond promptly to sustainability-related risks critical to the organization.

(5) Thai Economy and Foreign Exchange Outlook

The Bank of Thailand (BOT) forecasts that Thailand's GDP will likely expand by 2.9% in 2025, driven by growth in tourism, private and public consumption, and exports. However, household debt remains a key issue that could hinder economic growth. Additionally, external factors that may affect GDP include a potential trade war between the U.S. and China, economic growth rates of Thailand's key trading partners, and prolonged conflicts in the Middle East, which could adversely impact energy prices. Regarding monetary policy, the Bank of Thailand expects the current interest rate of 2.25% to remain appropriate given the economic outlook.

The THB is expected to depreciate against the USD in 2025, primarily due to the direction of U.S. economic policies under President Donald Trump's administration. Protectionist trade policies, in particular, are anticipated to have a broad impact on the global economy. Additionally, market expectations indicate that the Fed may slow down its interest rate cuts as the U.S. economy shows strong growth, supported by the U.S. government's economic stimulus measures.

(6) PTTEP's performance outlook for the first quarter and the year 2025

Sales volumes, gas price, and unit cost are the primary three factors that impact PTTEP's performance. The Company has continuously monitored and adjusted the assumptions to reflect the current situation and align with the evolving operational plans and industry dynamics. The summarized performance outlook for the first quarter of 2025 and the year 2025 is as follows:

Sales Volume (Thousand BOED)	Gas Price (USD/MMBTU)	Unit Cost (USD/BOE)	EBITDA Margin (% of sales revenue)
Q1/2025	Q1/2025	Q1/2025 and FY2025	Q1/2025 and FY2025
475–480	~6.0	29–30	70–75%
FY2025	FY2025		
500–510	~5.8		

Remarks:
1. The assumption is based on average Dubai price for FY2025 of 75–80 USD/Barrel.
2. EBITDA Margin: A percentage of Earnings before interest, taxes, depreciation, and amortization to the Sales Revenues and Revenue from pipeline transportation

Sales Volume:

The average sales volume for the first quarter of 2025 is projected to be in the range of 475,000–480,000 BOED, while the full-year 2025 sales volume is expected to be in the range of 500,000–510,000 BOED, reflecting an increase compared to the previous year. This growth is primarily driven by higher sales volume from Thailand, attributed to the full-year production ramp-up of G1/61 Project to 800 MMSCFD.

Selling Price:

- PTTEP's gas price formulas are partially linked to oil prices, with reference to average historical prices spanning from the past 3 to 21 months. The estimated average gas price for the first quarter of 2025 and the full year 2025 is approximately 6 and 5.8 USD/MMBTU, slightly lower than the previous year.

- PTTEP's liquid prices will fluctuate in accordance with global crude prices.

- The Company has entered into oil price hedging contracts, with an outstanding volume of 2 million barrels as at the end of 2024. PTTEP consistently monitors the movement of crude oil price market and retains the flexibility to adjust its hedging plan accordingly.

Unit Cost:

For the first quarter of 2025 and the full year 2025, PTTEP expects the average unit cost to remain at approximately 29–30 USD/BOE, with no significant change compared to 2024.

3.3 Significant Financial Information

The financial statements of PTT Exploration and Production Public Company Limited and its subsidiaries have been prepared in accordance with Thai Financial Reporting Standards (TFRS) as well as the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act. For more details, please see in "Financial Report."

Statement of Financial Position

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENT OF FINANCIAL POSITION

	As at December 31, 2022		As at December 31, 2023		As at December 31, 2024	
	Thousand (USD)	%	Thousand (USD)	%	Thousand (USD)	%
Assets						
Current assets						
Cash and cash equivalents	3,539,220	14.1	4,018,959	15.2	3,938,163	13.9
Short-term investments	-	-	200,000	0.8	291,023	1.0
Trade and other current receivables	1,219,995	4.8	1,818,678	6.9	1,273,117	4.5
Short-term loans to a related party	1,317	0.0	7,545	0.0	25,292	0.1
Inventories	553,046	2.2	611,110	2.3	669,624	2.3
Current tax assets	53,878	0.2	54,152	0.2	79,064	0.3
Derivative assets	16,254	0.1	19,265	0.1	25,114	0.1
Other current financial assets	667	0.0	-	-	-	-
Other current assets	300,171	1.2	131,135	0.5	201,678	0.7
Assets held-for-sale	10,730	0.0	-	-	32,543	0.1
Total current assets	5,695,278	22.6	6,860,844	26.0	6,535,618	23.0
Non-current assets						
Investments in associates	115,345	0.5	134,141	0.5	151,679	0.5
Investments in joint ventures	162,230	0.6	151,276	0.6	207,186	0.7
Long-term loans to a related party	434	0.0	438	0.0	557,480	2.0
Property, plant and equipment	11,880,375	47.2	12,864,663	48.8	14,431,173	50.8
Right-of-use assets	974,706	3.9	838,921	3.2	891,709	3.1
Goodwill	1,548,622	6.1	1,353,200	5.1	1,353,200	4.8
Intangible assets	132,703	0.5	134,327	0.5	162,516	0.6
Exploration and evaluation assets	3,071,577	12.2	2,756,341	10.5	2,659,296	9.4
Deferred tax assets	929,484	3.7	533,957	2.0	576,404	2.0
Rights to receive reimbursement from decommissioning funds	317,176	1.3	348,655	1.3	385,702	1.4
Derivative assets	26,521	0.1	10,837	0.0	46,949	0.2
Other non-current financial assets	139,655	0.6	162,860	0.6	203,876	0.7
Other non-current assets	173,848	0.7	229,877	0.9	238,587	0.8
Total non-current assets	19,472,676	77.4	19,519,493	74.0	21,865,757	77.0
Total assets	25,167,954	100.0	26,380,337	100.0	28,401,375	100.0

Statement of Financial Position (cont'd)

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENT OF FINANCIAL POSITION (cont'd)

	As at December 31, 2022		As at December 31, 2023		As at December 31, 2024	
	Thousand (USD)	%	Thousand (USD)	%	Thousand (USD)	%
Liabilities and equity						
Current liabilities						
Trade and other current payables	1,531,737	6.1	1,443,807	5.5	1,797,389	6.3
Current portion of long-term liabilities	303,193	1.2	280,860	1.1	389,966	1.4
Current corporate income tax payable	800,166	3.2	494,710	1.9	625,320	2.2
Other current provisions	488,591	1.9	104,015	0.4	154,060	0.5
Derivative liabilities	53,027	0.2	42,320	0.1	525	0.0
Other current liabilities	137,787	0.6	222,889	0.8	136,174	0.5
Liabilities held-for-sale	1,704	0.0	-	-	673	0.0
Total current liabilities	**3,316,205**	**13.2**	**2,588,601**	**9.8**	**3,104,107**	**10.9**
Non-current liabilities						
Debentures	2,809,260	11.2	2,785,242	10.6	2,795,370	9.9
Lease liabilities	720,569	2.9	587,524	2.2	575,845	2.0
Deferred tax liabilities	1,575,376	6.2	1,526,388	5.8	1,468,493	5.2
Non-current provision for employee benefits	190,800	0.7	206,726	0.8	233,336	0.8
Non-current provision for decommissioning costs	2,799,503	11.1	3,851,781	14.6	4,267,152	15.0
Non-current provision for remuneration for production bonus and renewal of petroleum production	193,533	0.8	158,997	0.6	133,051	0.5
Derivative liabilities	-	-	802	0.0	296	0.0
Other non-current liabilities	47,417	0.2	80,607	0.3	57,025	0.2
Total non-current liabilities	**8,336,458**	**33.1**	**9,198,067**	**34.9**	**9,530,568**	**33.6**
Total liabilities	**11,652,663**	**46.3**	**11,786,668**	**44.7**	**12,634,675**	**44.5**
Equity						
Share capital						
Issued and paid-up share capital	150,684	0.6	150,684	0.6	150,684	0.5
Share premium	3,439,037	13.7	3,439,037	13.0	3,439,037	12.1
Retained earnings						
Appropriated						
Legal reserve	15,048	0.0	15,048	0.1	15,048	0.1
Reserve for expansion	431,231	1.7	431,231	1.6	431,231	1.5
Unappropriated	9,481,343	37.7	10,531,354	39.9	11,677,291	41.1
Other components of equity	(2,052)	(0.0)	22,917	0.1	45,145	0.2
Equity attributable to owners of the parent	13,515,291	53.7	14,590,271	55.3	15,758,436	55.5
Non-controlling interests	-	-	3,398	0.0	8,264	0.0
Total equity	**13,515,291**	**53.7**	**14,593,669**	**55.3**	**15,766,700**	**55.5**
Total liabilities and equity	**25,167,954**	**100.0**	**26,380,337**	**100.0**	**28,401,375**	**100.0**
Book value per share (USD)	3.40		3.68		3.97	
Issued and fully paid-up capital at the end of year (thousand share)	3,969,985		3,969,985		3,969,985	

Statement of Income

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENT OF INCOME
FOR THE YEARS ENDED DECEMBER 31,

	2022		2023		2024	
	Thousand (USD)	%	Thousand (USD)	%	Thousand (USD)	%
Revenues						
Revenue from sales	9,270,564	96.0	8,511,079	94.0	8,698,463	93.8
Revenue from pipeline transportation	150,923	1.6	128,067	1.4	143,838	1.5
Other income						
Gain on foreign exchange rates	-	-	48,129	0.5	6,490	0.1
Gain on remeasuring of financial instruments	-	-	-	-	11,089	0.1
Gain on disposal of participating interests	-	-	73,239	0.8	-	-
Interest income	44,031	0.4	152,274	1.7	238,340	2.6
Other income	195,134	2.0	144,545	1.6	174,592	1.9
Total Revenues	**9,660,652**	**100.0**	**9,057,333**	**100.0**	**9,272,812**	**100.0**
Expenses						
Operating expenses	1,110,010	11.5	1,224,841	13.5	1,401,808	15.1
Exploration expenses	71,683	0.7	94,044	1.0	124,794	1.3
Administrative expenses	578,363	6.0	486,938	5.4	516,071	5.6
Petroleum royalties	687,723	7.1	450,155	5.0	396,387	4.3
Depreciation, depletion and amortisation	2,363,135	24.5	2,334,711	25.8	2,688,941	29.0
Other expenses						
Loss on foreign exchange rates	91,064	1.0	-	-	-	-
Loss on remeasuring of financial instruments	184,486	1.9	55,588	0.6	-	-
Impairment loss on assets and goodwill	300,080	3.1	120,000	1.3	-	-
Finance costs	233,583	2.4	294,457	3.3	334,466	3.6
Total Expenses	**5,620,127**	**58.2**	**5,060,734**	**55.9**	**5,462,467**	**58.9**
Share of profit of associates and joint ventures	19,556	0.2	42,556	0.5	37,752	0.4
Profit before income taxes	**4,060,081**	**42.0**	**4,039,155**	**44.6**	**3,848,097**	**41.5**
Income taxes	(2,061,501)	(21.3)	(1,831,388)	(20.2)	(1,621,179)	(17.5)
Profit for the year	**1,998,580**	**20.7**	**2,207,767**	**24.4**	**2,226,918**	**24.0**
Total comprehensive income (expense) attributable to:						
Owners of the parent	1,998,580	20.7	2,207,826	24.4	2,227,123	24.0
Non-controlling interests	-	-	(59)	-	(205)	0.0
Total	**1,998,580**	**20.7**	**2,207,767**	**24.4**	**2,226,918**	**24.0**
Basic earnings per share (USD)	**0.51**		**0.54**		**0.56**	

Statement of Cash Flows

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENT OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31,

	2022	2023	2024
	Thousand (USD)	Thousand (USD)	Thousand (USD)
Cash flows from operating activities			
Profit before income taxes	4,060,081	4,039,155	3,848,097
Adjustments for:			
Share of profit of associates and joint ventures	(19,556)	(42,556)	(37,752)
Depreciation, depletion and amortisation	2,363,135	2,334,711	2,688,941
Impairment loss on assets and goodwill	300,080	120,000	-
Write-off of exploration expenses	32,634	66,233	96,113
Other amortised expenses	12,426	9,299	9,986
Write-off of assets	17,704	72,783	1,684
Income recognised from deferred income	(7,333)	(233)	-
Loss (gain) on remeasuring financial instruments	95,993	(14,871)	(8,508)
Loss (gain) on foreign exchange rates	8,142	(2,932)	21,075
Interest income	(44,031)	(152,274)	(238,340)
Finance costs	223,287	287,957	327,607
Other income	(73,041)	(80,901)	(3,670)
Other expenses	147,840	16,351	25,045
	7,117,361	6,652,722	6,730,278
Changes in working capital	(2,430,129)	(2,290,813)	(1,008,709)
Net cash flows provided by operating activities	**4,687,232**	**4,361,909**	**5,721,569**
Cash flows from investing activities			
Cash paid for short-term investments	-	(400,389)	(341,311)
Cash received from short-term investments	-	200,390	250,288
Cash paid for other non-current financial assets	-	(2,818)	(6,245)
Cash received from other non-current financial assets	-	-	1,949
Net cash received from financial derivative contracts	-	-	901
Cash paid for short-term loans to related parties	(1,250)	(9,093)	(301)
Cash received from short-term loans to related parties	-	3,000	5,086
Cash paid for long-term loans	(15,458)	(15,222)	(596,194)
Cash received from long-term loans to a related party	41,500	-	10,275
Dividend received from related parties	60,979	52,820	57,616
Net cash received from disposal of participating interests	-	208,284	-
Cash paid for contingent considerations from business acquisition	(955)	(717)	-
Cash received from disposal of investment in an associate	128,841	-	-
Cash paid for investment in associate and joint ventures	(17,642)	(16,323)	(105,535)
Cash received from lease receivables	234	50	-
Interest received from short-term investments	-	959	7,992
Interest received from long-term loans to related parties	772	243	448
Net cash paid for acquisition of assets	-	-	(531,310)
Increase in property, plant and equipment	(1,765,221)	(2,206,914)	(2,853,998)
Increase in intangible assets	(31,077)	(26,414)	(53,450)
Increase in exploration and evaluation assets	(95,357)	(158,560)	(112,258)
Net cash flows used in investing activities	**(1,694,634)**	**(2,370,704)**	**(4,266,047)**

Statement of Cash Flows (cont'd)

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENT OF CASH FLOWS (CONT'D)
FOR THE YEARS ENDED DECEMBER 31,

	2022	2023	2024
	Thousand (USD)	Thousand (USD)	Thousand (USD)
Cash flows from financing activities			
Cash paid for repayment of debentures and long-term loans	(1,025,126)	(71,460)	-
Cash received from issuance of debentures	358,644	44,550	-
Cash paid for finance cost from issuance of debentures	(563)	(1,058)	-
Cash paid for lease liabilities	(177,008)	(261,489)	(317,712)
Interest paid	(144,365)	(136,604)	(131,498)
Cash paid for redemption of subordinated capital debentures	(142,590)	-	-
Interest paid for subordinated capital debentures	(4,256)	-	-
Net cash received (paid) from financial derivative contracts	(44,924)	-	-
Cash received from issuance of subsidiaries' share capital	-	3,496	4,736
Dividends paid	(819,492)	(1,098,772)	(1,080,024)
Net cash flows used in financing activities	**(1,999,680)**	**(1,521,337)**	**(1,524,498)**
Net increase (decrease) in cash and cash equivalents	992,918	469,868	(68,976)
Cash and cash equivalents at the beginning of the year	**2,559,189**	**3,539,220**	**4,018,959**
	3,552,107	4,009,088	3,949,983
Adjustment for the impact of exchange rate changes	(12,887)	9,871	(11,820)
Cash and cash equivalents at the end of the year	**3,539,220**	**4,018,959**	**3,938,163**

Significant Financial Ratio Summary Table

		2022	2023	2024
Liquidity ratio				
Current Ratio	Times	1.72	2.65	2.11
Quick Ratio	Times	1.37	2.06	1.63
Cash Flow from Operations to Current Liabilities Ratio	Times	1.45	1.48	2.01
Account Receivable Turnover	Times	10.51	8.15	9.02
Account Payable Turnover	Times	6.51	6.35	4.93
Collection Period	Days	35	45	40
Day Payable	Days	56	57	74
Profitability Ratio				
Net Profit Margin	%	20.69	24.38	24.02
Return on Equity	%	15.41	15.71	14.68
Efficiency Ratio				
Return on Assets	%	8.22	8.57	8.13
Return on Fixed Assets	%	27.95	27.82	28.30
Assets Turnover	Times	0.40	0.35	0.34
Financial Policy Ratio				
Interest-Bearing Debt to Equity Ratio	Times	0.28	0.25	0.24
Net Interest-Bearing Debt to Equity Ratio	Times	0.02	(0.04)	(0.03)
Times Interest Earned	Times	30.41	21.85	19.32
Dividend Ratio	%	53	49	49
Data per Share				
Book Value per Share	USD	3.40	3.68	3.97
Net Profit per Share	USD	0.51	0.54	0.56
Dividend per Share	THB	9.25	9.50	9.625
Growth Rate				
Total Asset	%	7.35	4.82	7.66
Total Liabilities	%	5.77	1.15	7.19
Sales	%	38.06	(8.30)	2.35
Net Profit	%	65.10	10.47	0.87

Part 2

Corporate Governance

In parallel with PTTEP's commitment to driving and enhancing the value of our core E&P business for energy security, and delivering long-term value to society, communities, and the environment, we uphold the highest standards of governance, risk management and compliance. PTTEP focuses on good corporate governance, transparency, business ethics, appropriate internal controls and strict adherence to relevant laws and regulations. We believe that these elements serve as a crucial foundation, enabling the organization to proactively prepare for a stable and sustainable evolution in response to the changes and challenges that we must meet.

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4. Corporate Governance

4.1 Corporate Governance Policy

PTTEP's Board of Directors (Board) emphasizes that PTTEP's and its subsidiaries' (PTTEP Group) operations comply with the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) in order to grow sustainably and enhance the confidence of all shareholders and other stakeholders. To demonstrate our commitment to strike a balance in terms of social and environmental aspects in our operations, PTTEP has adopted an approach to achieve Net Zero Greenhouse Gas Emissions target through the "EP Net Zero 2050" concept. The Board has assigned the Corporate Governance and Sustainability Committee (CGS Committee) to oversee and assure that the Company's operations are in line with the CG&BE Principles and that good corporate governance is always maintained at the level of international standards. The CGS Committee also regularly monitors and assesses the implementation of CG&BE and ensures its effectiveness.

In 2024, the Board of Directors particularly focused on the development plan and targets of Sustainability Framework and made a commitment to conduct the business with transparency and effectiveness by adhering to good corporate governance principles, maintaining robust risk management and internal control system as well as strictly conforming to applicable laws and regulations including those related to Governance, Risk Management and Compliance (GRC). The latter forms the key component of the Framework in order to respond to current situations, global trends, and technological development, and be prepared for future challenges. Examples of GRC operations included the revision of PTTEP Group's CG&BE to align with the changing social norms as well as enhancing the GRC Framework to provide clearer guidelines for the oversight, management, monitoring, and reporting of GRC activities. This framework is designed to support new businesses and future projects. Additionally, the Stakeholder Engagement Survey was conducted to gather feedback and insights from stakeholders on PTTEP's GRC activities to analyze and further develop appropriate strategies for GRC operations. With our commitment to the ongoing development of good corporate governance, the Company earned various recognitions for our good corporate governance, domestically and internationally. Details are disclosed in the "Awards and Success" topic.

The Board has reviewed the implementation of the Corporate Governance Code 2017 (CG Code), established by the Securities and Exchange Commission (SEC), along with the Organisation for Economic Co-operation and Development (OECD) Principles, applying them in ways that are suitable for the Company's business. The Board assigned the Corporate Governance and Sustainability Committee to ensure CG Code compliance and its appropriate implementation in accordance with the Company's business circumstances, as well as international practices or higher standards, so as to generate sustainable value and continued acceptance for the Company. Details are as follows:

4.1.1 Policy and Practices Related to the Board of Directors

Details are disclosed in "Governance Structure and Key Data on the Board of Directors, Sub-Committees, Management, Employees and Others" and "Corporate Governance Milestones" sections.

4.1.2 Policy and Practices Related to Shareholders and Stakeholders

The Board has approved PTTEP's mission which puts an emphasis on the rights and value creation for all stakeholders. The Company's mission is to operate globally to provide a reliable energy supply and sustainable value to all stakeholders. In practice, the Company upholds the rights of all stakeholders including but not limited to shareholders and financial institutions, government agencies and regulators, suppliers/contractors, customers, employees and directors, business partners and joint ventures, communities and society, and the media. The importance of the Company's stakeholders is clearly written in PTTEP Group's Good Corporate Governance and Business Ethics (CG&BE) in which practical guidelines with respect to business ethics are established with an effort to balance duties and responsibilities between the Company and our stakeholders. PTTEP has also set up communication channels to receive complaints and suggestions. Furthermore, a strategy for managing and building relationships with stakeholders has been developed as a key mechanism to enhance stakeholder engagement and support the achievement of the company's goals. This information is published on PTTEP's website, and policies regarding the treatment of various stakeholder groups are as follows:

(1) Shareholders and Financial Institutions

Shareholders

PTTEP recognizes and values the importance of shareholders' rights and the treatment of all shareholders fairly and equally as specified by relevant laws, rules, and regulations. Hence, we have stipulated principles in the Company's Good Corporate Governance to ensure that our shareholders' basic rights are protected and honored. These include the right to trade and transfer shares, declaration of share ownership, and the right to attend shareholders' meetings in person or through their proxies alongside the right to participate in and vote on significant issues presented by the Board at the Company's shareholder meetings, such as the election of new members of the Board to replace those due to retire by rotation, determination of the Board's remuneration of any kinds, appointment and approval of external auditors and the auditor's fees, approval of connected transactions, acquisition or disposition of material assets as required by law, and other issues which are of significance to the Company. The shareholders are also entitled to receive profit sharing in the form of dividends as well as to obtain equal and adequate information from the Company in a timely manner. The Company has only one class of ordinary shares in which one share allows its owner to have one vote. Our efforts to ensure and enhance the shareholders' rights also include the following:

1.1) Annual General Meeting of Shareholders

PTTEP respected and promoted shareholders' rights in its Annual General Meeting of Shareholders (hereafter referred to as AGM or the Meeting) in 2024, through the following actions:

Before the Meeting

1) Shareholders were invited to propose agenda items and nominate qualified candidates for the election of PTTEP directors prior to the AGM from September 1, 2023, until November 30, 2023. The criteria were announced publicly through the Stock Exchange of Thailand (SET) and PTTEP website. The shareholders' proposals were considered based on the Company's established criteria to ensure that the proposed agenda items were relevant and truly beneficial to the business of PTTEP Group. The Nominating and Remuneration Committee was responsible for screening and short-listing the nominated candidates for the Board's Consideration. Thereafter, the Board informed the shareholders of the resolution together with the rationale for each of the proposals at the AGM. In 2024, no such agenda items or any director candidates were proposed by the shareholders.

2) PTTEP announced the date for the 2024 AGM approximately two months prior to the date of the Meeting as soon as the Board resolved on January 30, 2024 and approved the date for the AGM on Monday, April 1, 2024, and the date of February 20, 2024, on which the Shareholders would have the right to attend the Meeting as well as to receive dividends, through the SET's and the Company's websites.

3) The AGM invitation letter and supplementary documents, in both Thai and English, were published on the Company's website on March 1, 2024, which was 31 days prior to the Meeting. The invitation letter had the necessary details of each agenda item, clearly stating the types of agenda items whether they were for acknowledgment or approval. The Board's opinions on each agenda item were clearly stated along with other rules and regulations related to the Meeting. The details of procedures and documents required for attending the Meeting (E-Meeting), a proxy form (to preserve their rights to attend the E-Meeting) as stipulated by the Ministry of Commerce, were enclosed in the invitation letter along with the list of required documents. The AGM invitation letter and supplementary documents were distributed to the Shareholders by postal service more than 21 days prior to the Meeting.

4) PTTEP provided the names of three independent directors in the proxy form to provide the shareholders an option to appoint one of them as their proxy. The Company also informed the shareholders about the stake of the independent directors on each of the agenda items, for instance, to elect new directors replacing those due to retirement by rotation and who resigned, an independent director whose term was completed but re-nominated for another term would be considered as having vested interests (but not be considered as having a special interest) or on the agenda item to approve the remuneration of the Board whereby directors who would be considered as having special interest were excluded from the voting regardless of their shareholding status. The Company also recommended that shareholders use proxy forms, through which they could specify their votes on each agenda item.

5) The Company also invited shareholders to submit questions related to the agenda items of the Meeting or other information relevant to the Company prior to the Meeting. This action helped to make the Meeting more efficient and beneficial to shareholders. Such questions were consolidated and answered at the AGM as well as recorded in the Minutes of the Meeting.

At the Meeting

1) The Meeting was held on Monday, April 1, 2024, at 14:30 hrs. The Meeting was convened through electronic means (E-Meeting) according to the Emergency Decree on Electronic Meeting, B.E. 2563 (2020), the Notification of the Ministry of Digital Economy and Society Re: Standards for Maintaining Security of Meetings via Electronic Means, and other relevant laws and regulations. The Meeting date and time were determined having taken into account the shareholders' convenience. Details of procedures and documents required for attending the E-Meeting and proxy granting including contact channel for inquiries were introduced. The system for E-Request submission was available from March 18, 2024, at 8:30 hrs. until the end of the Meeting on the AGM date.

2) All 14 PTTEP directors attended the Meeting. The Company's Chairman of the Board presided over the Meeting, while the sub-committee chairmen, the Chief Executive Officer, senior executives from the Finance and Accounting Group, and other functional groups also participated in responding to and providing clarifications on the inquiries raised by shareholders. The external auditor, external legal advisors from TTT & Partner Co., Ltd., attended the Meeting and took up the role as an intermediary to ensure the Meeting was proceeded with transparency and in compliance with the Company's Articles of Association and related laws. They also acted as witnesses during the voting process. The Chairman of the Meeting ensured that the Meeting was carried out in accordance with the Company's Articles of Association and the agenda items as per sequence stated in the invitation letter, without any other agenda item added. The Chairman efficiently allocated time to each agenda item and provided adequate time and opportunities for shareholders to share their views and make in-depth inquiries in regard to those subjects relating to the Meeting's agenda items and the Company's operations prior to vote casting and decision-making on resolutions.

3) Before the Meeting, PTTEP provided clear and useful information as stipulated in the Articles of Association of PTTEP such as the number and ratio of the shareholders who attended the Meeting both in person and by proxies, including the Meeting procedures, how to ask questions, or submit suggestions regarding the concerned agenda items, the voting process and vote counting in each agenda item through E-Voting. The detailed contact channel was also provided if shareholders or proxies faced problems or had any questions regarding the E-Meeting system during the Meeting. Each resolution was clearly reported and displayed in the Meeting as required by relevant laws and the Company's Articles of Association and independent legal inspectors were appointed to witness and inspect the vote counting procedure.

4) All information presented at the Meeting was available in both Thai and English, the E-Meeting in English version for foreign shareholders who attended the Meeting was also provided to ensure fairness and equality among all shareholders.

5) External independent legal advisors, acting as inspectors as well as witnesses, were engaged to oversee the meeting to ensure the meeting's transparency and that it was conducted lawfully and in accordance with the Articles of Association of PTTEP including but not limited to meeting procedures as informed by the Chairman of the Meeting. Such procedures include verifying the documents and the proxy examination process, ensuring a quorum as well as assuring the meeting that none of the shareholders with potential conflicts of interest would cast votes on such agenda items, and making sure that the voting procedures, vote counting, and verification of the resolution and result of the vote counting were done correctly.

After the Meeting

1) PTTEP disclosed the Minutes of the Meeting together with the vote counting results for each agenda item to the SET's information system and also on the Company's website immediately after the Meeting.

2) Minutes of the Meeting, in both Thai and English, were accurately and completely recorded. They covered explanations of the Meeting's voting and vote counting procedures, details of agenda items, questions and answers, explanations and opinions related to PTTEP's business operations, and the Meeting's agenda. The Company also kept in record the resolution on each agenda item, categorized them as agreed, disagreed, and abstained as well as the names and positions of the directors and executives who attended the Meeting. Furthermore, the final version of the Minutes of the Meeting was submitted to the Ministry of Commerce, the SET, and the Office of the Securities and Exchange Commission (SEC) within 14 days after the Meeting. Minutes of the Meeting were also delivered to the Company's shareholders for their reference and consideration, and for the purpose of verification whereby any shareholders who wished to make objections could do so within the timeframe stipulated by relevant laws. The approved Minutes, video, and audio clips of the Meeting were also published in both Thai and English on the Company's website. In 2024, the Company did not receive any objections or inquiries from the shareholders regarding vote counting results and the Minutes of the Meeting.

1.2) Disclosure of Significant Material Information

PTTEP ensures that information is communicated to shareholders accurately and in a timely manner, not only for the information that is required by related regulations but also for other information that the Company considers necessary for the shareholders to have. These disclosures are publicized through various channels, such as the SET and PTTEP website, and other media including printed media. Furthermore, the Company clearly discloses the shareholding structures in our subsidiaries and associated companies as well as with the controlling shareholder, namely PTT, to ensure shareholders that our organization's structure is transparent, verifiable, and does not comprise any form of cross or pyramidal shareholding structures.

1.3) Fostering Understanding of Business Operations and Long-Term Engagement with Shareholders

PTTEP continuously organizes various activities for the benefit of shareholders and society. The main objectives of such activities are, for shareholders and other persons interested in PTTEP, to enhance the knowledge and understanding of the exploration and production of petroleum business which is distinct from other businesses as well as participate in our CSR programs. In addition, we aim to foster a high level of confidence in investors to maintain long-term investment with PTTEP. In 2024, Shareholder Site Visits were organized at PTTEP Technology and Innovation Center (PTIC), Rayong Province, and at S1 Project, Sirikit Oilfield, Kamphaeng Phet Province.

PTTEP also prepares and publishes a quarterly newsletter, Explorer's Journal, as an additional channel to communicate PTTEP's news to shareholders, investors, and the general public. This includes the Company's performance, the progress of key projects, technology, Corporate Social Responsibility (CSR) activities, corporate governance activities, and other useful information; for example, PTTEP Shareholder Site Visit, the implementation of GRC principles for sustainable business, renewable energy technology for decarbonization and green hydrogen technology for energy transition, etc. There is also a fun game in the quarterly newsletter for shareholders to play and win special prizes. Explorer's Journal is publicized on the Company's website. Copies of the newsletter would be sent to shareholders while e-newsletter would be sent via registered emails of shareholders.

1.4) Equal Treatment of Shareholders

PTTEP provides a direct communication channel to all our shareholders via our independent directors' email at IndependentDirector@pttep.com for various issues, such as activities of the directors, good corporate governance, and audit-related issues. In addition, shareholders can directly contact the Company Secretary at CorporateSecretary@pttep.com or Investor Relations Section at IR@pttep.com for additional information. The Company also focuses on operating business with optimal efficiency, with a commitment to business ethics for sustainable growth of the organization using modern and accepted management and monitoring tools in order to provide appropriate and consistent returns to shareholders while taking proper care of stakeholders in a sustainable manner.

1.5) Prevention of Insider Trading

PTTEP puts a great emphasis on supervising the use of our internal information by including this matter in PTTEP Good Corporate Governance and Business Ethics. In line with securities laws, policies relating to the use of internal information are regularly reviewed to preserve integrity and equality among all the Company's stakeholders. Key measures are as follows:

1) The Board of Directors has assigned the Corporate Governance and Subsidiary Management Department as the center for monitoring the insider trading prevention program and preparing a list of personnel who are in possession of material and/or internal information (Insider List) which includes directors, the management, and relevant employees.

2) Directors, the management, and employees are regularly informed of PTTEP's regulations and policies with regard to insider trading prevention through various communication channels as well as through training to ensure understanding and compliance and to prevent misuse of information which may directly or indirectly be in conflict with his or her personal interests. Disciplinary actions are clearly specified, while supervisors, who act as the CG Leaders, are responsible for advising and encouraging their subordinates to follow. In 2024, there was no report of any misuse of internal information.

   PTTEP employees attended a training on Good Corporate Governance and Business Ethics (CG&BE) or CG&BE E-Learning which is a compulsory course and is held every two years. This course covers the topic of measures to prevent the use of insider trading. The latest course was arranged in 2024 with 100 percent of employees attending and completing the course.

3) Trading of PTTEP's securities during the blackout periods is prohibited when material information that may affect securities' prices is being disclosed, such as before the disclosure of financial statements, operational results, or investments in significant projects. All the Company directors, members of the management holding positions of Senior Vice Presidents (SVPs) and above, Vice Presidents (VPs)

of the Finance and Accounting Group (FNA) as well as other management and employees having material internal information will be informed of such blackout periods in order to abstain from trading of PTTEP's securities whether directly or indirectly. This prohibition also applies to their spouses and minor children. Violation of this prohibition is considered a disciplinary offense. Moreover, Corporate Governance and Subsidiary Management Department will send the Blackout Period Acknowledgement Form to the insiders once a year to acknowledge the blackout period measures. In 2024, a comprehensive blackout period calendar is introduced, providing insiders with real-time information on blackout periods and security trading, ensuring that insiders have continuous access to critical information on this matter.

PTTEP also requires all the Company directors, members of the management holding positions of SVPs and above, VPs of FNA as well as their spouses and minor children to refrain from directly and indirectly trading securities of PTTEP at all times and if it is necessary to trade, they must inform the Corporate Governance and Subsidiary Management Department at least two days in advance.

4) The Company directors, members of the management holding positions of SVPs and above, and VPs of FNA must disclose complete information with regard to their securities possession as well as related trading activities to the Corporate Governance and Subsidiary Management Department in addition to the disclosing obligation to the SEC. These pieces of information will be disclosed to the Board on a monthly basis for CG&BE compliance monitoring purpose. Shareholding by the Company directors, members of the management holding positions of Senior Vice Presidents (SVPs) and above, Vice Presidents (VPs) of FNA is disclosed in the Annual Report (56-1 One Report) as required by the SEC.

Financial Institutions

PTTEP adheres to a policy of treating financial institutions equally under the same standard, ensures open and fair communication based on good governance principles to foster trust and build strong, long-term relationships with financial institutions. PTTEP provides opportunities for financial institutions to transparently offer various services, such as lending, cash management, and insurance, based on the quality and terms proposed, with clear and measurable criteria in the selection process.

PTTEP follows a multi-dimensional approach in selecting financial institutions for products and services. These dimensions include; (1) credibility and financial stability of the financial institution; (2) products and services that meet PTTEP's requirements; (3) interest rates and fees; (4) technology, innovation, and system security; (5) quality of service; and (6) business policies aligned with PTTEP's goals. Additionally, PTTEP regularly evaluates the performance of financial institutions across various aspects and collaborates with them to review and improve service efficiency to meet international standards.

For financial institution creditors and bondholders, PTTEP ensures fair treatment according to the debt hierarchy outlined in contracts and legal provisions. The company fosters positive relationships, honors its debt obligations as agreed, and maintains relevant financial covenants as specified or disclosed. PTTEP also establishes transparent and efficient operating procedures to build trust and confidence among its financial institution creditors and bondholders.

For bond issuance, PTTEP ensures compliance with legal requirements and the regulations issued by the SEC as well as strictly follows its policies, objectives, and the resolutions of shareholder meetings. PTTEP upholds its responsibilities by adhering to the rights and duties of bond issuers as well as the terms of loan agreements. It ensures full disclosure of relevant information and has measures in place to address potential impacts on

stakeholders in case of non-compliance with the bond issuance terms or loan agreements.

(2) Employees and Directors

Employees

1) PTTEP complies with the UN principles by not employing illegal workforce and child labor in every area in which we operate. The following guidelines are stipulated in the Company's CG&BE:

    1.1) To understand and comply with all laws applicable to PTTEP Group's operations in the locations where we conduct our business;

    1.2) To understand local customs, cultures, and traditions of the locality in which we operate;

    1.3) To respect the local traditions, cultures, and cultural differences, and not to behave in any way which contradicts them;

    1.4) Not to discriminate against any individual based on our personal relationship with that individual, his or her ethnicity, nationality, gender (including pregnancy and sexual preference), age, skin color, religion, personal views, disability, or any other conditions or characteristics which are not concerned with work.

In 2024, PTTEP supported 45 persons with disabilities on The Occupational Income Promotion project under Section 35 of the Empowerment of Persons with Disabilities Act, B.E. 2550 (2007), through the Disabled Personnel Assistance Coordination Center to enable persons with disabilities or their caregivers to pursue career in their own hometowns. PTTEP made full payments directly to persons with disabilities within the period specified by law.

PTTEP strictly complies with labor laws enforced by every country we operate. In Thailand, a Welfare Committee has been established, comprising 9 employer representatives and 22 employee representatives from Thailand and overseas work sites which represented 100 percent of total employees. The Welfare Committee meets every two months to discuss labor-related issues that cover compensation, welfare, human resource management, and labor rights. In 2024, the Welfare Committee convened six meetings where 20 issues were discussed covering compensation, welfare, benefits, and opportunities for career advancement.

2) PTTEP recruits, selects and employs employees based on their qualifications, experience, and capability to work in the target positions and alignment with the Company's values. According to the Good Corporate Governance and Business Ethics of PTTEP Group, both internal and external candidates are treated fairly under the transparent recruitment process. In addition, our employees are given opportunities to develop and grow in their professional careers based on their potential as well as to join external activities under the Company's policy.

3) PTTEP sets up and regularly reviews compensation and benefits packages to ensure fairness for both the Company and employees according to our short-term and long-term business performance, pay positioning among leading energy companies in Thailand and the region, types of work, required skills and expertise, difficulties of work, responsibility and accountability of each position, and the individual employees' performance results in order to attract and retain competent and capable employees.

4) PTTEP provides and regularly reviews welfare and benefits packages to ensure fairness to both the Company and employees according to our ability to pay at present and in the long run, focusing on the welfare and benefits that help to enhance the quality of life of employees and their families. These are, for example, healthcare benefits for employees and their families which are comparable

to those provided by the majority of other leading energy companies in Thailand and/or in the region. The Company regularly reviews welfare and benefits programs to suit the changing social, economic, and other obligatory conditions of the business. In addition, the Company also provides psychological and legal consultation services through our "Sabaijaidee" program to Thai employees, local employees in overseas work sites, their spouses, and children to help them guard against anxiety and stress arising from matters concerning their families, private life, work, relationship, offspring, and legal issues. The services are provided by psychologists and professionals from one of our consulting companies. In 2024, The Sabaijaidee Live project and "Sabaijai Day" activities were organized four times throughout the year. The external speakers were invited to provide professional knowledge and advice on mental health care, and stress management as well as to promote and enhance diversity and inclusion in the company. There were also financial advisers provided advice on financial issues called "Money Clinic project" to support the well-being and recommended employees and their families in money management knowledge. We issue monthly articles about mental health care for employees as well. Psychology and stress tests have also been added to the WeConnect system so employees can assess their stress at any time and provide channels of communication where employees and their families can directly contact the professionals at the right time.

The Company establishes a provident fund program for our employees to ensure their financial security after resignation and retirement. The fund consists of contributions from both the Company and employees. The Company makes a monthly contribution at a rate of 15 percent of our employees' basic monthly salary, while employees contribute 2 to 15 percent of their basic monthly salary. Criteria and policy regarding this fund are subject to the Company's regulations. Effective from October 1, 2022, the Company has increased the flexibility and the ability to respond to economic fluctuation in fund management by allowing employees to adjust their provident fund contribution rate four times per year, up from two times per year. Currently, 99 percent of total eligible employees have joined the Provident Fund.

In addition, to celebrate and commemorate the long-term commitment and loyalty of our employees, PTTEP establishes the Long Service Awards Program to provide recognition to staff members who have reached significant milestone years of service, which are 5, 10, 15, 20, 25, 30, 35, and 40 year employment anniversary with the Company. The purpose of the program is to strengthen our corporate employee engagement by recognizing and honoring the commitment and dedication of long-term employees while promoting career aspirations within the Company as well.

5) PTTEP prioritizes human resource development to increase the organization's capability to drive the business performance as the Company always believes that human resources hold a key to our success. The Company provides opportunities for employees to develop and enhance their knowledge, and skills through both short-term and long-term training and development programs. Apart from professional capability and necessary skills building, the Company also embeds the corporate core values (*EP* SPIRIT) in all employees in domestic and international assets, so they can perform the expected behavior together based on the same corporate culture to realize the Company's vision and mission. In 2024, PTTEP organized the *EP* SPIRIT Trainer program for nominated local staff in Myanmar and Malaysia to enhance their knowledge and skill for leading, and promoting core values and support Corporate Culture workplan to international assets with understanding the context of the countries. Furthermore, PTTEP continues promoting core values through Change Agent named *EP* SPIRIT

Transformers in Thailand, Myanmar, and Malaysia. In addition, our employees attended training and development programs at an average of 53 hours per person per year. Programs for technical skills and Safety Security, Health, and Environmental (SSHE) were provided to employees. Such programs covered topics such as water management, oil spill response, and environmental management. In addition, the Company has extended the capability development areas to include digital literacy, managerial skills, and leadership skills such as New Manager Program, Coaching & Feedback, Negotiation & Influence, Ethical Leadership, and Data Science Bootcamp.

6) PTTEP realizes the value and importance of regular consultation between the Company's employees and their supervisors or among employees to seek ways out to issues in the day-to-day operation as fast as possible and to maintain a good working relationship among them. Should any conflicts arise among employees or between employees and their supervisors, the concerned employee may file a complaint through one of the communication channels provided. The employees, including relevant witnesses, who comply with the provided measures and procedures and act in good faith shall be protected, without facing a penalty, termination, or any other negative consequences. PTTEP has introduced various channels for Grievance Handling issues, such as (1) the Whistleblowing System, which, during 2024, we received a total of 36 cases and eight of those considered valid complaints in accordance with the Reporting and Whistleblowing Regulation, B.E. 2566 (2023). Among these, six cases have been completed and two have remained under investigation which is expected to be completed by Q1/2025; and (2) the Human Resource Management Policy Grievance Channel which, during 2024, we received 10 complaints. All were considered valid and have been successfully processed. Moreover, PTTEP has included the result of each complaint case and related penalties (if any) in the Annual Report (56-1 One Report) In addition, PTTEP communicates lessons learned from each completed case to employees without disclosing personal information in order to prevent recurrence. In this regard, PTTEP has a certain process to verify facts confidentially, involving only those concerned with a view to protecting employees and whistleblowers.

7) PTTEP conducts the Employee Engagement Survey every two years. The recent results in 2024 indicated that the staff engagement is 75 percent higher than the last results from the survey carried out in 2022 and benchmarks from Thailand Market Average, Thailand's Oil, Gas, Exploration and Production companies, APAC's Oil, Gas, and Consumable Fuels companies, and Fortune 500 companies. PTTEP remains committed to its Employee Engagement improvement plan which the Chief Executive Officer will endorse for 2025–2026. Additionally, we plan to conduct the next Employee Engagement Survey in 2026.

Directors

PTTEP efficiently support directors' performance by establishing clear guidelines for directors' roles and responsibilities, appointment of sub-committees, development of directors, relationship enhancement between directors and the management, as well as indemnity for directorship. Details are disclosed in "Attachment 5: Good Corporate Governance and Business Ethics."

(3) Government Agencies and Regulators

PTTEP conducts business by adhering to Good Corporate Governance and Business Ethics and strictly complies with the laws, rules, and regulations applicable to our operations in all locations where we operate whether in Thailand or overseas, including cooperation in being a good citizen.

(4) Suppliers and Contractors

In this context, "vendor" refers to individuals or companies providing goods and services to PTTEP Group without an agreement, while "supplier" refers to those with an agreement.

According to the Procurement Regulation and the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE), vendors play an integral part in the sustainability of our business. The Company therefore established a policy which aims to treat our vendors as equal business partners. PTTEP's procurement system is based on fair competition and strict compliance with the laws and regulations as well as other legal obligations. It also takes into account the Safety, Security, Health, and Environment (SSHE). Vendors must establish and implement a safe working procedure in line with the Company's work safety standards. Their employees, meanwhile, are also required to uphold business ethics and respect human rights. Furthermore, in pursuing the Company's vision of being the Energy Partner of Choice, PTTEP has focused on long-term value creation and mutual benefits to foster good partnerships with all parties including vendors. PTTEP has published information related to Procurement and Contract on PTTEP website at www.pttep.com > E-Service > Procurement and Contract. Click here for more information
The key summary is as follows:

1) Vendor Registration and Pre-Qualification

PTTEP Group strives for procurement processes that are accurate, proper, efficient, flexible, while conforming to international standards and taking risk management into account, on par with other leading companies. Thereby, the Company has in place mechanisms to ensure appropriate risk management and acquisition of goods and services that are accurate and timely which will result in the utmost benefit for PTTEP Group. The established procedure of Vendor Registration and Pre-Qualification is as follows:

- PTTEP is deeply committed to free and fair business competition without trade barriers. Vendors can register their profiles through our website at www.pttep.com > E-Service > Procurement and Contract > New Vendor Registration. Click here for more information
- The pre-qualification committee, consisting of representatives from relevant units, was established to prequalify vendors by screening and evaluating them based on their product and service categories. The committee is authorized to perform its duties independently for fairness while ensuring that vendors possess the qualifications to deliver the products or provide the services needed by PTTEP. The evaluation process is comprised of three aspects: (1) Preliminary Technical, (2) Safety, Security, Health, and Environment (SSHE), and (3) General (for example, company registration, code of conduct, etc.) including Financial Status.
- PTTEP has published Privacy Notice and Guidelines on the Protection of Personal Data for the Procurement Process of PTTEP Group on our website at www. pttep.com > E-Service > Procurement and Contract > Related Document. Click here for more information

2) Sourcing Strategy and Procurement Process

PTTEP develops Annual Procurement Plan (APP) in accordance with the Company's 5-year roadmap. As such, the Company is able to leverage sourcing strategy and set contractual periods as appropriate for market situation for both domestic and international assets. The APP shall be endorsed by an authorized person as per the Delegation of Authority and Signature (DAS) document. After the APP is endorsed, PTTEP will apply a sourcing strategy based on the scope of service, essential contract terms and conditions, vendors, market conditions, estimated contract value, duration, Category Management Process as well as risk management in order to efficiently proceed with the procurement plan.

Additionally, PTTEP continuously looks for sourcing opportunities from countries with lower production costs (low-cost countries) by searching for new potential bidders for categories which have limited sources of supply or those that aim to achieve further cost-saving targets. The new potential bidders will be assessed for quality as per the Company's standards before being added to the approved vendor list.

For procurement process under the Production Sharing Contract (PSC), PTTEP is required to submit Annual Master Procurement Plan (AMPP) in order to obtain endorsement from the Department of Mineral Fuels (DMF) for procurement valued above THB 10 million prior to the sourcing process. For any procurement transactions that fall under DMF criteria for submitting Procurement Strategy, the Procurement Strategy Sheet shall be submitted for DMF's endorsement 30 days in advance of procurement process.

PTTEP focuses on strategic sourcing where the Company will conduct a bid clarification meeting with high-value contract bidders prior to the tendering process. In the process of vendor selection for high-value and high-risk procurement, the technical proposal will be evaluated first prior to consideration of the commercial proposal. Subsequently, the result of the bidding process will be submitted to the Procurement Committee (PC), joint venture partners (if any), and the Board (for high-value procurement) for endorsement prior to the stage of contract drafting with the selected vendor. Furthermore, PTTEP is required to inform the bid result to DMF, and in the event that the awarded contract value is 10 percent higher or lower than the Procurement Strategy, DMF's endorsement is required prior to awarding the contract. The Company only selects vendors with the required technical and SSHE qualifications, and which offer the lowest price or on the basis of the best interest of PTTEP Group.

Moreover, PTTEP has adopted a weighted technical and price score method together with Green Procurement criteria in the vendor selection process in order to align with the Company's sustainability policy.

3) Contract Management and Assessment

Contract Management and Supplier Relationship Management (SRM) constitute an important component for the petroleum exploration and production business. A contract holder coordinates between suppliers and all relevant parties, to ensure that they fully understand and comply with PTTEP's work plan, contract objectives, SSHE standards, and risk mitigation plan, as well as critical key performance indicators (KPIs). The contract holder also needs to assess and follow up periodically on the performance to ensure that the suppliers operate according to the contractual terms. At the end of the contract, the contract holder must also complete the Contract Closed-out Report to identify areas of improvement regarding the operations and long-term sustainable relationship with the supplier. PTTEP has improved and set standard supplier performance evaluation criteria to suit the characteristics of each category and set corrective action plans for those suppliers who fail the evaluation. Evaluation results will also be used in vendor pre-qualification evaluation in the future.

Additionally, PTTEP has reviewed and revised Procurement & Contract Procedure and Procurement & Contract Training Toolkit to ensure clarity, conciseness, adaptability, and being up to date. PTTEP Delegation of Authority and Signature (PTTEP DAS) regarding procurement was also revised to be more prudent and align with the current operational conduct, so that the relevant units are able to use as a guideline properly. Moreover, the revised version was communicated through the Contract Holder Certification Program workshop and training, as well as other communication channels, to build understanding and awareness among contract holders and relevant persons.

4) Supplier Collaboration Initiatives

In 2024, PTTEP continued to develop effective supply chain management and support supplier collaboration initiatives to maintain a good relationship with suppliers. In this regard, the Supplier Relationship Management

Plan is developed and implemented, for example, by organizing pre-bid meetings with suppliers under critical work categories, communicating strategic direction and business opportunities to suppliers for advance tender preparation, conducting offshore drilling contractor performance monthly meetings, and organizing annual meetings with major suppliers. As a result of good collaboration with suppliers, in 2024, PTTEP successfully established 75 Master Service Agreements with suppliers for the repetitive sourcing items and completed 67 Frame Agreements to reduce the procurement process and lead time while increasing procurement efficiency.

PTTEP also organized Supplier Day (The Symposium) 2024 under the theme "Shaping the Future: Digital Procurement and Transformation." The primary objective of the event was to embrace digital advancements and explore the role of digital tools, artificial intelligence (AI), and innovative strategies that are reshaping procurement. A special highlight of the event will be the Supplier Excellence Awards, where we will recognize outstanding achievements in supplier performance.

5) Local Content

To enhance the capability of domestic vendors to compete internationally, PTTEP supports the sourcing of local products and services. Not only does it promote domestic employment and income distribution, but it also reduces the outflow of capital to other countries. As a result of our commitment to building a long-term relationship with the communities where we operate, the Company has been entrusted by the respective communities with licenses to operate. Meanwhile, the Company also encourages our vendors to operate with care and responsibility wherever they are and to increase their local sourcing to save costs as well as to support the local communities. Local Content details are also disclosed in the "Building a Sustainable Tomorrow" section, "Just Transition" topic, "Advocating for Sustainable Supply Chain" sub-topic.

In addition, PTTEP also supports SME entrepreneurs and Made in Thailand products as per e-GP regulation, for instance, considering SMEs as the priority for sourcing opportunities, setting the scope of work to suit Made in Thailand products, setting conditions/vendor qualification and evaluation criteria to support SMEs and Made in Thailand products, and supporting Thai entrepreneurs or companies registered in Thailand, to name a few.

6) Vendor Sustainability Management

PTTEP is committed to operating our business to achieve sustainable growth and adhering to good corporate governance for the community, society, and environment. To effectively achieve these goals, the Company prioritizes the management and continuous improvement of its supply chain.

"PTTEP Vendor Sustainable Code of Conduct" was drafted with its contents and scope adhering to the relevant rules, regulations, and laws. The vendors are encouraged, in all of their activities, to be ethical, respect human rights, comply with the SSHE standard, and prioritize environmental management. In this regard, the Company has introduced Green Procurement Roadmap and organized a project to produce environmentally friendly procurement criteria to be applied within an organization. Also, PTTEP has successfully applied green procurement criteria for 27 work categories and implemented technical bid evaluation in conjunction with commercial evaluation to award bidder. The successful bidder shall get at least a 30 percent score to pass PTTEP green procurement criteria. The performance data of green procurement is shown on our website at www.pttep.com > Sustainability > Governance for Sustainable Business > Supply Chain Management. Green Procurement details are also disclosed in the "Building a Sustainable Tomorrow" section, "Just Transition" topic, "Advocating for Sustainable Supply Chain" sub-topic.

7) Vendors' Environmental, Social, and Governance (ESG) Assessment

PTTEP Group conducts an assessment on suppliers' sustainability on ESG aspect (ESG on-site audit), to assess sustainability risks in five areas: (1) corporate policy, (2) business ethics, (3) society, (4) occupational health and safety, and (5) environment. The assessment was done through a certified third party to ensure that suppliers' ESG risks are audited and managed in line with the best practice. ESG assessment data is publicized on our website Click here for more information

(5) Customers

PTTEP is committed to our mission to be the producer and supplier of crude oil, natural gas, condensate, naphtha, and LPG at fair and competitive prices, through the arrangements of short-term, long-term, and spot contracts. The Company assesses customer's suitability based on the following four criteria: (1) economic return of product prices; (2) financial stability; (3) safety standards; and (4) compliance with each customer's local laws and regulations. The Company treats all customers fairly with the objective to deliver optimal benefits for all, while strictly adhering to the terms and conditions of the contracts and maintains customer confidential information in compliance with Personal Data Protection Act, B.E. 2562 (2019), as disclosed under the "Policy and Statement of Personal Data Protection" topic. In an effort to maintain good relationship with the customers, the Company arranges regular meetings with customers to exchange production plans and market-related information to ensure that the Company can produce and deliver quality products in accordance with the contracted quantities and meet the time of customers' needs. The Company also conducts satisfaction surveys with customers as means to continuously improve the quality of our products and services.

In addition, PTTEP has made available the mechanism which allows both internal and external parties to report any suspicious misconduct or wrongdoing that might be in violation of laws or Good Corporate Governance and Business Ethics (CG&BE) committed by the Board, the management, employees, or representatives of PTTEP Group. Procedures are in accordance with the Whistleblowing Reporting and Protection Regulation to ensure efficiency, transparency, fairness and accountability of the complaint handling process. In 2024, the Company received no complaints from the customers.

(6) Business Partners and Joint Venture Partners

Joint venture projects between PTTEP and the Company's domestic and foreign business partners and joint venture partners operate under mutual working agreements according to the international standards in order to promote equal ethic standards between PTTEP and our business partners and joint venture partners. These agreements include details regarding the rights and duties of business partners and joint venture partners such as the right to become a member of a project's management committee. The committee is responsible for the issuance of guidelines on the procurement of products and services as well as for the development of strategic planning and annual budgeting with a clear scope and approach. The partners also have the right to audit annual financial and accounting records. At the same time, the Company also agrees with business partners and joint venture partners on certain sets of appropriate and clear measures, for example, penalty imposed on partners for failures to honor an agreement. In addition, the Company focuses on the transparent distribution of information to business partners and joint venture partners and external parties.

(7) Communities and Society

PTTEP Corporate Social Responsibility Policy emphasizes sustainable social development and stakeholder engagement at all levels. Social responsibility has been integrated into each business's decision-making and

execution process. This Corporate Social Responsibility Policy is adopted in all PTTEP operations areas.

In this regard, PTTEP utilizes the Issue and Stakeholder Management System (ISMS) as a tool for analyzing social risks to prevent and mitigate impact as well as to promote good relationships with communities in every operating area. Stakeholder management and Corporate Social Responsibility Department, in charge of Corporate Stakeholder Management framework & guideline and strategy, revisit them and analyze all data and statistics annually. Moreover, relevant managers and Public Affairs staff will ensure effective implementation. The data & statistics are updated regularly through ISMS Report Online System and will be used as a centralized database. This approach enhances the efficiency of monitoring community and social risks and provides opportunity for management to monitor though this dashboard. PTTEP has also set guidelines for grievances and issues handlings, allowing communities to report their concerns directly to on-site officers. Issues will be recorded and tracked through the Grievance and Issue Monitoring System to ensure that such issues are managed appropriately.

(8) Media

Collaborate with media with the emphasis on providing accurate and appropriate information for further communication to the public in an accurate manner.

4.1.3 Information Disclosure and Transparency

(1) Disclosure of Financial and Non-Financial Information

Information disclosure is one of the key aspects of good corporate governance. PTTEP prioritizes the information disclosure to the Stock Exchange of Thailand (SET), as well as to the shareholders and all stakeholders. The disclosed information must be accurate, sufficient, timely, and equally accessible to all parties and is prepared in accordance with the Company's Business Ethics Guidelines. The responsible unit in providing information and response to external queries are the Investor Relations (IR) and the Corporate Communications unit.

The information disclosure consists of financial information and non-financial information. In 2024, financial information was disclosed through financial statements which were reviewed or audited by the external auditor to confirm that they were presented accurately, in all material respects, according to the Thai Financial Reporting Standards (TFRS). The financial statements were subsequently approved by the Audit Committee and/or the Board prior to being disclosed to the public. The Board reported their responsibilities with respect to the financial statements in the Annual Report (56-1 One Report). In addition to the SET's requirements, the Company also released unaudited annual financial statements in advance to allow timely access to the financial information for the shareholders and investors. Unless stated otherwise, the information before and after the audit usually and generally does not contain any significant changes.

The Company also disclosed non-financial information, including the acquisition/disposal of assets, related party transactions, dividend payments, the management discussion and analysis, invitation letter for the shareholders' meetings, minutes of meetings, as well as other information deemed important for investment decisions. These disclosures were made in compliance to the guideline of the SET's and the Securities and Exchange Commission (SEC)'s disclosure requirements for the listed companies. Additionally, the Company disclosed the annual corporate governance report in the Annual Report (56-1 One Report).

Information that PTTEP has publicly disclosed to SET is disseminated in both Thai and English on the Company's website, which also features other up-to-date information considered to be of interest to the aforementioned parties. Key information available on the website comprises petroleum exploration and production projects, investment in new business for energy transition, quarterly analyst meeting presentations, webcasts,

investors' event calendar and the Company's presentations, historical and latest stock price, and press releases. The Company also reports its Safety, Security, Health, and Environment (SSHE) performance in the Annual Report (56-1 One Report). Additionally, videos offering guidelines on how to calculate the Company's financial results, along with an infographic summarizing the operating performance, are available on our website for investors.

The Company also publishes a quarterly investor newsletter, Explorer's Journal, which includes information that may be beneficial to our shareholders and investors, including performance highlights, project updates, good corporate governance practices, sustainable development roadmap, and knowledge sharing on the fundamentals of the exploration and production business. The newsletter is available in both Thai and English on the Company's website and is distributed to investors in both hard copy and email formats.

In 2024, PTTEP disclosed a total of 37 articles through the SET portal and organized the following activities for the shareholders, analysts, and investors:

Activity	Frequency (Times)
• Roadshows/conferences (both domestic and overseas)	21
• Analyst meetings	4
• Opportunity Day and SET Digital Roadshow (arranged by the SET)	7
• Site visits at PTTEP's operational sites	7
• Knowledge sharing events for investors	2
• Company visits and conference calls	27

The Company recognizes that accurate, complete, timely, and transparent information disclosure is essential to Good Corporate Governance and Business Ethics (CG&BE), and is fully committed to excelling in this area. Therefore, in 2024, the Company's management held events and activities with domestic and international investors in the forms of virtual conferences, online meetings, telephone calls, and in-person meetings.

(2) Investor Relations

The Investor Relations (IR) unit is responsible for the communication of relevant information and news that reflect fair value of PTTEP's stock price to the analysts, shareholders, and general investors according to the SET's and SEC's requirements to build up confidence, enhance the company's image, and cultivate a positive perception among investors. Additionally, the IR unit coordinates and provides advice on investor relations matters to the Company's Board of Directors and executives.

Investors or interested individuals may contact and request information related to PTTEP through the following channels:

1) **Head of Investor Relations:**
   Mr. Nattapol Tachavaraporn
   Telephone: +66 2537 5304

2) Investor Relations unit:
Telephone: +66 2537 4217, +66 2537 4946, +66 2537 5567 and +66 2537 5522
Fax: +66 2537 4444
Email: IR@pttep.com

4.1.4 Policy and Practices Related to Personal Data Protection

PTTEP recognizes the importance of personal data protection and governance of personal data in accordance with the Personal Data Protection Act, B.E. 2562 (2019) (PDPA) and associated secondary laws and undertakes the following actions:

1) Produce PDPA Gaps Analysis and Recommendations to study and analyze legal requirements and internal processes in accordance with PDPA and communicate the recommendations to relevant parties for implementation, for example, privacy notice, personal data consent, cookies policy, and cookies consent, etc.

2) Establish a PDPA Implementation Plan and consult with relevant parties to put the plan into action, follow up on the implementation, and examine related documents.

   In addition, personal data collection, usage, disclosure, and/or cross-border transferring of PTTEP's activities are reviewed annually to ensure compliance with the PDPA and related secondary laws.

3) Establish and announce the Personal Data Protection Policy on PTTEP's website to emphasize the Company's intention to protect personal data and explain how the Company generally treats personal data.

4) Provide Personal Data Protection Notice for External Parties to inform data subject and understand the purpose and method of collection, use, disclosure, and/or transfer of personal data abroad, including rights as the owner of personal data, etc. The information is published at the Personal Information Protection Center on the website of PTTEP.

5) Establish and announce the Personal Data Protection Standard for Employees to ensure that employees know how to treat their personal data and how to comply with the law.

6) Establish and announce the Personal Data Retention Guideline to provide appropriate guidance for personal data protection and management including retention period and destruction to be in accordance with Company's personal data protection policy.

7) Establish and announce the Personal Data Security Incident Reporting and Response Procedure for handling and reporting personal data security incidents to be in accordance with PDPA and associated secondary laws.

8) Communicate PDPA knowledge through various channels including email and provide regular training to educate employees. In addition, e-learning has been made available to help employees understand the rules and practices of collecting, using, or disclosing personal data, and the important duties of the processor of personal data.

4.1.5 IT Security Policies and Practices

Since 2019, the Board has delegated the Risk Management Committee to oversee the Company's cybersecurity strategy and review process.

Later, in 2020, PTTEP appointed the Digital Steering Committee, with the Executive Vice President of the Operations Support Group (OPS) as its chairman, to take on the following responsibilities:

- Define PTTEP's digital directions, policies, and strategies.
- Review new digital technologies and innovative ideas in accordance with digital strategies.
- Define PTTEP Digital Master Plan and Roadmap to align with PTTEP and PTT Group's directions and business strategies.
- Provide advice and determine solutions related to digital operations and processes.
- Supervise and monitor digital risk management to ensure risks are within the risk appetite under the Enterprise Risk Management Framework.

Reporting to the Digital Steering Committee, the Vice President of the Information Management Department performs the role equivalent to that of the Chief Information Security Officer. He and his team are responsible for developing the direction, targets, strategy, policies, and standards for information technology security. Their tasks also include supervising the IT risk management as well as the IT security master plan and roadmap, with a view to keeping cyber risks in line with the Company's risk appetite. Indeed, cybersecurity risks have been incorporated into the corporate risk profile, which is closely overseen by the Digital Steering Committee, the Risk Management Committee, and the Board of Directors to ensure that PTTEP can respond promptly to any cyber threats and any emergencies. Furthermore, to strengthen PTTEP's response to cybersecurity incidents, the Company has already appointed the Chief Information Security Officer and established the Cybersecurity Incident Response Task Force in the first quarter of 2023.

PTTEP issued three policies related to information security/cybersecurity, namely Digital Security, Information Security Management System and Cybersecurity. All these policies were announced across the organization in keeping with good corporate governance and are available to all in the management and among employees through PTTEP Intranet. All employees have acknowledged these policies and received relevant training under the cybersecurity and IT security training program, which was carried out to foster their awareness and understanding of the relevant corporate policies and regulations, as well as Thailand's Computer Crime Act, B.E. 2550 (2007) and Personal Data Protection Act, B.E. 2562 (2019). All policies and training programs are reviewed regularly so that they remain relevant and in line with the current laws.

In 2023, all PTTEP staff were required to participate and pass a compulsory online Cybersecurity Awareness Training Course to ensure up-to-date awareness of current cybersecurity threats. PTTEP also sent phishing email messages to a randomly selected group of employees every week to test employees' awareness on cyber threats.

In 2024, PTTEP prepared to handle cyber incidents by conducting three tests per year, covering all departments, and improving the speed of vulnerability remediation.

Additionally, proactive measures have been taken to enhance the detection and response capabilities of the Security Operation Center, which covers IT, Subsurface, and Operational Technology (OT) work, by applying international standard indicators.

PTTEP also received a Certificate of Registration for Information Security Management System – ISO/IEC 27001:2022 or ISMS for the scope: The information security management applied to PTTEP Data Center and Supporting Facility Governed by PTT Exploration and Production Public Company Limited. The Certificate was effective on September 2, 2023.

4.2 Governance Implementation at PTTEP

4.2.1 GRC Principles

PTTEP values the importance of integrating Governance, Risk Management and Compliance (GRC), where the Company includes GRC as one of the three pillars of the Sustainability Framework, to ensure the effectiveness of the Company's operations and adherence to regulations, rules, policies, and ethics. This will lead to confidence

among directors, executives, all staff members, and stakeholders and propel the Company towards achieving corporate goals in a sustainable manner.

PTTEP has continuously supported conducting business operations with GRC principles with the following four main goals: (1) achieve zero fraud and corruption and zero non-compliance; (2) achieve high-impact risk identification with effective mitigation; (3) achieve 100 percent improvement for control deficiency; and (4) increase GRC Maturity Level to level 4+.

The Company has adopted two essential GRC long-term strategies, namely Smart Assurance and Mindful GRC. The former aims to drive the specified GRC goals by effective digital technology, while the latter focuses on raising awareness and encourage GRC practices among all employees. PTTEP is also willing to extend and share the GRC practices to its external stakeholders and relevant parties. The collaboration among teams from Corporate Governance and Subsidiary Management Department and Risk Management Department has been established to drive GRC-promotion programs throughout the Company. Their approach is in accordance with the GRC Framework. Furthermore, the Company has also stipulated its governance structure to be in accordance with the Three Lines Model.

External independent experts are entrusted to regularly evaluate the Company's GRC performance. For instance, GRC Maturity Assessment and GRC Perception Survey with Stakeholders. Internal control assessment is also carried out, guided by the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The GRC performance is also audited by the Third Line unit or the Internal Audit unit in accordance with risk levels at a particular period. In 2024, PTTEP found zero non-compliance incident with significant impacts on PTTEP's business continuity.

PTTEP is committed to conducting its business with transparency and effectiveness by adhering to the good corporate governance principles, maintaining robust risk management and internal control system as well as strictly conforming to applicable laws and regulations. The key performance in this area in 2024 is as follows:

1) Revisited GRC targets and workplan to ensure a seamless integration of GRC into business operations.

2) Enhanced the GRC Operating Model Framework with more clarity for effective governance, management, monitoring, and reporting on GRC performance across PTTEP's domestic and international assets and subsidiaries. Additionally, the Company established an operational framework to support future projects and business initiatives.

3) Continually enhanced the GRC One Digital System to study the feasibility on integrating GRC data across various GRC units, PTTEP internal departments, and external sources, to maximize the effectiveness of data linkage within the system.

4) Continuously fostered GRC as an integral part of corporate culture through communication campaigns targeting management and employees in Thai operations and overseas, emphasizing GRC awareness and understanding while inspiring the incorporation of GRC principles and mindful practices into their work and daily lives. This includes initiatives of GRC case study via "GRC is in You" roadshow conducted to domestic and international assets, promoting GRC learning, and sharing contents related to possible GRC issues to enhance employee engagement. Moreover, PTTEP promoted good practices on GRC to external communities, including publications in Explorer's Journal, shareholder site visits, and Facebook page: PTTEP Shareholders Society. PTTEP has also shared GRC practices as well as knowledge and experiences to the society and other interested parties.

4.2.2 Corporate Governance Concerning Subsidiaries and Associated Companies

PTTEP supervises its subsidiaries and associated companies through the management of PTTEP Group companies. The Company has established adequate and appropriate monitoring and assessing systems which include risk management, internal audit and control, compliance with rules and regulations, compliance with good corporate governance, and business ethics. The Company regularly reports the performance to the Corporate Governance and Sustainability Committee. The Company is also aware of the significance of information disclosure in accordance with the principles of good corporate governance. Details as disclosed in the "Internal Control and Connected Transactions" section, under the "Sufficiency and Suitability of the Internal Control System" topic.

4.2.3 Monitoring of the Compliance with Corporate Governance Policies and Practices

(1) Conflicts of Interest Prevention Policy

PTTEP is committed to preventing all potential conflicts of interest to provide the Company's stakeholders' confidence that our business management is efficient, transparent, and in compliance with the Good Corporate Governance and Business Ethics of PTTEP Group under the following principles:

1) Directors, the management, and employees shall treat the interests of PTTEP Group as priority and shall not participate or be involved in any activities which may lead to any conflicts of interest.

2) Directors, the management, and employees shall conduct self-reviewing and disclose, at least on an annual basis, their transactions that have led to a conflict of interest with the Company.

3) Directors, the management, and employees who have a conflict of interest shall not participate in the consideration or voting on any matters in which they have vested interest. Such conflict of interest shall be completely disclosed to the Company.

4) Directors, the management, and employees shall strictly adhere to the laws and regulations as required by the Stock Exchange of Thailand (SET), particularly in relation to connected transactions.

The Company has established preventive measures for potential conflicts of interest as follows:

1) Directors, the management, employees, and related persons must avoid financial involvement or engagement in a relationship with outsiders which may result in PTTEP Group's loss of benefits, conflicts of interest, or operational inefficiency.

2) Directors, the management, and employees who may have a potential conflict of interest in bidding, selection process, and awarding of the transaction, must report to their supervisors and/or those participating in the given process through the conflicts of interest reporting system. They must also withdraw themselves from participating in such process or conflicted transactions of PTTEP.

3) Directors, the management, and employees shall report to the Company through the conflicts of interest reporting system regarding the information of persons having close relations and working within PTTEP Group and the companies in which PTTEP has invested. This is to prevent any potential conflict of interest.

4) Directors, the management, and employees must notify the Company immediately should there be any suspicion or uncertainty of what they or their related persons are involved in, or that their shares in

the business with transactions with the Company, may lead to a conflict of interest.

5) Directors, the management, and employees shall attend the Good Corporate Governance and Business Ethics (CG&BE) training sessions which were arranged in various forms and topics as determined by the Company, for example, induction for new directors, management and employees, e-learning, and communication through email. Furthermore, PTTEP stipulates that CG&BE E-Learning is a compulsory course that is arranged every two years. In 2024, 100 percent of PTTEP employees participated in the course.

6) Directors, the management, and employees must conduct self-review of their conflicts of interest on an annual basis. To review their conflicts of interest related to any matters in the procurement process, the management and employees who are directly involved in the procurement process must conduct self-review and disclose their transactions which may lead to a conflict of interest at least every six months. Such declaration will enable the supervisors to consider re-assignment of duty of particular members of the management and/or employees who are involved in a conflict of interest. In 2024, all employees conducted self-review and conflict of interest disclosure with 100 percent completion. The Company discloses the statistics of violations against conflicts of interest policy under the topic of Whistleblowing Reporting and Protection Procedures.

(2) Prevention of Insider Trading

Details are disclosed in the “Corporate Governance” section, under the “Prevention of Insider Trading” topic.

(3) Anti-Corruption

Importance

PTTEP Board of Directors attaches great importance on operating with transparency and fairness under corporate governance with zero tolerance on any form of corruption whether directly or indirectly. PTTEP has proper governance on all relevant functions pursuant to the Good Corporate Governance and Business Ethics of PTTEP Group or CG&BE which is PTTEP Group’s regulations binding all across the organization, from directors, the management, to all employees of PTTEP and its subsidiaries, who are required to sign a commitment form agreeing to observe and conform with such regulations. Also, our measures encourage those related to PTTEP Group, including suppliers and contractors and joint venture partners, to abide by the CG&BE and uphold similar best practices for anti-corruption on par with PTTEP’s standards.

PTTEP believes that efficient anti-corruption measures require a sound governance structure together with a clear management system, adequate, and proper risk management and internal controls, good monitoring for strict and ongoing compliance, independent audit, and explicit guidelines as stated in the CG&BE. It also requires all directors and the management to lead on good governance (CG Leader) by example. PTTEP Board of Directors assigned the Corporate Governance and Sustainability Committee to monitor the compliance of the CG&BE as well as the Anti-Corruption Policy. Corporate Governance and Shareholder Engagement Section, under the Corporate Governance and Subsidiary Management Department, Corporate Secretary and Assurance Division, is a central function to support and drive the compliance of the CG&BE and PTTEP Group’s anti-corruption measures. At least every quarter, updates are to be provided to the Corporate Governance and Sustainability Committee and the Board of Directors. The CG&BE updates were prepared in writing based on internal control principles. They have been published and distributed to all relevant

stakeholders in Thai, English, and Burmese. The full version of the CG&BE is available on the Company's website for further study by interested parties. Finally, the "Standard of Practices for Anti-Corruption" was rolled out for the management and employees to conduct themselves properly under various circumstances where corruption risks exist – this is considered another internal control measure of PTTEP.

In addition, to establish a good standard for transparent business execution and reduce the risk of conflict of interest, PTTEP Group constantly adheres to the No Gift Policy and explicitly announces the Policy to outsiders that PTTEP Group personnel will not accept gifts, entertainment, or any other benefits on any occasion. Integrity & Ethics has also been made as one of PTTEP's Corporate Values to be fostered across the organization.

Scope of PTTEP Group's Anti-Corruption Policy

PTTEP stipulates its anti-corruption policy as an integral part of the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) which is PTTEP Group's regulations binding across the organization, from directors, the management, all employees of PTTEP, its subsidiaries, and its suppliers and contractors who are required to sign a commitment form agreeing to observe and conform with such regulations. The policy's contents embrace the principles, guidelines, and clear examples of all matters related to anti-corruption measures. These include governance structure stated under Corporate Governance: guidelines for political neutrality, use and protection of information and assets, conflicts of interest, procurement and contract, and anti-money laundering under Business Ethics. The "Standard of Practices for Anti-Corruption" was also rolled out to guide all PTTEP personnel in conducting themselves to prevent corruption. Examples include guidelines on gift offering and acceptance, hospitality, sponsorship and donation, and conflicts of interest. These reflect PTTEP's intention in the fight against fraud and corruption in all forms.

PTTEP has defined corruption based on applicable rules and legislation, both domestic and international. It mainly focuses on intention: any action in the interests of PTTEP Group must not be accompanied by the intention to use one's or others' authority for wrongful gains, which is unlawful and/or against PTTEP Group's regulations. This also includes all corrupt practices undertaken as a giver or recipient, or through an agent. PTTEP recognizes that certain activities, including not-for-profit donations, sponsorship, facilitation payment, and revolving door, may be at high risk for corruption. Therefore, in defining "corruption," these activities are mentioned so that practitioners may exercise extra precaution. PTTEP also provides appropriate guidelines for employees when facing such situations in the Standard of Practices for Anti-Corruption to reduce corruption risks. In addition, PTTEP does not make donations to support political parties for election campaigns, both at the local and national levels, which is in line with the guideline and principle of political neutrality under our business ethics.

Measures and Principles for Implementation

Implementation of anti-corruption measures involves an internal control system, risk management, compliance oversight, audit, and promotion of corporate culture and ethics, each of which is under the responsibility of relevant functional units. Therefore, PTTEP defined the "Three Lines Model" of internal control and risk management as follows:

1) The First Line Roles are made up of various functional units responsible for overseeing their respective work while they apply proper risk management, internal control, and full compliance with all applicable laws and regulations. Entities in this First Line Roles are required to have knowledge and understanding of internal regulations and relevant laws related to their work. Moreover, they must improve their competencies and attend the necessary training to ensure that they are adequately knowledgeable and ready to perform duties in their respective jobs and efficiently confront various situations.

2) The Second Line Roles are made up of those units responsible for overall legislation, regulations, and policies adopted by the Company and for defining regulations and criteria as well as monitoring compliance, such as the units in charge of governance, risk management, internal control, and compliance (GRC) with a GRC framework defined within the Governance, Risk Management, and Compliance Management System (GRC MS) to enable goal achievement while having proper risk management according to applicable corporate regulations and code of ethics. At the same time, business processes are improved for efficiency and adequate internal control through reduced redundancy. The work scope contains the following nine key components: (1) leadership and commitment; (2) policies, objectives, and plans; (3) organization and resources; (4) GRC assessments; (5) controls and responses; (6) monitoring and assurance; (7) audit; (8) continual improvement; and (9) communication and culture.

3) The Third Line Roles are made up of audit functional unit and external auditors, responsible for independently auditing the overall performance of various management systems under the First and Second Line Roles.

PTTEP assigns the Internal Control Section to regularly conduct internal control assessments on potential fraud risks, which include risks of asset misappropriation, corruption, fraud, and fraudulent financial reporting, by allowing process owners to conduct control self-assessment of their operation process and by evaluating for the adequacy of internal control system at the corporate level in accordance with the Office of the Securities and Exchange Commission (SEC)'s regulations. The Company's Vice Presidents are required to conduct an annual self-assessment of internal control of each unit in accordance with COSO principles which covers potential fraud risk. The results of the assessment indicated that PTTEP has an adequate and appropriate level of internal control. In addition, PTTEP has continuously improved its internal control system to be more effective and efficient.

Continuous Communication, Knowledge Development, and Training

The Corporate Governance and Sustainability Committee has defined a clear plan for fostering the CG&BE of PTTEP Group and the Anti-Corruption Policy on every personnel across the organization through various ongoing activities encompassing target groups at all levels and of all age groups. Activities were designed to match target groups' interests and knowledge levels, and their implementation expanded to external stakeholders, including suppliers and contractors. Performance indicators of target groups inside and outside PTTEP were clearly defined to ensure proper policy implementation for the most concrete and tangible results. In 2024, key activities were as follows:

Internal Measures

1) Organized induction sessions for new directors, the management, and employees regarding Governance, Risk management, and Compliance (GRC), providing them with basic knowledge and understanding for acknowledgment and compliance. In addition, the Company required all personnel to acknowledge CG&BE by signing a commitment form to demonstrate their intention that they shall perform their duties based on CG&BE, and the form was signed with 100 percent completion.

2) Organized GRC basic knowledge training courses (GRC 101) as a compulsory course for new staff. Contents covered corporate governance and business ethics, risk management, internal control, and compliance, with an emphasis on anti-corruption and relevant matters so that employees would have correct understanding and duly apply them to their work. All staff were welcome to review this course at any time.

3) Organized the CG&BE E-Learning as a compulsory course every two years. The course content includes anti-fraud and anti-corruption topics. In 2024, 100 percent of PTTEP employees participated in the course. The next session will be held in 2026.

4) Arranged training courses relating to Good Corporate Governance and Business Ethics (CG&BE) for those at supervisor level onwards under the concept of "Leading with Ethical Leadership." The objectives were to build ethical leadership with an understanding of CG&BE, create role models, and enable supervisors to provide advice and promote their subordinates to have awareness of CG&BE and conduct their work ethically.

5) Arranged CG&BE Health Check Program in the form of workshop sessions for employees. The content provided in the sessions was tailored for each group of employees in order to review their understanding of the CG&BE of PTTEP Group. The participants were given case studies with the aim of building understanding and correctly implementing CG&BE in their operations. On this occasion, feedback and questions about CG&BE raised by employees through the sessions were also collected to mutually determine the appropriate practices. The final solutions would be part of the annual CG&BE revision.

6) Jointly organized PTT Group CG Day 2024, an annual activity where PTT Group's flagship companies take turn to host the event. The activity was arranged for all personnel of PTT Group and representatives of entities dealing with governance and anti-corruption, suppliers, and customers of PTT Group. Known this year as "PTT Group CG Day 2024: CG Citizen – Sustainability Connect (Opportunity, Adaptability, Transparency)," the activity was held on November 6, 2024, as a hybrid event. This event clearly demonstrated the commitment among PTT Group companies in carrying out businesses with accurate and transparent manners, and free from all types of corruption.

7) Established communication on conflicts of interest, guidance on giving and acceptance of gifts, corporate tokens, representation, or other benefits which may be computed into a monetary value, and the complaint handling together with the provision on protection so that the management and employees may realize the importance of corruption prevention measures. Additionally, the Company provided communication to enhance the confidence of all individuals in filing complaints through the Company's defined channels with a good understanding of relevant procedures and protection. The number of complaints was disclosed annually as a summary along with punished cases. (Details are shown under the "Whistleblowing Reporting and Protection Procedures" topic.) This is part of the campaign for all employees to take part in building a corporate culture with transparency and corruption-free practices.

8) Organized other ongoing communications to educate personnel across the organization such as issuing CEO Message regarding the No Gift Policy, launching a series of internal communications on the definition of fraud, acts considered fraudulent, differences between fraud and corruption, and penalties. etc. In addition, the Company encouraged employees to participate in various anti-corruption activities, for example, promoting Anti-Corruption Day through multiple channels, such as communication signboards, emails, newsletters, etc.

Measures for External Parties

PTTEP has a clear intention to become a leading company in the realm of Corporate Governance (CG) demonstrating strong commitment and expanding good governance to external parties. This is evident in PTTEP having a written clear policy covering external stakeholders, for example, vendors, joint venture partners, and representatives of PTTEP Group. The Company also encourages these external stakeholders to conduct businesses ethically and not to be involved with corruption through the following activities:

1) Notifying all suppliers and contractors about the No Gift Policy and request for their cooperation not to give or offer gifts, tokens, or other benefits on any occasions to the directors, the management, and employees of PTTEP Group. PTTEP also communicated and invited all suppliers and contractors to engage in online training including post-test on anti-corrupt practices.

2) Announcing to external parties the No Gift Policy explicitly on PTTEP's website and installing communicating signboards in office premises near spots where visitors can clearly see, both in Thailand and other countries.

3) Advocating to society a culture of good governance and anti-corruption. In 2024, PTTEP took action and participated in various key activities. Details are shown under the "Collective Efforts with the Public to Counter Corruption" topic.

4) Establishing channels for external parties to inquire in case of questions or recommendations on good corporate governance and business ethics by sending an email message to Corporate Secretary and Assurance Division (CorporateSecretary@pttep.com)

Monitoring the Implementation of Anti-Corruption Measures

The Board of Directors has assigned the Corporate Governance and Sustainability Committee to monitor the implementation concerning anti-corruption measures, which is part of the CG&BE. The Company Secretary, as the Committee's Secretary, gathers data and reports to the Committee at least once every quarter. Moreover, since the oversight of compliance with anti-corruption measures of PTTEP Group is jointly done by several functional units (the Second Line Roles and the Third Line Roles), reports are made to the applicable sub-committees, namely the Risk Management Committee and the Audit Committee. All implementation results are reported to the Board of Directors and summarized for the shareholders in the Annual Report (56-1 One Report).

Furthermore, the Corporate Governance and Sustainability Committee monitors the outcomes of the implementation of the CG&BE plan annually to ensure goal achievement.

Audit

PTTEP designates the Internal Audit Division to perform fraud auditing tasks, which include corruption, and undertaking further examination when complaints are received. Currently, the Internal Audit Division has an Internal Audit Guideline – Fraud Audit that covers fraud risk assessment, prevention, detection, and investigation of fraud, as well as practical guidelines used in the investigation process for complaints of fraud.

PTTEP has implemented its Continuous Control Monitoring System to monitor and inspect any irregular transactions that occur in PTTEP's work processes. The system has been implemented on the Procure to Pay processes, and covers warehousing and inventory management, targeting the risk of non-compliance with regulations or work procedures

that may possibly lead to fraud and corruption. When an irregular transaction has been detected, the system will send a notice directly to the management, enabling them to investigate and promptly resolve the matter. Moreover, the Company has continuously implemented technology to prevent corruption, for instance, GRC One Digital System, which facilitate data integration between the GRC unit and other units within the organization, enabling the effective utilization of information, Robotic Process Automation (RPA) designed to reduce accounting errors, the Audit Management System (TeamMate+) which has assisted the audit process from the audit planning process to the audit issues follow up process and the enhancement of Follow Up Dashboard to facilitate timely management in monitoring the outstanding audit issues.

Collective Efforts with the Public to Counter Corruption

PTTEP acknowledges the significance of our role as a listed company to build confidence of our shareholders and stakeholders that the Company's management is transparent, fair, and free from fraud and corruption. The Company, in its capacity as a state enterprise, has a responsibility to lead by example and to encourage society to adopt better anti-corruption standards. In 2024, the Company proactively took several measures and participated in several activities to counter corruption. For instance, the Company joined Thailand's National Anti-Corruption Day which was on September 6, 2024, at the Stock Exchange of Thailand Office.

In 2024, Thai Private Sector Collective Action Against Corruption (CAC) certified PTTEP as a member of Thailand's CAC. The Company has been continuously accredited as CAC member since 2014, reflecting the company's commitment to conduct business transparently and strengthen its anti-corruption measures, thereby gaining trust and confidence from stakeholders. In addition, the Company, in collaboration with CAC, participated in an activity in PTTEP 2024 Supplier Day on November 29, 2024. The objectives were to raise awareness and understanding of anti-corruption among PTTEP's suppliers as well as to invite them to join the Thai Private Sector Collective Action Against Corruption (CAC). This highlights PTTEP's commitment to expand a transparent business network to its suppliers.

(4) Whistleblowing Report

PTTEP Board of Directors has established the Whistleblowing Regulation for PTTEP Group to ensure that the complaint-handling process is effective, transparent, fair, and conforms to international standards. This regulation is meant to provide appropriate and fair protection for whistleblowers and those cooperating with the Company in good faith. This mechanism gives an opportunity for both internal and external parties to report any suspicious misconduct or wrongdoing that might be in violation of laws, the Good Corporate Governance and Business Ethics (CG&BE), anti-fraud and corruption policies, and other related regulations, as committed by the Board, the management, employees, or representatives of PTTEP Group.

PTTEP sets clear procedures and timeframe for the investigation of complaints as prescribed in the regulation to ensure the transparency and fairness of the complaint-handling process. Examples are as follows:

- The Board of Directors has appointed a complaint screening committee responsible for determining whether a complaint contains sufficient detail to initiate an investigation and for appointing investigators. If a committee member has a conflict of interest or is the subject of a complaint, the secretary of the complaint screening committee shall report to the Chief Executive Officer, who will appoint an appropriate replacement to serve as a committee member.

- The Corporate Governance Section, Corporate Secretary, and Assurance Division, serving as the secretary of the complaint screening committee under the Whistleblowing Regulation, acts as the case coordinator. It will preliminarily determine whether a complaint contains sufficient detail to initiate an investigation, submit the reviewed complaint to the investigator within seven working days, and monitor and ensure that the resolution of complaints is completed within the specified timeframe.

- The investigators prescribed in the regulation must complete the investigation within 30 working days. If the period is extended due to necessity, the extension can be made only with the approval of the authorized person (not exceeding seven working days at a time for non-complex cases and not exceeding 30 working days at a time for complex cases). The investigator shall not have vested interests in the complaint. Every complaint coming through the whistleblowing channels is summarized and reported to the Corporate Governance and Sustainability Committee and/or Audit Committee (as the case may be), and subsequently reported to PTTEP Board of Directors.

The whistleblowing channels of PTTEP Group are as follows:

1) Sending complaint by post to PTTEP director, chairman of the audit committee, supervisor, or the Corporate Governance Section, Corporate Secretary and Assurance Division:
PTT Exploration and Production Plc.
555/1 Energy Complex Building A, 33rd Floor,
Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900

2) Sending email to the supervisor or the Corporate Governance Section, Corporate Secretary and Assurance Division (CGhotline@pttep.com)

3) Reporting through the whistleblowing system, which is available on PTTEP website (www.pttep.com). The system will assign an individual Report Number and PIN to the whistleblower to ensure security and prevent forbidden access by unauthorized personnel, as well as to allow the whistleblower to perform a follow-up on the progress of the reported complaint and make inquiries. This system serves as a necessary tool for preventing and monitoring the risks of fraud and corruption.

There is also a provision on the protection of whistleblowers and involved persons including the remedy for any person who is affected by the complaint in this regulation. Whistleblowers and those cooperating with the Company in good faith shall receive appropriate and fair protection from PTTEP Group, such as no change of job positions/titles, no threat or unfair treatment, etc. The complaint investigation shall be conducted on a confidential basis and not disclosed to irrelevant persons.

In 2024, PTTEP received a total of 46 complaints, consisted of 36 complaints through the channels according to the Whistleblowing Regulation and 10 complaints through the channels according to the Human Resources Management Policy. After reviewing on the clarity and adequacy of these complaints, 18 cases were accepted for further investigation.

As of December 31, 2024, the investigation of 16 cases were completed while 2 cases were still under investigation process (completed in quarter 1/2025). A summary of complaints is shown in the table below:

Topic	2022	2023	2024
Number of whistleblowing cases	13	33	46
Whistleblowers			
• External reporter	3	16	14
• Internal reporter	3	4	13
• Anonymous reporter	7	13	19
Number of accepted cases after considering evidence and witnesses	8	11	18
Number of wrongdoing cases	3	3	15
Type of wrongdoings			
• Safety and Health	-	-	1
• Business integrity			
◦ Non-compliance with regulation	-	-	-
◦ Conflicts of Interest	-	2	1
◦ Corruption, Fraud, Bribery	-	-	2
◦ Use and Protection of information and assets	-	-	2
◦ Others	-	-	-
• Human Resources			
◦ Inappropriate manner	-	1	6
◦ Sexual harassment	3	-	2
◦ Non-sexual harassment	-	-	1
◦ Others	-	-	-
• Others	-	-	-
Consequences of wrongdoings			
• Verbal warning	-	1	6
• Written warning	2	2	6
• Suspension	-	-	-
• Termination with severance pay	-	-	-
• Termination without severance pay	1	-	3

After completing the investigation of these 16 accepted cases, 15 cases were found to involve wrongdoing while one case was determined to have no offenses. Disciplinary action has already been taken against those found to have committed misconduct, as outlined below:

- The wrongdoing related to safety and health, consisting of one case was penalized with a written warning.
- The wrongdoing related to business integrity is as follows:
  - Conflicts of interest: one case was penalized with termination without severance pay.
  - Corruption, fraud, bribery: two cases were penalized with termination without severance pay.
  - Use and protection of information and assets: two cases were penalized with written warning.
- The wrongdoing related to human resources is as follows:
  - Inappropriate manner: six cases were penalized with a verbal warning and written warning.
  - Sexual harassment: two cases were penalized with written warning.
  - Non-sexual harassment: one case was penalized with written warning.

The Corporate Governance unit has prepared and reported the results of the complaint investigation to the relevant parties. The findings of the cases were used carry out further improvements to the Company's internal control measures.

details regarding the complaint-handling procedures and the whistleblowing regulation and system, please visit PTTEP website. Click here for more information

4.3 Business Ethics

PTTEP is committed to operating its business in an ethical manner. Business ethics is regarded as a crucial behavioral framework and a good approach for the conduct of business. Hence, it is a guide for all directors, members of the management, and employees to perform their duties effectively, and ethically, as well as to treat every group of stakeholders equally, fairly, and transparently. These practices will build confidence and lead to acceptance in the efficiency and transparency of the Company's business operations, creating a long-term sustainable value for all stakeholders and fairness for everyone concerned.

Business Ethics of PTTEP Group is part of the "Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE)." The Board first established its written Business Ethics in 1989, and it is constantly reviewed annually. The CG&BE was regarded as the highest regulation for business operations of PTTEP Group. More details of the CG&BE are disclosed in Attachment 5.

PTTEP's Business Ethics consists of principles, guidelines for good practices, samples of questions and answers, information for further study, and a list of departments responsible for each of the principles. There are 10 ethical issues that reflect our organizational values of PTTEP Group to which directors, management, and employees must adhere as per the following:

1) Compliance with Laws, Regulations, and Rules, and Respect for Different Customs and Cultures
2) Political Neutrality

3) Human Resource
   - Workplace Environment
   - Privacy, Equal Treatment, and Anti-Harassment
   - Illegal Drugs, Substance Abuse, and Alcohol, including substances that cause other intoxicating effects, such as hemp, cannabis, and kratom plants, etc.
   - Outside Employment and Management and Employees' Participation in Outside Activities
4) Use and Protection of Information and Assets
   - Record Keeping, Using, Disclosing, and Safeguarding Information
   - Use and Storage of Electronic Data and Information Technology Resources
   - Use and Protection of Intellectual Property
   - Insider Trading and Use of Inside Information
   - Communicating responsibly
5) Conflicts of Interest
6) Procurement and Contracts
7) Anti-Fraud and Corruption
8) Trade Competition
9) Anti-Money Laundering
10) Safety, Security, Health, and Environment

PTTEP has distributed PTTEP Group's CG&BE electronic booklet to all directors, the management, and employees for their reference and adherence. Everyone is also required to sign their names, thus committing themselves to apply PTTEP Group's CG&BE to the highest working standards. In addition, the booklet is delivered to the Company's business partners, regulators, parties with regular business relationships with the Company, and other interested parties. For the convenience of the Company's shareholders, investors, and interested parties, the contents of PTTEP Group's CG&BE booklet can also be found on the Company's website under the Corporate Governance section.

PTTEP continuously enhances and promotes the awareness and understanding of PTTEP Group's CG&BE among the Company directors and personnel. The Board governs the ways in which the CG&BE is communicated to the directors and personnel to ensure that they are able to uphold and comply with such policy accordingly. Communication also extends to external parties, for example, employees, consultants, business partners, subsidiary companies, agents, nominees, or any persons acting on behalf of PTTEP Group in order to promote good ethical cultures throughout the business chain and society in general. Details are explained in the "Continuing to Provide Communication, Knowledge and Training" sub-topic under the "Anti-Fraud and Corruption" topic.

The Board monitors and evaluates the performance of the CG&BE activities quarterly. the Corporate Secretary and Assurance Division is in charge of reporting them to the Corporate Governance and Sustainability Committee and the Board on a quarterly basis to ensure that CG&BE activities achieve the targeted performance. Furthermore, the Corporate Governance and Sustainability Committee has reviewed the work plan by taking into account the evaluation results on CG&BE and Anti-Fraud and Corruption measures to ensure continuity and efficiency for the development of the work plan.

4.4 Major Changes and Developments of Policy, Practices, and Corporate Governance System in the Past Year

4.4.1 Significant Changes and Developments of the Corporate Governance Policy, Guideline, and Governance System

PTTEP realizes the importance of good corporate governance that it will promote effectiveness and sustainable growth of the Company's operations leading

to the best interest of all stakeholders. PTTEP, therefore, regularly reviews and improves the policy, regulation, and relevant guidelines to ensure the effectiveness of implementation. In 2024, significant changes and developments of the Company in CG&BE are as follows:

(1) The Revision of the Good Corporate Governance and Business Ethics Regulation (CG&BE)

The CG&BE regulation is regularly reviewed and updated annually to comply with the changing laws & regulations and alignment with international standards. In 2024, the key content and related practices were updated, including the revision of the Board of Director's roles in internal control and internal auditing, as well as the principles and framework for sustainability. The key strategies for management on stakeholders were introduced, and the groups of stakeholders were redefined. The Business Ethics (BE) guidelines under the principle of human resources were expanded to cover gender issues and provide examples of practices related to substances that cause intoxicating effects. Furthermore, the guidelines on the use and protection of information and assets were improved, adding specific practices for the use and storage of electronic data and information technology resources must be used only for the benefit of the PTTEP Group.

(2) The improvement of CG&BE Reporting System

PTTEP has implemented advanced technology to support its operations in alignment with CG&BE, by developing and enhancing key CG&BE management systems as outlined below:

- The CG&BE reporting system has been enhanced to improve the collection and reporting of employee-related information more thoroughly and efficiently. This includes tracking the giving/accepting of gifts or other benefits, as well as, reporting Conflict of Interest at all employee levels, with the ability to quickly search and verify the names of employees and companies involved. Additionally, the system records participation in CG&BE E-Learning, which enables the analysis of the understanding and knowledge of CG&BE among Management and employees.

- The whistleblowing system has been redesigned into a more modern and user-friendly format, improving its effectiveness in handling the complaints. In 2024, the system underwent further improvements and was expected to complete in 2025.

3) CG&BE Communication and Training

PTTEP promotes the communication of CG&BE principles to the management and all employees, both in domestic and overseas operations, to raise awareness, foster understanding, and ensure the ongoing integration of these principles into operations and daily life. In 2024, several forms of communication and training were implemented, as outlined below:

- Conducted a CG&BE Health Check courses for employees of S1 Asset, Suphanburi Asset, the Wellhead Platform Construction Department (EWP), and the Petroleum Development Support Base (PSB) in Songkhla to review their understanding of PTTEP's business ethics. The course covered principles related to anti-fraud and corruption and included discussions with employees on common issues encountered regarding CG&BE, with the aim of establishing best practices that align with CG&BE principles.

- Launched the 2024 CG&BE E-Learning program to assess the knowledge and understanding of CG&BE among management and all employees every two years, from September 16 to November 15, 2024. 100 percent of management and all employees completed the e-learning.

4.4.2 Other Good Corporate Governance Practices

PTTEP values and strictly abides by PTTEP Group CG&BE and international best practices, which are applied with due regard to our circumstances, business, and the best interests of the Company, shareholders, and stakeholders as a whole. Below are details of PTTEP's additional implementation pursuant to the best practices:

1) Since PTT holds (both directly and indirectly) 65.29 percent shares in PTTEP, the free-float proportion of shares is less than 40 percent of the total paid-up shares. Yet, the current free-float proportion is enough for minor shareholders to exercise their rights to veto significant transactions. PTTEP values full compliance with the SEC and SET rules and regulations while taking seriously the perennial stewardship of minor shareholders' rights. PTTEP organizes various activities to convey useful information to these shareholders, winning acceptance from relevant external agencies.

2) PTTEP recognizes the importance of advanced delivery of the shareholders' meeting notices to shareholders to allow them enough time to duly examine the information. The shareholders' meeting date is scheduled in March to the beginning of April every year for shareholders' convenience and to not coincide with other listed companies. This schedule also provides shareholders with early receipt of rights and benefits, including dividends. As PTTEP operates its businesses in many countries, it takes more time to carefully audit our financial statements, which are in the interests of shareholders, and to prepare various reports well. Recently, the Company was able to send meeting invitations to shareholders by post 24 days in advance of the Meeting. In addition, PTTEP also publicized the Meeting invitations on our website no less than 28 days in advance of the Meeting to give shareholders enough time to examine the Meeting data.

3) Under PTTEP's Articles of Association, director election is done by a majority vote, with one shareholder having votes equal to the number of shares one holds. Shareholders can vote for individual directors. Directors receiving the highest votes are elected in descending order until the available director positions are filled. PTTEP, therefore, does not rely on the cumulative voting method. Despite this, PTTEP has adopted other methods of looking after the interests of minority shareholders, including allowing them to nominate director candidates for election in advance.

4) The verification of the rights of attending shareholders is done thoroughly and in detail, ensuring that multiple granting of proxies is properly done without affecting the rights of other attending shareholders.

5) Directors automatically retire at the age of 70; their qualifications become void when they reach this age.

6) PTTEP requires that the number of independent directors should be no fewer than half of the number of directors in the Board.

7) PTTEP values the independence of the Chairman of the Board; therefore, we give top priority to the selection of the Chairman from the list of independent directors, except for other justification or suitability in other aspects, e.g. business expertise, work experience, and good leadership in order to find the suitable person. PTTEP has adopted specific processes for this position, including Chairman assessment by the entire Board of Directors to ensure his genuine independence. Details are disclosed in the "Governance Structure and Key Data on the Board of Directors, Sub-Committees, Management, Employees, and Others" section, "Independence of the Chairman" topic. The present Chairman is an independent director.

8) PTTEP Board of Directors annually revisits the suitability of the Skill Mix by explicitly defining each skill aspect or proficiency and setting the annual target for the Skill Mix in line with prevailing business circumstances and changing the business environment for director recruitment and capability development. The Board also values the Board's diversity by not discriminating against gender, nationality, ethnic group, race, country of origin, or cultural background.

9) PTTEP applies best practices on requiring a minimum quorum for voting in the Meeting stating that the minimum quorum is reached with no fewer than two-thirds of the entire Board's directors (excluding those with vested interests) present. Furthermore, PTTEP's corporate governance requires that directors absent without good reasons from the Board meetings on more than three consecutive occasions should automatically lose their director's qualifications. PTTEP also sets meeting attendance as an indicator of the Board Performance Target. PTTEP's practice is to determine and schedule Board and sub-committee meetings during the year in advance for the benefit of efficient planning by the directors. In 2024, more than two-thirds of the Board attended every Board meeting. Finally, before any voting, the Chairman gives all directors opportunities to ask questions and extensively discuss issues in order to reach unanimous decisions.

10) Assessment of the Board and sub-committees is done through scoring on performance assessment forms for both self-assessment and cross assessment, Chairman assessment, and entire-Board assessment together with evaluation against Board performance target covering all aspects of both business performance and good corporate governance. Assessment results are discussed by applicable sub-committees in order to improve their performances. In addition, the Board of Directors undergoes appraisal by neutral external agencies, including the Corporate Governance Report of Thai Listed Companies (CGR) Project carried out by the Thai Institute of Directors (IOD), and the ASEAN CG Scorecard assessment. The evaluation results are used for the Board's performance improvement.

11) In 2024, PTTEP held one independent directors' meeting and one non-executive meeting for consultation and exchange of views on crucial, useful matters of the Company, and major and minority shareholders and upgraded our corporate governance practices. The CEO was subsequently informed of the outcomes of these meetings.

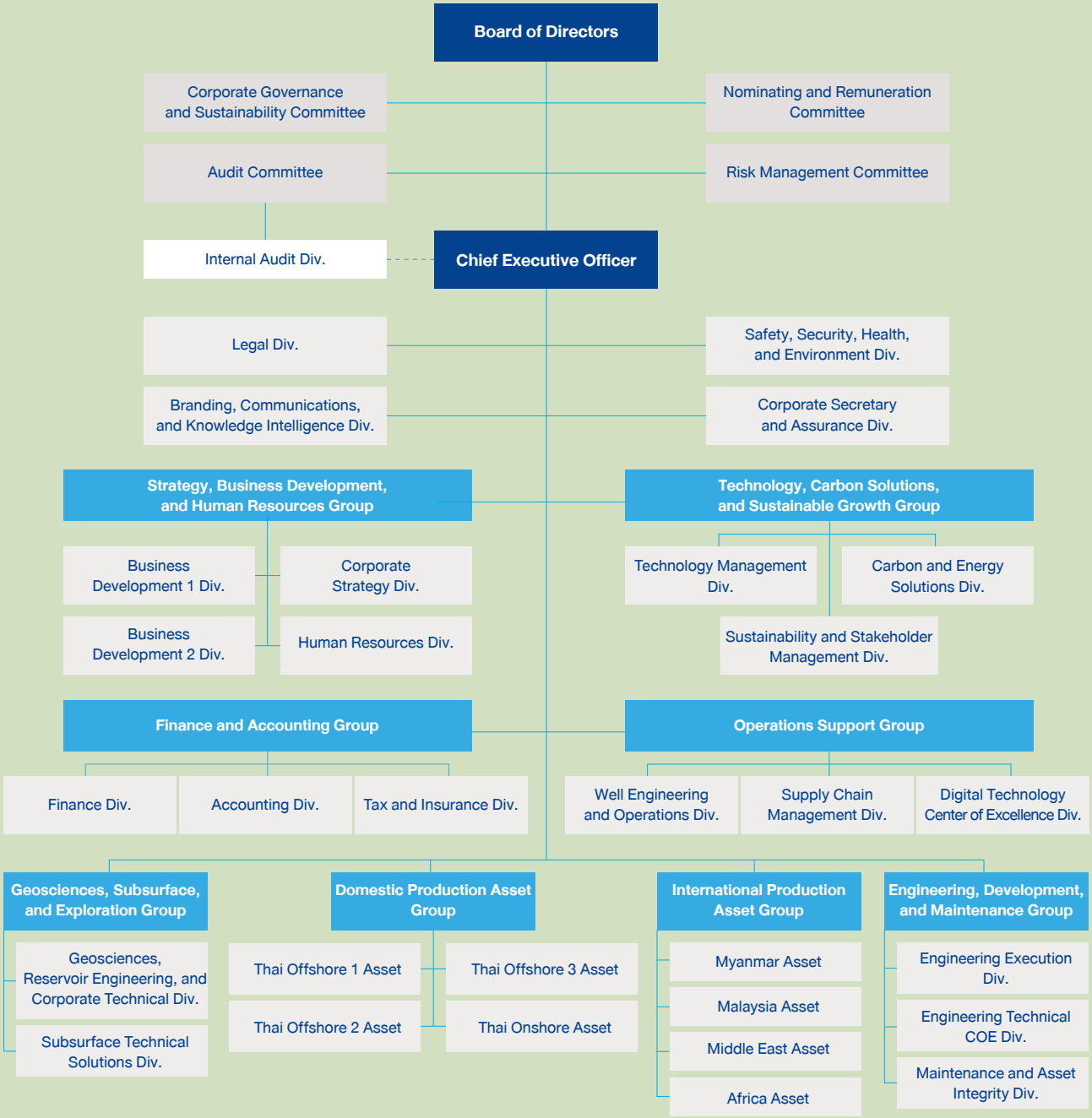
12) PTTEP specifies a policy on CEO and senior management remuneration in line with their short-term and long-term performance, as well as PTTEP's performance. The Company has also disclosed the CEO's remuneration, the ratio of the CEO's remuneration to the average remuneration of the Company's executives, as well as to the average of all employees.

13) PTTEP does not offer a scheme that provides the management with the right to buy PTTEP shares. The Company instead applies an appropriate remuneration structure that is suitable for the Company's business and competitiveness. Such structure is screened by the Nominating and Remuneration Committee and the Board of Directors.

5. Governance Structure and Key Data on the Board of Directors, Sub-Committees, Management, Employees, and Others

5.1 Governance Structure

As of January 1, 2025



5.2 The Board of Directors

5.2.1 Composition of the Board

PTTEP Board of Directors (Board) consists of a balanced number of qualified directors who possess versatile skill sets (Skill Mix) including necessary expertise relevant to the Company's lines of work. In 2024, PTTEP specified the Board's Skill Matrix to reflect the Company's strategic directions and clearly defined skills or expertise in each line of work. The Skill Matrix has been classified into 12 areas under 2 skill categories as follows:

1) Core Skills: basic skills which are necessary for directors to oversee the entire Company, namely Business Judgment, Management Skills & Corporate Governance, and Business Strategy.

2) Specific Skills: specific skills or expertise which is useful for directors to supervise and oversee the Company, namely Industry Knowledge, Accounting, Legal, International Market and Collaborations, Risk & Crisis Management, Economics & Finance, Sustainability & SSHE (Safety, Security, Health, and Environment), Innovation, Technology & Digital Transformation and HR & Organization Development.

The candidates nominated for the selection process to become PTTEP's directors shall possess all Core Skills identified above so that they can properly oversee PTTEP's business and conduct, as well as the planning of various strategies. The candidates shall also possess Specific Skills that are useful for PTTEP's business to be able to support the operations of PTTEP. Currently, PTTEP's Board of Directors consists of qualified directors with versatile skills in both Core and Specific Skills, fulfilling the requirements of PTTEP's Board Skill Mix. In addition, PTTEP places great emphasis on the Board Diversity and efforts against discrimination to promote equal treatment, regardless of their ethnicity, nationality, gender, age, skin color, religion, and disability, as well as regularly revisits the balance and sufficiency of Board Diversity to ensure alignment with the changing business environment. PTTEP directors must not be over 70 years old and shall possess the qualifications according to the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE), Public Limited Companies Act, and Securities and Exchange Act as well as rules and regulations of the Securities and Exchange Commission (SEC), the Capital Market Supervisory Board (CMSB), The Stock Exchange of Thailand (SET), and relevant resolutions of the Cabinet. Directors shall also commit and dedicate their time to fully perform their duties and responsibilities. Directors will be regarded as unqualified if they fail to attend Board meetings more than three consecutive times without any reasonable justifications.

The Board structure consists of 15 directors, an appropriate number for the Company's operational size. The Board consists of non-executive and executive directors. In addition, the Board shall have independent directors, comprising a number not fewer than half of the incumbent members. As of December 31, 2024, the Board consisted of 15 directors including:

14 non-executive directors (93.33% of total members)

1 executive director: the Chief Executive Officer (CEO)

10 independent directors (66.67% of total members)

2 female directors (13.33% of total members)

PTT is the only major shareholder of PTTEP, while minor shareholders are highly varied and are not concentrated in groups. The aforementioned Board's components and proportions are deemed appropriate to maintain the balance within the Board for the best interests of the Company's shareholders.

The names, backgrounds, qualifications, experiences, and numbers of shares of non-executive directors, executive directors, independent directors, and directors from PTT (the major shareholder of PTTEP) are disclosed in Attachment 1 "Information of the Board of Directors, Management, Controlling Persons and Company Secretary" as well as on PTTEP's website.

5.2.2 Information of the Board and Controlling Persons

The full list of the Board of Directors as of December 31, 2024, is as follows:

Name of Director	Position	Starting Date
1. Mr. Krairit Euchukanonchai	Chairman Chairman of the Independent Directors Committee	February 1, 2021
2. Ms. Penchun Jarikasem	Independent Director Chairman of the Audit Committee	February 1, 2018
3. Mr. Veerathai Santiprabhob	Independent Director Chairman of the Risk Management Committee Member of the Corporate Governance and Sustainability Committee	October 15, 2020
4. Mr. Teerapong Wongsiwawilas	Independent Director Chairman of the Nomination and Remuneration Committee Member of the Audit Committee	January 1, 2022
5. Mr. Wuttikorn Stithit	Director Member of the Risk Management Committee	January 1, 2023
6. General Nithi Chungcharoen	Independent Director Member of the Nomination and Remuneration Committee Member of the Risk Management Committee	January 1, 2023
7. Mrs. Natjaree Anuntasilpa	Independent Director Member of the Audit Committee	March 17, 2023
8. Mr. Ekniti Nitithanprapas	Director Member of the Corporate Governance and Sustainability Committee	April 3, 2023
9. Mr. Danucha Pichayanan	Independent Director Member of the Corporate Governance and Sustainability Committee	March 1, 2024
10. Mr. Phongsthorn Thavisin	Independent Director Chairman of the Corporate Governance and Sustainability Committee Member of the Nomination and Remuneration Committee	April 1, 2024
11. Admiral Pogkrong Monthardpalin	Independent Director Member of the Nomination and Remuneration Committee	April 1, 2024

Name of Director	Position	Starting Date
12. Mr. Thongthit Chayakula	Independent Director Member of the Audit Committee	April 1, 2024
13. Mr. Kongkrapan Intarajang	Director	May 21, 2024
14. Mr. Wattanapong Kurovat	Director Member of the Risk Management Committee	November 15, 2024
15. Mr. Montri Rawanchaikul	Director Chief Executive Officer Secretary to the Board	October 1, 2021

5.2.3 Information on the Roles and Duties of the Board

Scope of Authorities and Duties of the Board

According to the principles of accountability, duty of care, and duty of loyalty, the Board's roles and responsibilities have been clearly defined strictly in line with those stipulated by laws, objectives, Articles of Association of PTTEP, and resolutions of the shareholders and Board meetings. The scope of authorities and duties of the Board are as follows:

1) To govern and ensure that PTTEP's operations are in compliance with the Company's CG&BE. PTTEP is to be a leader and a role model in adopting, advising, communicating, and promoting the CG&BE among employees of PTTEP as well as other organizations.

2) To consider and approve the statement of vision, mission, and corporate values of PTTEP Group to ensure that they are effectively applicable and practical.

3) To consider and approve PTTEP Group's strategic plan, business direction, targets, workforce structure, and other significant operations, while regularly monitoring and reviewing operation results to ensure that they are in line with the Company's strategy, operational direction, targets, and determined policies with an emphasis on agility and appropriateness to facilitate the management to effectively and efficiently manage the business, while considering impacts on safety, security, health, environment, innovation and technology, as well as social responsibility.

4) To ensure efficient and adequate internal control systems through a clear set of regulations and work processes as well as standardized and reliable accounting system and financial reporting, appropriate and adequate risk management, and effective compliance program with regular monitoring.

5) To consider and approve significant matters as prescribed by laws or in the Company's affidavits, policies, regulations, or authorities which may result in obligations with PTTEP.

6) To consider cases related to conflicts of interest in a prudent and transparent manner by filing individual stakes and those of any related persons while preventing potential misuse of the Company's properties and inappropriate execution of transactions with the Company's connected persons.

7) To ensure that the Company has clear and proper regulations, standardized and reliable financial reporting, an efficient internal control system, and proper risk management.

8) To ensure that audits are performed effectively by internal and external auditors.

9) To ensure that communication and disclosure of information to the Company's stakeholders are performed in an accurate, complete, appropriate, and timely manner.

10) To ensure that the Company's stakeholders are treated fairly and equitably.

11) To consider, approve, and appoint experts from different professions to provide the Company with insightful information as well as to act on the Company's behalf on matters that can significantly affect the financial position or reputation of PTTEP Group.

12) To consider and approve the Board Performance Target as well as to evaluate the performance of the Board, Chairman of the Board, and sub-committees.

13) To consider and approve the Chief Executive Officer's annual targets and Key Performance Indicators (KPIs), as well as to set remunerations in accordance with the CEO's performance. The Board is also responsible for ensuring that the Company has an effective performance evaluation process for high-level executives.

14) To appropriately delegate authority to the CEO to manage the Company according to strategic plan, business directions, targets, and policies of the organization, as well as to ensure that there is appropriate oversight and efficient monitoring and evaluation.

The Board is permitted to request documents and information and seek advice and services in relation to the Company's business operations from the management. In addition, if deemed necessary and appropriate, directors may seek advice from external and independent advisors at the Company's expense.

Responsibilities of the Board

The following are the key duties of the Board. Details are disclosed under the topic of "Scope of Authorities and Duties of the Board."

1) Policy and Business Direction Determination

The Board is responsible for decision-making regarding PTTEP's operational policies and determining the corporate vision, mission, and values. The Board is also assigned to be directly involved in the Company's budgetary planning, and organizational development strategy to accommodate continuous changes in the business environment, as well as to provide the management with advice to lead the Company towards our five ultimate goals of "Growth, Prosperity, Stability, Sustainability, and Dignity."

2) Good Corporate Governance and Business Ethics

The Board is responsible for establishing PTTEP Group's CG&BE, whereby all directors, the management, and employees must adhere to while operating businesses for PTTEP Group. This is to ensure that our businesses are operated in accordance with good standards and ethical practices with transparency, efficiency, and verifiability. In addition, the rights of the Company's stakeholders are taken care of proportionately to their fair shares to maintain the general confidence and acceptance in the Company. The Corporate Governance Unit has been established to be responsible for matters regarding the CG&BE.

3) Internal Control and Auditing

PTTEP Board of Directors acknowledges the importance of an internal control system and internal audit. The Board ensures that PTTEP Group has an internal control system that is efficient and in line with the Company's risk appetite. The Board assigns the Audit Committee to regularly verify the efficiency and effectiveness of the Company's internal control system from internal audit results provided by the Internal Audit Unit, as well as to validate and provide recommendations on the assessment results of PTTEP Group's internal control system on an annual basis. The Internal Audit Unit holds independence and reports directly to the Audit Committee. This is to ensure that PTTEP Group achieves its goals in operating, reporting, and complying with the applicable laws, rules, and regulations, as well as building confidence among the management, investors, and the Company's other stakeholders. PTTEP has an internal control system that is in line with relevant international standards. The Company ensures that there is an appropriate control environment, assessment of risks that might affect its objectives, efficient control activities, and a sufficient and reliable internal and external communication system. Moreover, there are ongoing monitoring activities and separate evaluations on PTTEP's internal control systems.

4) Risk Management

PTTEP Board of Directors is responsible for the effective management of risks to ensure the achievement of PTTEP Group's strategic goals as well as specifying the Company's risk appetite. The Risk Management Committee has been tasked with establishing policies and a framework for risk management, overseeing, and supporting PTTEP Group's efficient risk management. The Committee also reviews strategic and significant risks at both the corporate and project levels, sets operational plans, follows up on, evaluates, and continuously improves the plans in order to manage the risks within the risk appetite. The Committee regularly and promptly reports the results of risk management to the Company's Board of Directors.

5) Prevention of Conflicts of Interest

The Board establishes various management tools to ensure that business management is efficiently and transparently carried out in the best interest of PTTEP Group, by ensuring that the Company and our management are without any conflicts of interest. Should any of the Company's directors, the management, or employees have a stake that may potentially lead to a conflict of interest, he or she must withdraw from the participation or be abstained from voting, and subsequently inform the authority of such matter. This has been stipulated in the Business Ethics, which directors, the management, and employees can use as ethical guidelines in doing business.

6) Compliance

The Board values the importance of full legal compliance with all applicable rules and regulations in all jurisdictions where PTTEP Group operates. The Board also provides the Group with the support required to conform to the applicable laws as well as to properly manage compliance risks. This is an important mechanism to ensure that PTTEP Group's operations are carried out accurately and carefully as well as to be able to operate according to our strategy towards the business goals. The Compliance Unit is assigned by the Board to be responsible for this matter.

Authorities and Duties of the Chief Executive Officer

1) Authority in accordance with Resolutions from the Shareholder Meetings

The Chief Executive Officer is the authorized signatory to bind PTTEP with external parties (Clause 9, Paragraph 6, of the Company's Articles of Association registered with the Ministry of Commerce).

2) Authority provided by resolutions from the Board's Meetings of PTTEP

The Board authorizes the Chief Executive Officer to act and conduct, on the Company's behalf, a normal course of business operations under the stated objectives in our

Memorandum of Association, petroleum concessions, and other agreements, including other businesses that benefit the Company. In addition, the Chief Executive Officer is also authorized to be the acting body, conducting the business under PTTEP regulations and assigned to act as Secretary to the Board of Directors, adopting practices similar to other private companies in the E&P business while upholding the best interests of the Company. The Chief Executive Officer's delegation of authority is permitted except in a case where the concerned attorney or the delegated person has a direct or indirect conflict of interest with the Company or our subsidiaries in exercising such authority.

Segregation of Duties between the Board of Directors and the Management

The Board of Directors and the management have different important roles. PTTEP Board of Directors oversees and appoints high-level management to manage the operations of PTTEP Group, follows up on and evaluates the performance of the management to ensure the highest benefits for PTTEP Group, and ensures that operations are carried out to achieve the determined goals. The Board's key role is to oversee but not to become involved with day-to-day operations, which are the management's responsibility. In this manner, there is a balance between the role of oversight and the role of carrying out day-to-day operations. The management is responsible for managing operations in line with the direction set or assigned by the Board. The management must also report the results of operations to the Board regularly.

Directors' Serving Terms and Their Directorship in Other Companies

PTTEP's Articles of Association prescribes that one-third of the Company's directors shall be retired by rotation in each AGM and that the Board shall consist of no more than 15 members. The Board allows each of the directors and independent directors to serve consecutively on the Board for no more than nine years, while a director who has served on the Board for nine consecutive years will not be considered for another term for the optimal benefits of the Company and shareholders. PTTEP recognizes the value of knowledge and experience that our directors have earned over the years in the position and, therefore, does not have a rigid limit for the director's term. This essentially allows our competent and qualified directors at the time to continuously and effectively perform their duties.

In terms of qualifications, PTTEP specifies a directorship policy for a Director to serve in the director position in state-owned enterprises and/or juristic persons as follows:

1. Assume directorship in state-owned enterprises and/or juristic persons that state-owned enterprise is a shareholder for no more than three positions
2. Assume directorship in listed companies for no more than five positions. Such directorship must not contradict the criteria mentioned in 1.

Moreover, the total number of directorships under 1. and 2. must not exceed five positions.

Details of the number of directorships held by each of the Company's directors are disclosed in Attachment 1 "Information of the Board of Directors, Management, Controlling Persons, and Company Secretary." As of December 31, 2024, none of the directors held a directorship in more than the above conditions.

Segregation of Duties between the Chairman and Chief Executive Officer

The Board is authorized to elect one director to be the Chairman of the Board, whereby a pool of independent directors is to be considered first. The Board must also appoint another person to be Chief Executive Officer (CEO). The Chairman of the Board who acts as a policy leader is always not the same person as the CEO who is appointed to be responsible for business management under the authorities empowered by the Board of Directors and the framework set out in the Company's regulations. For clear segregation of duties and responsibilities and the balance of authority, the Chairman will not participate in the daily management of the business. The duties and responsibilities of the Chairman of the Board are as follows:

1) Supervise the Board to perform its duties with efficiency, according to the Board Performance Target and shareholders' expectations, independent from the management.
2) Determine the agenda for PTTEP Board's meetings.
3) Serve efficiently as Chairman at the Board's and the shareholders' meetings and ensure that the Company's directors perform their duties as stipulated in the CG&BE and foster CG&BE as part of the corporate culture.
4) Support and ensure constructive relations between directors and the management.

For the purpose of work delegation and appropriateness, the Chairman is not allowed to hold any position in any of the Company's sub-committees as clearly stated in the charter of the sub-committees.

Independence of the Chairman

PTTEP considers independence the most important factor in the selection of the Company's Chairman of the Board. Should there be no suitable candidate for the position, the Company's other directors will be considered. The current Chairman, Mr. Krairit Euchukanonchai, is qualified as an independent director, in accordance with the Company's own definition of an independent director which is stricter than what the law requires, and has performed his duties with independence. The Chairman and his performance are appraised and examined for future improvements by the Board every year and the score is also disclosed in the Annual Report (56-1 One Report) (The appraisal score of the Chairman in 2024 was 2.96 out of 3). Details of the appraisal results are disclosed under the "Performance Appraisal of the Board" topic. In addition, all Company's directors are allowed to independently express their views freely regarding the business operation, whether in meetings of the Board, sub-committees, or on other occasions. This is to ensure that the management is able to operate businesses with efficiency, accuracy, transparency, and in the best interests of the shareholders.

Policy and Practices for Chief Executive Officer and Executives with Directorships in Other Companies

PTTEP stipulates a principle in the CG&BE regarding the holding of directorship in other companies or organizations that are not their own or their families' businesses by the Chief Executive Officer and executives. The individuals must be given approval from the Company's authorized personnel, on an only-if-necessary and no-harms-done basis, as well as accept the condition that they shall not, in every aspect, associate PTTEP and their position held in the Company in those external activities. Meanwhile, remuneration of the Company's executives who are assigned to assume a directorship role in the organizations or units in, or related to, the petroleum exploration and production is considered PTTEP's; otherwise, the remuneration is considered theirs. Details of directorships held by each of the executives are disclosed in Attachment 1 "Information of the Board of Directors, Management, Controlling Persons, and Company Secretary."

5.3 Information about Sub-Committees

Sub-Committees

PTTEP Board of Directors is responsible for the appointment of directors who have expertise and knowledge in certain areas to become members of the sub-committees as specified by the Company's Articles of Association. Each of the Company's sub-committees is responsible for a specific set of tasks. Qualifications, service terms, and responsibilities of the sub-committee members are prescribed by the Company's regulations through the sub-committees' respective charters. All members of the Audit Committee must be independent directors, while the majority of the members of the Nomination and Remuneration Committee, and the Corporate Governance and Sustainability Committee must be independent directors. The Chairman of the Board and the Chief Executive Officer, however, are not allowed to assume any directorship in the sub-committees. In addition, the Chairman of each sub-committee must be an independent director. Applying to every meeting, the sub-committees are required to report the outcome of each meeting to

the Board for acknowledgment as well as to disclose them in the Annual Report (56-1 One Report) every year.

Currently, PTTEP has four sub-committees, namely (1) the Audit Committee, (2) the Nomination and Remuneration Committee, (3) the Corporate Governance and Sustainability Committee, and (4) the Risk Management Committee. Names of the directors, duties and responsibilities, number of meetings, meeting attendance, and remuneration policy are disclosed in the "Governance Structure and Key Data on the Board of Directors, Sub-Committees, Management, Employees, and Others" and "Corporate Governance Milestones" section. Meanwhile, reports of the Company's sub-committees are disclosed in the "The Sub-Committees Report" topic under the "Corporate Governance Milestones" section.

5.3.1 Corporate Governance and Sustainability Committee

The Corporate Governance and Sustainability Committee has duties and responsibilities according to its charter as follows:

1) To determine the Company's sustainability target, policy, roadmap, and workplan, covering all the key aspects: High Performance Organization (HPO); Governance, Risk Management, and Compliance (GRC); and Sustainable Value Creation (SVC), and consider Sustainability's budget which will be proposed to the Board for approval.

2) To advise and provide support to ensure that the Company's operations are in line with the Sustainability Statement and sustainability framework, capable of achieving the Company's targets as well as comparable to the practices of leading companies. Additionally, the Committee shall encourage the Board, the management, and all personnel to follow the Company's sustainability pathway in an efficient manner.

3) To evaluate and review the Company's sustainability target, policy, roadmap, and workplan in response to a dynamic business environment, applicable laws, related international best practices, and recommendations from trusted institutions and also to consider and respond to shareholders' suggestions and feedback.

4) To oversee, monitor, and evaluate the performance of the Company's sustainability to ensure its balance and efficiency, as well as to create the utmost benefits for the Company and its stakeholders and to report the progress to the Board on a regular basis.

5) To determine the Company's good corporate governance and business ethics policy before proposing it to the Board for approval. In addition, the Committee advises and promotes the implementation at all levels, reviews the policy annually to ensure its appropriateness and conformity with the laws and international best practices, and monitors the evaluation and reports on compliance with good corporate governance and business ethics of PTTEP on a regular basis.

6) To oversee the disclosure of sustainability information to stakeholders in the Company's annual report and sustainability report.

7) To regularly review and update its own charter to ensure its relevance and appropriateness.

8) To disclose the committee's performance in the Company's annual report.

9) To perform other duties as assigned by the Board.

The Corporate Governance and Sustainability Committee consists of at least three directors, where the majority of whom must be independent directors. The Company Secretary serves as the Committee's secretary. As of December 31, 2024, the Committee comprised four members as follows:

Mr. Phongsthorn Thavisin	Chairman of the committee and Independent Director
Mr. Veerathai Santiprabhob	Member and Independent Director
Mr. Ekniti Nitithanprapas	Member
Mr. Danucha Pichayanan	Member and Independent Director

According to its charter, the Corporate Governance and Sustainability Committee must meet at least four times a year. In 2024, the Committee held four meetings which were attended by all incumbent directors. The Committee disclosed its annual performance in the Corporate Governance and Sustainability Committee Report for 2024.

5.3.2 Audit Committee

The Audit Committee has the duties and responsibilities according to its charter as follows:

1) To develop the Audit Committee Charter to be in line with the Company's scope of work and responsibilities which must be approved by the Board and revised at least once a year.

2) To review the Company's financial reports with the external auditor on a quarterly basis to ensure accuracy, credibility, and adequacy.

3) To ensure that the Company's activities are performed in compliance with the Securities and Exchange law, SET requirements, other laws, regulations, procedures, cabinet resolutions related to the business, and the Company's rules and regulations.

4) To arrange an investigation and analysis of impacts and issues, as well as establish measures or any actions to immediately restrain any suspicious conduct in case the external auditor finds practices of a director, a manager, or a person responsible for the operation of the juristic person suspicious of committing management malpractice in a fraudulent manner. This includes reporting the suspicious circumstances, progress, and investigation results to the Securities and Exchange Commission, Thailand (SEC) and the external auditor within the specified timeframe.

5) To review connected transactions or transactions with potential conflicts of interest to ensure that these transactions are in compliance with the laws and SET's regulations and that they are reasonable as well as in the best interest of the Company, and review transactions with potential fraud which may affect the Company's operations.

6) To monitor acquisition or disposal of assets with significant value (Material Transactions or MT) by reviewing and providing opinions on investment transactions during the Board meetings to ensure that the investment transactions are reasonable and in the best interest of the Company as well as to ensure that these transactions comply with the laws and SET's regulations, and establish a reporting process for investment transactions under the purview of the management. Afterward, the Audit Committee is to keep monitoring the progress of the transactions to ensure that the investment plan is achieved with risk assessment in place.

7) To consider the reasonableness of fundraising transactions by reviewing and providing opinions on the transactions during the Board meetings and monitoring that the use of funds aligns with the objective of fundraising disclosed to the SEC.

8) To review the efficiency and effectiveness of internal control, risk management, and governance processes.

9) To oversee and monitor the internal audit process and ensure that the process is appropriate and effective as well as ensure the independence of the Internal Audit Division in order to enhance internal audit performance.

10) To evaluate the Internal Audit Division's performance, including audit-related problems and difficulties, and suggest ways to improve the internal audit system and the capabilities of internal auditors. The outcome and suggestions are to be reported to the Board at least once a year.

11) To consider, select, and propose the appointment, including the removal of an external auditor, and to propose the auditor's remuneration to the Board. The Audit Committee is to disclose the remuneration of the external auditor in annual reports of PTTEP as well as attend a meeting with the external auditor from the State Audit Office of the Kingdom of Thailand (SAO) or the external auditor endorsed by SAO at least once a year, in the absence of the management, to review audit findings and other issues, and recommend reviews or audit of any items, if necessary.

12) To endorse the appointment, transfer, removal, promotion, and performance appraisal of the Head of the Internal Audit Division by seeking comments from the Chief Executive Officer. The Audit Committee will appoint an investigation committee to investigate the case in which the Head of the Internal Audit Division is suspected of noncompliance with the law or the Company's rules and regulations which include the Good Corporate Governance and Business Ethics of PTTEP Group.

13) To approve a risk-based audit plan and instruct internal auditors to conduct other duties as appropriate, taking into consideration the Company's benefits as well as the impact on independence and objective of the audit.

14) To endorse the budget, division structure, and manpower of the Internal Audit Division for the management to propose to the Board.

15) To approve the charter of the Internal Audit Division.

16) To approve the Independence Declaration Form when the Head of the Internal Audit Division has to personally conduct audit fieldwork.

17) To endorse the results of audits which are approved in the annual audit plan as well as special audit requests.

18) The Chairman of the Audit Committee or a member must attend shareholders' meetings to answer questions related to the Committee's duties or the appointment of the external auditor.

19) To review the accuracy of self-assessment and related documents regarding anti-corruption measures in reference to Thai Private Sector Collective Action Against Corruption (CAC).

20) To perform other duties as assigned by the Board upon its consent.

21) To report the Audit Committee's performance on internal audit to the Board at least on a quarterly basis, within 60 days from the end of each quarter, except for the fourth-quarter report, which is to be issued as an annual report. Such reports must be submitted to the regulating ministry of the Company's parent company and the Ministry of Finance within 90 days from the end of the accounting year for acknowledgment. The Committee's annual report must also be disclosed in the Company's annual report.

The Audit Committee consists of at least three directors, but not more than five directors, all of whom must be independent directors. The Head of the Internal Audit Division acts as the Committee's secretary. As of December 31, 2024, the Committee comprised four members as follows:

Director's Name	Position	Financial Statements Audit Experience	
Ms. Penchun Jarikasem	Chairman of the Audit Committee	June 27, 2022 – Present	Chairman of the Audit Committee, TISCO Financial Group Public Company Limited
		June 27, 2022 – Present	Chairman of the Audit Committee, TISCO Bank Public Company Limited
		January 2022 – Present	Chairman of the Audit Committee, PTT Exploration and Production Public Company Limited
		April – June 26, 2022	Member of the Audit Committee, TISCO Financial Group Public Company Limited
		April – June 26, 2022	Member of the Audit Committee, TISCO Bank Public Company Limited
		December 2020 – September 2023	Sub-Committee on Finance and Accounting, Energy Conservation Fund
		April 30, 2020 – December 2021	Member of the Audit Committee, PTT Exploration and Production Public Company Limited
		April 2018 – Present	Chairman of the Audit Committee, Ritta Holdings Company Limited
		2018 – September 2019	Chairman of the Sub-Committee for Finance and Accounting, State Railway of Thailand
		April 2016 – April 2018	Chairman of the Audit Committee, Osotspa Public Company Limited
		2016 – December 2018	Sub-Committee for Finance and Budgeting Improvement, Office of the Public, Sector Development Commission (OPDC)
		2011 – 2015	Executive Vice President, Finance and Accounting Group, PTT Exploration and Production Public Company Limited

Director's Name	Position	Financial Statements Audit Experience	
Mr. Teerapong Wongsiwawilas	Member of the Audit Committee	January 2022 – Present	Member of the Audit Committee, PTT Exploration and Production Public Company Limited
		December 2020 – Present	Member of the Audit Committee, Krung Thai Bank Public Company Limited
		2017 – 2021	Member of the Audit Committee, Bangchak Corporation Public Company Limited
Mrs. Natjaree Anuntasilpa	Member of the Audit Committee	April 2023 – Present	Member of the Audit Committee, PTT Exploration and Production Public Company Limited
		2019 – April 1, 2023	Member of the Audit Committee, Airports of Thailand Public Company Limited
		2015 – 2015	Director of the Bureau of Economic Budgeting 1 (Director, higher level), Bureau of the Budget, Office of the Prime Minister
		2014 – 2015	Director of Bureau of Evaluation 2 (Policy and Plan Analyst, Expert level), Bureau of the Budget, Office of the Prime Minister
Mr. Thongthit Chayakula	Member of the Audit Committee	April 2024 – Present	Member of the Audit Committee, PTT Exploration and Production Public Company Limited

All members of the Committee had necessary knowledge, expertise, and experience in auditing financial statements. One of the members, namely Mrs. Natjaree Anuntasilpa, holds a degree in accounting.

According to the Audit Committee Charter, the Committee must hold at least one meeting every quarter. In 2024, the Committee held 15 meetings which included a meeting that was conducted together with the Risk Management Committee. The majority of directors attended all meetings. The Committee has disclosed its annual performance in the Audit Committee Report for 2024.

5.3.3 Nomination and Remuneration Committee

The Nomination and Remuneration Committee has the duties and responsibilities according to its charter as follows:

1) To select and nominate the name of individuals qualified to be Director, or Chief Executive Officer, when there is a vacancy, or to replace those whose terms have expired, or Acting Chief Executive Officer when there is a vacancy and the nomination process is still under consideration, for election by the Board of Directors or by the shareholders in consideration with the Board composition, knowledge and capability and their experiences which is useful to PTTEP, the number of companies they serve as a director, and their conflict of interest are taken into consideration. Also, the Committee may consider the candidates from a Director's pool provided by a trusted organization.

2) To consider the Chief Executive Officer's succession plan and appropriate executive-level management's development system to ensure that candidates are with skills and qualifications in accordance with PTTEP's target growth.

3) To consider the qualifications that are appropriate for a director and necessary for conducting business in accordance with PTTEP's strategy (Skill Matrix), and to annually determine the Target Skill Mix for the selection of directors. This includes preparing a list of potential nominee directors, Chief Executive Officer, or Acting Chief Executive Officer in advance and/or when there is a director or Chief Executive Officer vacancy and submitting it for consideration to the Board's or the Shareholders' meetings, as applicable.

4) To consider annual Board Performance Target and annual Key Performance Indicator (KPIs) of the Chief Executive Officer and propose to the Board for consideration; and to set the Performance Evaluation Form of the Board, Chairman, Director, Sub-Committees, and Chief Executive Officer.

5) To consider and propose qualified Directors to be a member and a chairman of a Sub-Committee to the Board for consideration when there is a vacancy or propose the restructuring of Sub-Committee to the Board for consideration as deem appropriate.

6) To consider the restructuring of organization to support growth and changes in business circumstances.

7) To consider remuneration packages for the Board and Sub-Committees with fair and reasonable principles in accordance with work performance, the Company's performance, the practices of the industry, and the scope of duties and responsibilities. The Remuneration package must be proposed at the Shareholders' Meeting for approval.

8) To consider the remuneration package of the Chief Executive Officer and salary structure of Executives with fair and reasonable principles and propose at the Board Meeting for approval. For consideration of the Chief Executive Officer's remuneration, the duties and responsibilities together with annual performance shall also be taken into account.

9) To evaluate the performance of the Nomination and Remuneration Committee and report its performance to the Board Meeting and disclose to shareholders on an annual basis.

10) To review this charter regularly to ensure its suitability and timeliness at all times.

11) To perform other duties as may be assigned by the Board.

The Nomination and Remuneration Committee consists of at least three directors, the Chairman, and the majority of the members must be independent directors. The Company Secretary serves as the Committee's secretary. As of December 31, 2024, the Committee comprised four members with four independent directors as follows:

Mr. Teerapong Wongsiwawilas	Chairman and Independent Director
Mr. Phongsthorn Thavisin	Member and Independent Director
General Nithi Chungcharoen	Member and Independent Director
Admiral Pogkrong Monthardpalin	Member and Independent Director

According to its charter, the Committee must meet at least two times a year. In 2024, the Committee held nine meetings which were attended by all incumbent directors. The Committee has disclosed its annual performance in the Nomination and Remuneration Committee Report for 2024.

5.3.4 Risk Management Committee

PTTEP's Risk Management Committee has the following duties and responsibilities in accordance with its charter:

1) Define the Enterprise Risk Management Policy and Framework including providing guidance and recommendations to the Board and management on key corporate risks and mitigations.

2) Consider the Risk Appetite Statement and Corporate Level Risk Metrics & Limits prior to submission to the Board for approval as well as monitor the results regularly.

3) Govern and support the risk management implementation to ensure its effectiveness and efficiency at both the corporate and business unit levels (Enterprise-wide Risk Management) by considering risks in decision-making, resource allocation, and the execution of business activities.

4) Consider strategic risks and key risks at the corporate level in core and strategic business areas by providing recommendations to manage the risks within the risk appetite according to 2), as well as monitor and evaluate the mitigation strategies in response to the business environment.

5) Screen and provide comments on any material transaction involving the company's investments or divestments prior to the Board's approval.

6) Consider the oil price risk management and financial risk management hedging objectives and guidelines prior to the Board's approval as well as monitor hedging performance regularly.

7) Foster risk management as an integral part of the corporate culture.

8) Support the Risk Management function in assessing key risks and advising on other potential risks that may impact the corporate level to ensure continuous and effective risk management in line with industry best practices and support PTTEP in achieving its business objectives. This includes the authority to directly assign tasks related to PTTEP's risk management to the Risk Management function.

9) Report key risks and results of risk management to the Board regularly and promptly alert the Board of any significant risk management events.

10) Disclose the Committee's performance in the Company's Annual Report.

11) Review and update its own charter to ensure its relevance and appropriateness.

12) Perform other risk management-related duties as may be assigned by the Board.

The Risk Management Committee consists of at least three directors, and at least one of them is an independent director. As of December 31, 2024, the Committee comprised four members, two of whom were independent directors, as follows:

Mr. Veerathai Santiprabhob	Chairman and Independent Director
Mr. Wuttikorn Stithit	Member
General Nithi Chungcharoen	Member and Independent Director
Mr. Wattanapong Kurovat	Member

In 2024, there were changes to the Members of the Risk Management Committee as follows:

- Mr. Pitipan Tepartimargorn had his term ended due to retirement by rotation. His retirement was effective from April 1, 2024, onwards.
- Mr. Veerapat Kiatfuengfoo has resigned from the position of Director. His resignation was effective from September 30, 2024, onwards.
- Mr. Wattanapong Kurovat has been appointed as a member of the Risk Management Committee. His appointment was effective from November 15, 2024, onwards.

According to its charter, the Committee must hold at least four meetings a year. In 2024, the Committee held 13 meetings, including one conducted together with the Audit Committee. Three members attended all the meetings, while one member was absent from one due to a prior commitment. The Committee disclosed its annual performance in the Risk Management Committee Report for 2024.

5.3.5 Independent Directors Committee

The Independent Directors Committee has the duties and responsibilities according to its charter as follows:

1) To propose to the Board and/or the Chief Executive Officer (as applicable) significant matters that are beneficial to the Company as well as to its major and minor shareholders.

2) To advise the Board of Directors on their roles and duties that should be practiced and to provide advice as per the roles and duties that should be practiced of independent directors for the benefit of the Company as well as its major and minor shareholders.

3) To review the Company's operations to ensure that they comply with the laws relevant to independent directors as well as to review the definition of independent directors to ensure that it is legally appropriate and complete.

4) To perform other duties as assigned by the Board, provided that such duties do not affect the Committee's independence.

5) To regularly review and update the Independent Directors Committee Charter to ensure its relevance and appropriateness.

PTTEP directors who meet all qualifications required of independent directors according to the CG&BE are considered independent directors without the need for any appointment from the Board of Directors. As of December 31, 2024, the Committee comprised 10 members as follows:

Mr. Krairit Euchukanonchai	Chairman
Ms. Penchun Jarikasem	Member
Mr. Veerathai Santiprabhob	Member
Mr. Teerapong Wongsiwawilas	Member
General Nithi Chungcharoen	Member
Mrs. Natjaree Anuntasilpa	Member
Mr. Danucha Pichayanan	Member
Mr. Phongsthorn Thavisin	Member
Admiral Pogkrong Monthardpalin	Member
Mr. Thongthit Chayakula	Member

According to its charter, the Committee must meet at least once a year as necessary and appropriate with the Company Secretary serving as the Committee's secretary. In 2024, the Committee held one meeting and all incumbent directors attended the meeting. There was no compensation paid to members of the Committee for their meeting attendance.

5.4 The Management

5.4.1 Name List of the Management

As of January 1, 2025, PTTEP's management, according to the definition of management as defined by the Capital Market Supervisory Board (CMSB), consists of 19 members. Details of their biography, qualifications, and experience are disclosed in Attachment 1 "Information of the Board of Directors, Management, Controlling Persons, and Company Secretary."

Name List and Number of Shares held by the management, their Spouse/Cohabiting Partner and Minor Child

Name	Number of Ordinary Shares		
	As of January 1, 2024	As of January 1, 2025	Increase/ (Decrease) During the Year
1. Mr. Montri Rawanchaikul Chief Executive Officer	52,050	52,050	-
2. Mrs. Natruedee Khositaphai Executive Vice President, Operations Support Group	107,457	107,457	-
3. Mr. Chayong Borisuitsawat[1] Executive Vice President, Domestic Production Asset Group	65,096	65,096	-
4. Mr. Piya Sukhumpanumet[2] Executive Vice President, Geosciences, Subsurface, and Exploration Group	89,916	89,916	-
5. Mr. Nirandorn Rojanasomsith Executive Vice President, Engineering, Development, and Maintenance Group Spouse/Cohabiting Partner	135,202 38,839	135,202 38,839	- -
6. Ms. Kanita Sartwattayu[3] Executive Vice President, Strategy, Business Development, and Human Resources Group	50,279	50,279	-
7. Mr. Nopasit Chaiwanakupt Executive Vice President, Technology, Carbon Solutions, and Sustainable Growth Group	-	-	-
8. Mrs. Chanamas Sasnanand[4] Executive Vice President, Finance and Accounting Group	n/a	45,411	n/a
9. Mr. Titi Thongjen[5] Acting Executive Vice President, International Production Asset Group	n/a	2,000	n/a

Remarks:

1 Appointed as Executive Vice President, Domestic Production Asset Group effective on December 1, 2024 (previously held the position of Executive Vice President, Strategy, Business Development, and Human Resources Group).

2 Appointed as Executive Vice President, Geosciences, Subsurface, and Exploration Group on January 1, 2025 (previously held the position of Executive Vice President, International Production Asset Group).

3 Appointed as Executive Vice President, Strategy, Business Development, and Human Resources Group effective on December 1, 2024 (previously held the position of Executive Vice President, Domestic Production Asset Group).

4 Appointed as Executive Vice President, Finance and Accounting Group effective on October 1, 2024 (number of ordinary shares held on appointment date was 45,411 shares).

5 Appointed as Acting Executive Vice President, International Production Asset Group effective on January 1, 2025 (number of ordinary shares held on appointment date was 2,000 shares).

Name	Number of Ordinary Shares		
	As of January 1, 2024	As of January 1, 2025	Increase/ (Decrease) During the Year
10. Mr. Sermsak Satchawannakul[6] Senior Vice President, Finance Division	45,215	45,215	-
11. Mr. Sakchai Sarawek[7] Senior Vice President, Accounting Division	-	-	-
12. Mrs. Maneeya Srisukhumbowornchai[8] Senior Vice President, Tax and Insurance Division	n/a	-	n/a
13. Ms. Nuchanong Sangkeaw[9] Vice President, Managerial and International Asset Accounting Department	4,605	4,605	-
14. Ms. Natiya Leelasiri[10] Vice President, Accounting Policy and Solutions Department	n/a	32,576	n/a
15. Mr. Chayanin Yiamsombut Vice President, Insurance Department	22,145	22,145	-
16. Mrs. Yada Vudhivorn Vice President, Tax Department	-	-	-
17. Ms. Sukporndee Assamongkol[11] Vice President, Operations and Domestic Asset Accounting Department	4,618	4,618	-
18. Ms. Chutima Uthaiwatthanathorn[12] Vice President, Capital Market and Financial Planning Department	n/a	-	n/a

Remarks:

6 Appointed as Senior Vice President, Finance Division effective on October 1, 2024 (previously held the position of Senior Vice President, Accounting Division).

7 Appointed as Senior Vice President, Accounting Division effective on October 1, 2024 (previously held the position of Vice President, Managerial Accounting Department).

8 Appointed as Senior Vice President, Tax and Insurance Division effective on June 1, 2024 (number of ordinary shares held on appointment date was none).

9 Appointed as Vice President, Managerial and International Asset Accounting Department effective on October 1, 2024 (previously held the position of Vice President, Capital Market and Financial Planning Department).

10 Appointed as Vice President, Accounting Policy and Solutions Department effective on January 1, 2025 (number of ordinary shares held on appointment date was 32,576 shares).

11 Appointed as Vice President, Operations and Domestic Asset Accounting Department effective on August 16, 2024 (previously held the position of Vice President, Financial Accounting Department).

12 Appointed as Vice President, Capital Market and Financial Planning Department effective on October 1, 2024 (number of ordinary shares held on appointment date was none).

Name	Number of Ordinary Shares		
	As of January 1, 2024	As of January 1, 2025	Increase/ (Decrease) During the Year
19. Mr. Thanat Thamrongsaksuvit Vice President, attached to Senior Vice President of Finance Division, assigned as Managing Director of PTTEP Treasury Center Company Limited (PTT TC)	-	-	-
Management Who Retired or Rotated during 2024			
1. Mr. Suksant Ongvises[13]	10,681	10,681	-
2. Mr. Sumrid Sumneing[14]	13,000	13,000	-
3. Mr. Rangsan Bhengbhun[15]	65,917	65,917	-
4. Mrs. Panporn Sasananan[16]	-	-	-
5. Ms. Pratamaporn Deesrinthum[17]	49,249	49,249	-

Remarks:

[13] Ceased to perform the role of Executive Vice President, Lang Lebah Project effective on January 1, 2025 (number of ordinary shares held on the last date in his position was 10,681 shares).

[14] Ceased to perform the role of Executive Vice President, Finance and Accounting Group effective on September 30, 2024 (number of ordinary shares held on the last date in his position was 13,000 shares).

[15] Ceased to perform the role of Executive Vice President, directly report to Chief Executive Officer effective on January 1, 2025 (number of ordinary shares held on the last date in his position was 65,917 shares).

[16] Ceased to perform the role of Senior Vice President, Finance Division effective on October 1, 2024 (number of ordinary shares held on the last date in her position was none).

[17] Ceased to perform the role of Vice President, Accounting Policy and Solutions Department effective on January 1, 2025 (number of ordinary shares held on the last date in her position was 49,249 shares).

5.4.2 Remuneration Policy for the Management

Remuneration of the Chief Executive Officer

The remuneration of the Chief Executive Officer (CEO) is appropriately determined based on criteria that are clear, transparent, fair, and reasonable. PTTEP's Nominating and Remuneration Committee is responsible for reviewing the remuneration of the CEO prior to proposing to the Board for approval. The approval from the Board is based on his or her performance, the Company's performance, remuneration of listed companies comparable in size and industry, roles and responsibility, and overall economic situation.

The ratio of the annual compensation of the CEO compared to the average annual compensation of the Company's executives is approximately 1.3:1, while the ratio of the annual compensation of the CEO compared to the average annual compensation of the Company's employees is approximately 10.5:1.

Remuneration of the Chief Executive Officer

	2023	2024
	Total Amount (THB)	Total Amount (THB)
Salary	13,742,400	15,680,160
Bonus[1]	9,734,200	10,468,281
Other compensations[2]	973,159	803,908
Total	24,449,759	26,952,349

Remarks:
[1] Annual bonus shall be paid in January in the following year.
[2] Provident Fund contribution

Remuneration of the Executives

PTTEP's Nominating and Remuneration Committee is responsible for the salary structure of the Company's executives. The key principle is to establish an unbiased and reasonable structure that reflects not only the Company's business nature and its performance but also some of the variables which can be compared to and justified by those of other leading energy companies in the industry, taking into account the roles and responsibilities of executive positions. The Board must grant approval to the structure prior to the implementation.

The CEO, meanwhile, is responsible for reviewing the appropriateness of the remuneration of each of the executives as well as their annual salary increase, taking into consideration his or her individual target-based performance and the Company's performance measured against the annual performance targets determined in advance.

To maintain the Company's remuneration competitiveness, PTTEP conducts an annual survey on the remuneration of leading companies in the industry. The information gathered through the survey allows the Board to better understand the current market situation to further increase the Company's competitiveness in the job market as well as to be able to provide the Board with thorough explanations particularly when the changes in the salary structure and payment method are significant. The ratio of the average annual compensation of the executives compared to the average annual compensation of the Company's employees is approximately 7.9:1

Remuneration of the Executives

	2023		2024	
	Number	Total Amount (THB)	Number	Total Amount (THB)
Salary	9*	80,216,110	10*	91,487,530
Bonus		57,948,298		59,014,118
Other compensation		11,650,313		13,263,455
Total		149,814,721		163,765,103

Remark: * Executives consisted of Executive Vice Presidents and PTT's executives who have been seconded to PTTEP.

In 2024, compensation (salary, bonus, and contribution to the provident fund) of PTTEP's and the subsidiaries' employees, including wages of the seconded employees, totaled THB 14,308,956,890.

Remuneration of the Directors of Subsidiaries and Associated Companies

PTTEP's subsidiaries and associated companies are functional units of the Company in carrying out E&P and related businesses, including new business, in order to optimize the Company's benefits, taking into account the business and investment conditions. PTTEP assigns the Company's management to hold a directorship position in our subsidiaries and/or associated companies in order to ensure that they are managed in compliance with the business direction and strategy of PTTEP.

PTTEP has set up a policy for directors' remuneration of subsidiaries and associated companies. The directors' remuneration policy is based on the roles and authorities of the Board of Directors of such subsidiaries and associated companies, their size of investment, and business risks. The management who are assigned to be directors of subsidiaries or associated companies are entitled to additional remuneration subject to the remuneration policy of such subsidiaries or associated companies.

5.5 Personnel

5.5.1 Number of Employees

As of December 31, 2024, PTTEP and our subsidiaries had a total workforce of 5,592 employees.

Number of Employees*

Employee Type	Total (Persons)
Thai Permanent Employees	2,063
Thai Contracted Employees	2,133
Non-Thai Contracted Employees	63
Local Employees in Overseas Subsidiaries	1,329
Seconded Employees from PTT Group Companies and Joint Venture Partners	4
Total	5,592

Remarks:

* Based on the Company's database as of December 31, 2024. The list is exclusive of outsourced staff hired through service contracts and third-party service providers. M&A conditions are excluded.

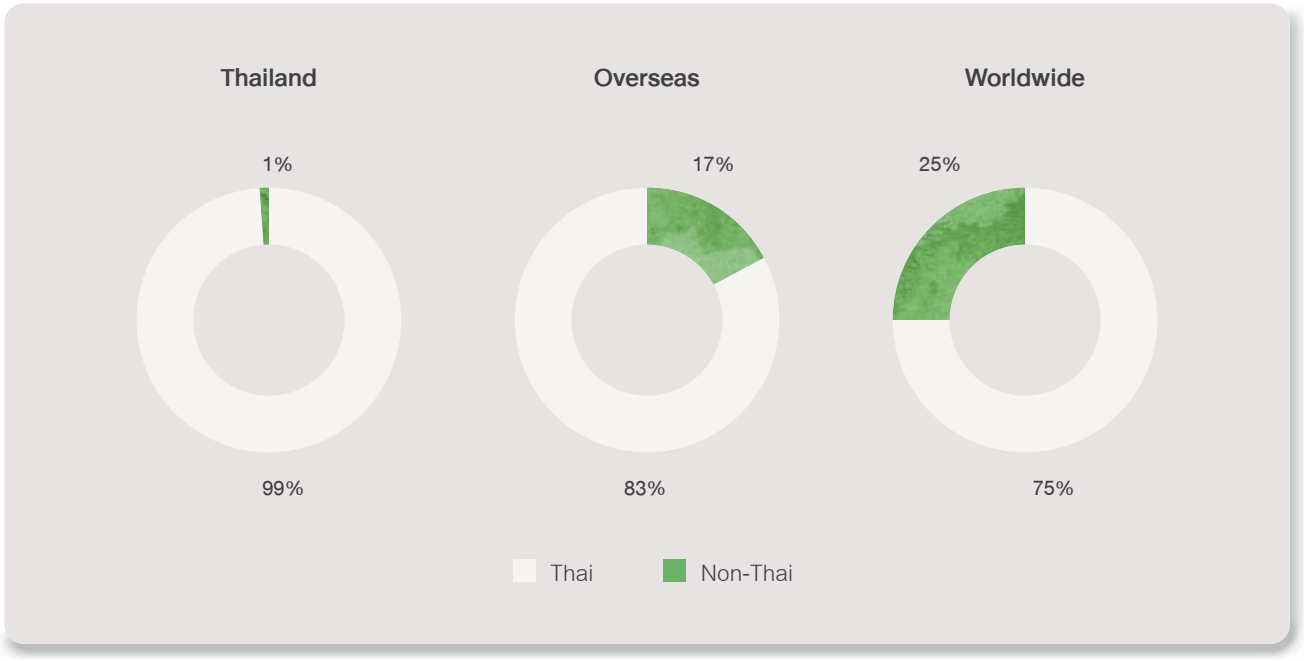
Number of Employees in Each Function Group*

Function Group*	Thai Permanent Employees	Thai Contracted Employees	Non-Thai Contracted Employees	Local Employees	Seconded Employees	Total
Chief Executive Officer	5					5
Domestic Production Asset Group	562	867		4		1,433
Engineering, Development, and Maintenance Group	256	294		1		551
Finance and Accounting Group	164	186			2	352
Geosciences, Subsurface, and Exploration Group	238	62	11	11		322
International Production Asset Group	210	49	13	1,261		1,533
Operations Support Group	265	480	16	5		766
Strategy, Business Development, and Human Resources Group	122	73	2			197
Technology, Carbon Solutions, and Sustainable Growth Group	82	56				138
Lang Lebah Project	26		21	45		92
Internal Audit Division	16	2			1	19
Legal Division	13	10			1	24
Safety, Security, Health, and Environment Division	39	29		1		69
Corporate Secretary and Assurance Division	39	6				45
Branding, Communications, and Knowledge Intelligence Division	26	19		1		46
Grand Total	2,063	2,133	63	1,329	4	5,592

Remarks:

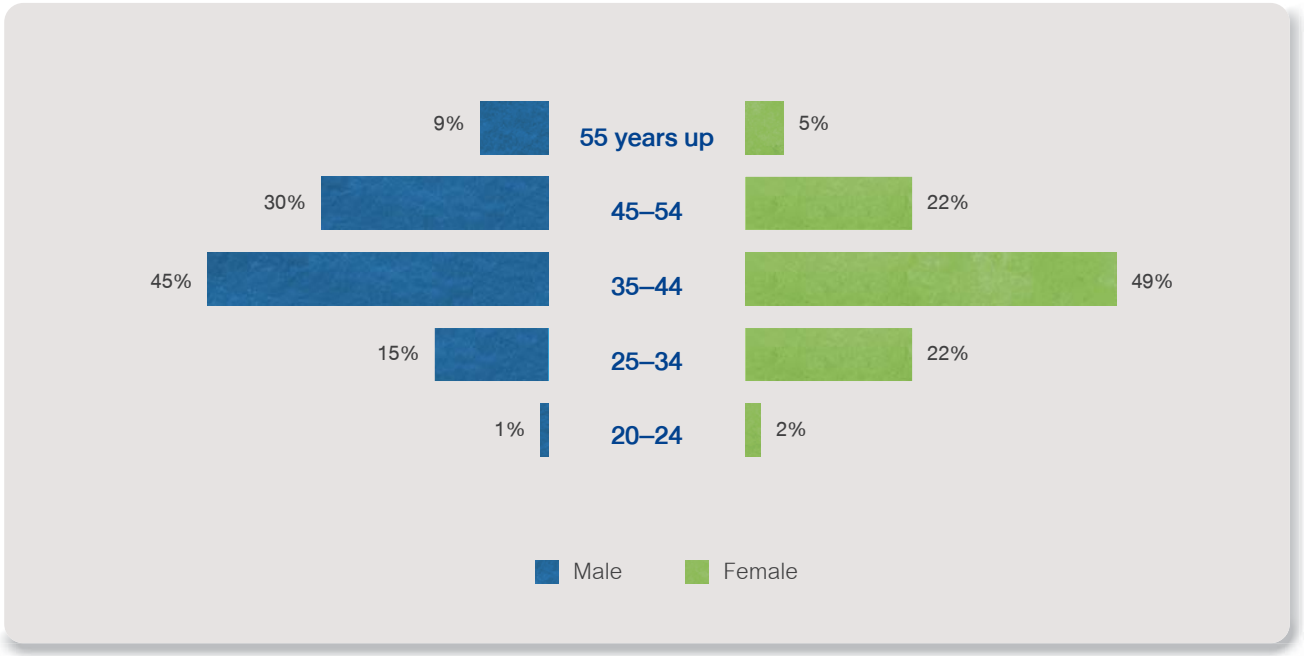
* Based on the Company's database and organization structure as of December 31, 2024. The list is exclusive of outsourced staff hired through service contracts and third-party service providers. M&A and Divestment conditions are excluded.

Staff Demography by Nationality and Work Location*



Remark: * Based on the Company's database as of December 31, 2024.

Staff Demography by Gender and Age*



Remark: * Based on the Company's database as of December 31, 2024.

Employee Turnover

	IN[1, 3]	OUT[1, 2]
Thai Permanent Employees	63	86
Thai Contracted Employees[3]	203	59
Non-Thai Contracted Employees	14	21
Local Employees	178	81
Seconded Employees	4	4

Remarks:
1 Based on the Company's database as of December 31, 2024.
2 Including voluntary resignation, dismissal, early retirement, retirement, and death
3 The turnover was exclusive of outsourced staff hired through service contracts and third-party service providers. M&A and Divestment conditions are excluded.

Turnover Rate

In 2024, the Company's total employee turnover rate (Voluntary resignation, dismissal, early retirement, retirement, death) was 4.49 percent.

Voluntary Turnover Rate

The voluntary resignation rates (resignation and early retirement) from 2019 to 2024 are as shown below:

2019	2020	2021	2022	2023	2024
2.5%	1.7%	3.1%	3.1%	3.0%	3.6%

Remark: M&A and Divestment conditions are excluded.

5.5.2 Human Resource Development Policy

To increase the organization's and staff's capabilities, both Thais and non-Thais, for continuous business growth domestically and internationally, PTTEP has executed a capability development process by implementing a competency-based training and development, focusing on the 70:20:10 model of on-the-job training, coaching and mentoring, and formal training, respectively, in an effort to accelerate human resource development. In 2024, the Company provided the following training and development programs for employees:

(1) In-House and External Training Courses

PTTEP provides in-house and external training courses from various institutions, both domestic and overseas, to staff and the management at all levels. These training courses cover a wide variety of topics, including technical and functional training and Safety, Security, Health, and Environment (SSHE) training on which PTTEP places great importance. In 2024, there were many development programs on the environment, such as those on topics of Waste Management, Water Management, Environmental Impact Assessment, Biodiversity and Ecosystem Services Management, and Oil Spill Management. Moreover, PTTEP has also focused on and provided various types of training on digital skills, foreign languages, business management, and leadership skills to our staff to further improve their skills. In 2024, PTTEP also continued to develop individual development plans for all our staff.

To respond to our Company's strategy which will expand to other new business opportunities apart from petroleum exploration and production, and to strive towards becoming a low-carbon organization, PTTEP employees must, therefore, be equipped with new knowledge and skills for our new business execution in the future. The key staff who need to have a good knowledge foundation were provided with basic knowledge training on new businesses, such as alternative energy, electricity, and greenhouse gas reduction technology, to ensure their readiness for the energy transition. Furthermore, PTTEP also emphasizes the development of the management, to update and equip them with new necessary knowledge and skills. Training courses were provided to support our management team to ensure the Company's sustainable growth and readiness for succession in management positions.

(2) Online Training Courses

In contrast to conventional learning approaches, online learning enables employees to engage in a structured learning experience irrespective of the limits of their geographical location. The Company has implemented and embraced diverse online learning platforms, catering to all types of employees, thereby enabling them to access learning opportunities from any location and at any time as well as to help employees stay abreast of global trends, PTTEP places a strong emphasis on the integration of Diversity & Inclusion within its learning and development processes, and it has been actively evolving a blended learning approach. By combining diverse methods, the Company aims to craft a comprehensive and impactful training experience that addresses varied learning styles, including gender, age, and time.

(3) Long-term Training and Development Programs

Long-term training and development programs are for the period of 1–3 years based on employees' Individual Development Plans (IDPs) to prepare employees for various projects in specific periods. Under this approach, employees are required to undertake on-the-job training through various assignments relating to the Company's projects or to be temporarily assigned to work with the Company's business partners or services companies in Thailand and overseas. In the technical areas, mentors are also assigned to assist and coach the employees during their journeys along individual development plans.

(4) Master's & Doctoral Degree Scholarship Programs for Employees

The Company provides scholarships to employees to help them pursue master's & doctoral degrees in leading domestic and overseas universities in the following fields:

1) Petroleum Geosciences;
2) Petroleum Engineering;
3) Engineering;
4) Drilling and Well Engineering;
5) Digital and Information Technology;
6) Technology and Carbon Solution (Alternative Energy).

In 2024, the Company invested in human capital development programs at a total amount of THB 338,965,940 and provided more than 297,060 training and development hours for our employees with an average of 53 training and development hours per person per annum. PTTEP has in place a policy for the management to produce an Individual Competency Development Plan (ICDP) in order for PTTEP to be able to develop its staff capabilities in line with the determined plans. To ensure standardization, PTTEP has conducted the Technical Competency Assessment Calibration with Job Family Masters in each Job Family. As a result, our 2024 employees' competency both at PTTEP corporate and international assets increased by approximately 6.04 percent.

The Company calculated the Human Capital Return on Investment (HCROI) in several dimensions. These included man-hours and cost spent on development activities against total revenue and production, time to autonomy for young technical professionals, and readiness of immediate successors for senior management positions, as well as continuous development of additional measurements to evaluate the HCROI more efficiently. The results are subsequently used to evaluate and elevate the efficiency and effectiveness of the development activities for future improvement.

5.6 Other Significant Information

5.6.1 Secretary to the Board of Directors

The Board of Directors appointed Mr. Montri Rawanchaikul, Director and Chief Executive Officer, as The secretary to the Board of Directors, effective from January 1, 2022. The secretary of the Board of Directors serves as the focal point between the Board and the management and is responsible for providing advice to the Board on legal compliance regarding the duties and responsibilities of the Board and the management. The secretary of the Board of Directors is also an accountable person in reviewing the agenda and minutes of the Board's meetings prior to their

submission to the Board and managing documentation of the Shareholders' meetings, as well as the preparation for the Board for the Shareholders' meetings. Mr. Montri Rawanchaikul is highly knowledgeable, capable, and experienced, allowing him to aptly support the Board in carrying out its fiduciary duties.

5.6.2 Company Secretary

The Board of Directors appointed Ms. Yaninee Wajeepratubjit, Senior Vice President, Corporate Secretary and Assurance Division, as the Company secretary and secretary of the Corporate Governance and Sustainability Committee, secretary of the Nominating and Remuneration Committee, and secretary of the Independent Directors Committee, effective from May 1, 2023. Ms. Yaninee holds a degree in accounting. She is highly knowledgeable, capable, and experienced in corporate secretarial functions. In addition, she has attended seminars and completed all necessary training which are beneficial to her role. Details of the Company Secretary are disclosed under Attachment 1 "Information of the Board of Directors, Management, Controlling Persons, and Company Secretary."

The Company secretary has performed roles with fiduciary duties by holding responsibilities and duties on care and loyalty to the Company, as required by the Securities and Exchange Act, including preparing and safeguarding the Company's important documents, namely the director registry, notice of the Shareholders' meetings, notice of the Board's meetings, Minutes of the Shareholders' meetings, Minutes of the Board's meetings, and Annual Reports; safeguarding the Conflicts of Interests Report submitted by the members of the Board and management as well as sending a copy of the report to the Chairman of the Board and Chairman of the Audit Committee, as stipulated by law.

The Company secretary is also responsible for the following duties as required by the Board:

- Providing suggestions and advice, coordinating, and monitoring to ensure that the Board of Directors perform their roles in compliance with relevant applicable laws, rules, and regulations as well as the Company's objectives, Articles of Association, resolutions from the Board's and shareholders' meetings;
- Organizing meetings of the Board, sub-committees, and shareholders;
- Providing orientation and giving advice to new members of the Board;
- Recommending necessary and appropriate training programs to members of the Board;
- Coordinating with the Company's functional units to ensure that the Company's business operations are in line with the directions set by the Board and shareholders' meetings and work with external regulators who oversee listed companies;
- Governing the Company's subsidiaries, including preparing and safeguarding their important documents;
- Promoting and educating directors, the management, and employees about Good Corporate Governance and Business Ethics of PTTEP Group and ensuring full compliance with such policy, including regularly reviewing PTTEP Group's CG&BE to comply with related laws and in line with international practices of leading organizations;
- Ensuring that all shareholders are treated fairly, ethically, and lawfully, as well as promoting good relationships with minority shareholders;
- Acting as a focal point who is responsible for coordinating with relevant parties when reports or complaints are submitted through the Whistleblowing System of PTTEP Group;
- Performing other duties as required by the Company.

5.6.3 Head of the Internal Audit Division

PTTEP has established the Internal Audit Division, which has a direct reporting line to the Audit Committee and an administrative (Dotted-Line Reporting) reporting line to the CEO. The head of the audit division is to oversee the auditors' performance in accordance with their roles and the scope of work as follows:

(1) In-House and Subsidiary Audits

The purpose of the audits is to ensure that the operations are in accordance with the Company's targets. The auditors evaluate the efficiency, adequacy, and effectiveness of governance, risk management, and internal controls. The audits and the processes involved are also developed to identify control weaknesses which could potentially open up opportunities for fraud, as well as to provide recommendations for the enhancement of internal controls to ensure that they are appropriate and adequate.

(2) Joint Venture and Joint Operating Company Audits

The auditors conduct audits on the operators for projects that PTTEP has invested in to ensure that the operators comply with the joint venture agreements and other related contractual arrangements and that they possess appropriate internal controls. Expenditures incurred must also follow correct proportions according to the respective participating interests of each party in the joint venture.

(3) Digital Technology Audit

The auditors conduct audits to review the adequacy of the adoption of digital technology in various work systems of the Company to ensure that digital technology is well managed and in line with the Company's business objectives with appropriate resources within the risk appetite.

(4) Consulting Services

The auditors provide consulting services for other units whereby the nature and scope of such services are pre-determined. These are to ensure that they will result in improved efficiency and effectiveness of the existing and future processes in corporate governance, risk management, and internal controls. The auditors may also provide useful recommendations on the design of such processes.

(5) Fraud Investigation

The Internal Audit Division is responsible for undertaking investigations of all reported or suspected frauds in accordance with the duties and procedures stipulated in the Whistleblowing Regulation. Investigation team members must not bear any conflicts of interest on complaints under the investigation. Prevention, detection, further investigation, and prosecution of fraud offenders are the responsibility of the management.

(6) Special Audit Requests

Special audit requests are not included in the annual audit plan. The Internal Audit Division performs such tasks as requested by the Company's management and/or the Audit Committee to quickly prevent and mitigate risks.

According to the Audit Committee Charter, the Audit Committee has a duty to endorse the appointment, transfer, removal, promotion, and performance appraisal of the Head of the Internal Audit Division, as specified in the Audit Committee Charter.

Mrs. Maneeya Srisukhumbowornchai held the position of Senior Vice President of the Internal Audit Division and Head of the Internal Audit Division during May 1, 2023, to May 31, 2024. Since June 1, 2024, Mr. Chayagorn Leangruenrom has assumed these positions. The Audit Committee deems that both aforementioned executives are qualified to undertake the responsibilities efficiently based on their educational background, necessary knowledge, skills, and work experiences. They both

have also completed direct training on audits, including the management of the Internal Audit Division and internal auditor competency development. These have contributed to the regular enhancement of efficiency of those related to internal audit, as well as support for the work of the Audit Committee.

The details of the Head of the Internal Audit Division are disclosed in Attachment 3 "Details of the Head of the Internal Audit Division and the Head of the Compliance Function."

5.6.4 Head of the Compliance Function

PTTEP has established the Corporate Governance and Subsidiary Management Department which has a direct reporting line to the Senior Vice President of the Corporate Secretary and Assurance Division and the Chief Executive Officer, respectively. The key responsibilities are to promote and ensure that PTTEP Group operates in full compliance with all applicable laws as well as to support the management in managing compliance risk efficiently through various compliance programs. This includes providing communication and training programs, developing, maintaining, and monitoring legal compliance using the Legislation e-Database, identifying and conducting compliance risk assessment, providing advice on new issuance or amendment of PTTEP Group's internal regulations to be in line with the laws, coordinating with regulators regularly and reporting compliance performance to the Audit Committee and the management.

Head of the Compliance Function in 2024 was Ms. Chalida Srikorakul, who has been appointed as the Vice President of the Corporate Governance and Subsidiary Management Department from January 26, 2021, until the present.

More details related to the Head of the Compliance Function are disclosed in Attachment 3 "Details of the Head of the Internal Audit Division and the Head of the Compliance Function."

5.6.5 Head of the Investor Relations

Details are disclosed in the "Corporate Governance" section under the topic of "Investor Relations."

5.6.6 Remuneration of Auditor

(1) Audit Fees

In 2024, PTTEP and its subsidiaries had total Audit Fees of USD 2.21 million (THB 78.05 million). Of this amount, USD 0.69 million (THB 24.39 million) was for the audit firm of PTTEP (PwC) and persons or companies related to the auditor and the audit firm.[1] The remaining amount of USD 1.52 million (THB 53.66 million) was for other firms.

(2) Non-Audit Fees[2]

In 2024, PTTEP and its subsidiaries had Non-Audit Fees to PwC and persons or companies related to the auditor and the audit firm, for a total of USD 1.21 million (THB 41.54 million). Of this amount, USD 0.44 million (THB 14.93 million) was for consulting services for M&A in the areas of Financial Due Diligence, tax, and accounting, which were deal-specific or one-off transactions, and the remaining amount was for other services, such as tax services and special purpose audit, which were mostly procured through a bidding process. The Non-Audit Fees to PwC and persons or companies related to the auditor and the audit firm of USD 1.21 million (THB 41.54 million) was approximately 10 percent when compared against all Non-Audit Fees in 2024, which included charges from other service companies.

Summary of the Auditors' Report for the Past Three Years (2022–2024)

The auditors expressed an unqualified opinion in the Auditors' Report on PTTEP's consolidated financial statements for the past three years.

1 In accordance with the definition of the Securities and Exchange Commission of Thailand (SEC)

2 "Non-Audit Fees" is a terminology commonly used by SEC reporting requirements.

6. Corporate Governance Milestones

6.1 Summary of the Board's Performance in the Past Year

6.1.1 Nomination, Development, and Performance Assessment of the Board

(1) Independent Director

PTTEP's Definition of an Independent Director

PTTEP Independent Directors must annually review and certify their independence. They need to be fully qualified without any prohibited characteristics in accordance with the law. They must also have the following additional qualities as stipulated by PTTEP's definitions, which are stricter than the law:

1) An Independent Director must not hold shares exceeding 0.5 percent (SEC sets at one percent) of the total number of shares with voting rights of PTTEP Group, associate companies, major shareholders, or controlling persons, including shares held by persons related to that Independent Director.

2) An Independent Director must not be or have been an executive director, employee, advisor earning a regular monthly salary, or a controlling person of PTTEP Group, associate companies, major shareholders, or controlling persons unless the foregoing status has ended for at least two years prior. In this regard, such prohibited characteristics are to exclude cases where an independent director used to be a government official or advisor of a government agency that is a major shareholder or a controlling person of the Company.

3) An Independent Director must not be a person who is related by blood or legal registration as a father, mother, spouse, sibling, or child, including the spouse of a child of any other Director, the Management, major shareholder, controlling person or person to be nominated as director, the Management, or controlling person of the Company or its subsidiaries.

4) An Independent Director must not have or have had a business relationship with PTTEP Group, associate companies, major shareholders, or controlling persons that may interfere with independent discretion, which includes not being or having been a significant shareholder or the controlling person of any person having a business relationship with PTTEP Group, associate companies, major shareholder, or controlling person unless the foregoing relationship has ended for at least two years prior.

The "business relationship" in the previous paragraph includes normal business transactions, rental, or lease of property, transactions related to assets or services or granting or receipt of financial assistance through receiving or extending loans, guarantees, providing assets as collateral, and any other similar actions, which result in the Company or the counterparty being subject to indebtedness payable to the other party in an amount starting from three percent of the net tangible assets of the Company or from THB 20 million or more, whichever amount is lower. The calculation of such indebtedness shall be in accordance with the method for calculating the value of related party transactions under the Notification of the Capital Market Supervisory Board Re: Rules on Execution of Related Party Transaction, mutatis mutandis. In any case, the consideration of such indebtedness shall include indebtedness incurred during the period of one year to the date of establishing the business relationship with the related person.

5) An Independent Director must not be or ever have been an auditor of PTTEP Group, associate companies, major shareholders, or controlling persons. An Independent Director must also not be a significant shareholder, controlling person, or partner of the audit firm which employs the auditors of PTTEP Group, associate companies, major shareholders, or controlling persons unless the foregoing relationship has ended for at least two years prior.

6) An Independent Director must not be or have been a provider of professional services, which includes serving as a legal advisor or financial advisor being paid with a service fee of more than THB 2 million per year by PTTEP Group, associate companies, major shareholders, or controlling persons, and not being a significant shareholder, controlling person, or partner of such provider of the professional services unless the foregoing relationship has ended for at least two years prior.

7) An Independent Director must not undertake any businesses of the same nature and in significant competition with the business of the Company or its subsidiaries, or not being a significant partner in a partnership or an executive director, employee, or advisor earning a regular monthly salary, or holding more than one percent of the voting shares of another company that undertake a business of the same nature and in significant competition with the business of the Company or its subsidiaries.

8) An Independent Director must not be a director who is appointed as the representative of the directors of the Company, major shareholder, or the shareholder related to the major shareholder.

9) An Independent Director must not have any other characteristics that cause the inability to express independent opinions on the business operation of the Company.

An Independent Director with the qualifications in accordance with the aforementioned 1) to 9) may be assigned by the Board of Directors to make a decision on the business operation of PTTEP Group, associate companies, major shareholders, or controlling persons in the form of a collective decision.

The definition related to Independent Directors is in line with the Notification of the Securities and Exchange Commission Re: Determination of Definitions in Notifications relating to Issuance and Offer for Sale of Securities.

Business Relationship or Professional Services of Independent Directors of the Company during the Past Fiscal Year

- None -

(2) Nomination of Directors and the Management

Nomination of Directors

When there is a vacancy for a director position or when a director's term limit is due, it is a duty of the Nomination and Remuneration Committee to select the candidates who fit the required skills, experience, and are in line with the Company's Target Skill Mix and strategic directions to ensure that the Board's composition is complete, comprising experienced and well-rounded experts in various areas with the right balance, and for the optimal benefit to PTTEP. The Company attaches importance to factors such as Board Diversity which includes consideration on gender, independence, and conflicts of interest of directors in a comprehensive and transparent manner. On December 31, 2024, PTTEP Board comprised 10 independent directors and two female directors from 15 directors.

The Nomination and Remuneration Committee determines the Target Skill Mix for director nominations by analyzing the Board's current Skill Matrix. In 2025, PTTEP focuses on the three main areas of Target Skill, namely (1) Accounting, (2) Law, and (3) Economics & Finance, including investment banking.

In addition, the Nomination and Remuneration Committee also considers director candidates from the directors' pool provided by the State Enterprise Policy Office (SEPO) which comprises a list of people who are regarded as highly qualified for the operations of state enterprises. As of December 31, 2024, PTTEP had nine directors whose names were listed in SEPO's directors' pool. The Company also seeks advice from the major shareholder, PTT, as well as considers minor shareholders' proposals (if any) according to the rules regarding the nomination of a person to fill in the positions that are due to retire by rotation.

The election of directors to replace those who are due to retire by rotation must obtain approval from the AGM by a majority vote based on the number of the Company's shareholders with voting eligibility at the Meeting. The election process is as follows:

1) Should the number of director candidates be fewer than the number of positions to be elected, PTTEP will propose at the Meeting to elect all candidates as directors by voting for individual candidates, under which each of them must receive majority votes.

2) Should the number of director candidates exceed the number of those to be elected, a ballot is to be held. Each shareholder may vote for as many director candidates as the number of the opened positions. Voting will then be carried out for each of the individuals. Those with the highest ballots will be elected, as many as the number of the opened positions. Each of them must receive majority votes.

When a director position becomes vacant for reasons other than rotation, the Board may elect a new director, using the three-fourth majority voting rule. The elected director is permitted to remain in his or her directorship for only as long as the remaining term of the predecessor.

Nomination and Succession Plan of the Chief Executive Officer

The Nominating and Remuneration Committee has included in its Charter the role of considering the Chief Executive Officer succession plan and appropriate executive-level management's development system to ensure a candidate list with the skills and qualifications in line with the Company's target growth.

The Nominating and Remuneration Committee is responsible for considering the candidates' knowledge, skills, experience, profession, and other various specific qualifications to bring about the best of interests to the Company, for example, strategic vision in the energy sector, the ability to lead substantial investment to achieve targets, the crisis management ability, working experience in Exploration and Production, ability to seek and manage New Business for the Company's sustainable growth and also looking into their probable conflicts of interest.

The Company formulates a succession plan for the Chief Executive Officer to prepare the Company for the time when the Chief Executive Officer is unable to perform his or her duties or when the serving term is completed. The plan helps to minimize the risks and the impacts which may result from the discontinuity of the management. The procedure for a succession plan is as follows:

1) PTT Group Management Committee (PTTGMC), a committee in which the Company's Chief Executive Officer is a director, and PTTEP forms the Group Leadership Development Program (GLDP). The program's primary focus is to enhance the capability of the management from the levels of PTT Group's executives, Executive Vice Presidents, and above to prepare them for a possible nomination to become the Chief Executive Officer in one of PTT Group companies.

2) PTT CEO and President reviews the shortlisted names at the Senior Executive Vice President level of PTT and Executive Vice President level of PTT Group with suitable qualifications from 1) and proposes potential candidates to PTT Nominating Committee for review which will then further propose the candidates to PTT Board of Directors for the selection of the most suitable person to be PTTEP's next Chief Executive Officer.

3) After receiving the candidate names, accompanied by opinions of PTT Board from 2), and comparing them with the Company's potential candidates at the Executive Vice President level, the Company's Nominating and Remuneration Committee will reassess the individual's knowledge, capability, and experience relating to the business, conflicts of interest, and his or her vision to lead the Company to grow according to the strategic plan determined by PTTEP's Board of Directors.

4) The Nominating and Remuneration Committee proposes the name of the final candidate, together with opinions and a fair and reasonable remuneration package proposed by the Nominating and Remuneration Committee, to the Board of Directors for approval and appointment of the Company's Director and new Chief Executive Officer.

Nomination of the Management and Succession Plan

The Board grants Chief Executive Officer the authority to select and appoint individuals who possess the knowledge, capabilities, and experience to management positions in consultation with the Career Review Board (CRB) Committee in line with PTTEP Rules and Regulations for Human Resource Management. The nomination must then be acknowledged by the Board. Exceptions are made for the appointment of the Executive Vice President and above, where the Board's approval is required. If the nominee is not from within the organization, an interview with the interview committee is required, while the nomination of the Head of Internal Audit Division requires approval from the Audit Committee.

PTTEP has a systematic succession planning for every vacancy of the management in accordance with the positions in the organizational structure in order to fill in vacancies due to appointments and transfers, retirement, and reorganization to support the Company's business expansion domestically and internationally. The Career Review Board (CRB) is authorized to select and appoint successors for managerial positions using the Company's Management Success Profile as the screening criteria. These profiles comprise organizational knowledge, experiences, competency, as well as personal attributes required for the target positions, while Currently Estimated Potential is also taken into consideration. Once the successors are identified, their individual short-term and long-term development plans will be established with emphasis on technique and functional knowledge, managerial skills, personality, and soft skills required for different business areas, such as Asset Management, Strategy & Business Development, Technical Expert, and Business Support, according to the corporate values and organizational culture to ensure that the successors are qualified for the target positions by the time of requirement.

(3) Development of Directors

Orientation of New Directors

The orientation program which is provided to the Company's new directors consists of:

1) Briefing by the Chief Executive Officer and PTTEP high-level executives: This briefing covers the nature of business, business directions, knowledge, and techniques of petroleum exploration and production, relevant rules and regulations, the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE), and any other information that is necessary and beneficial for an efficient undertaking of the Director's role – as well as other topics that the directors are interested in.

2) Director Manual: This contains essential information such as strategic plans, relevant rules and regulations, and the CG&BE covering issues of Human Rights, Measures to Prevent the Use of Insider's Information, Conflicts of Interest, and Anti-Fraud and Corruption, etc., which will be beneficial for efficient undertaking of the director's roles. The PTTEP Director's Manual is updated regularly so that it can be used as a reference.

3) Site Visits: New directors visit PTTEP Group's facilities as appropriate so that they can better understand the business. The visits are also beneficial for an efficient undertaking of their roles as Directors.

At the end of each orientation, new directors will evaluate the effectiveness of the program for further improvement. Any director elected as Chairman of the Board is also required to attend a briefing on how to efficiently perform the Chairman's duties and conduct Board and shareholders' meetings.

Development and Training of Directors

PTTEP encourages its directors to continuously develop their knowledge and understanding of the business and their duties. The Company facilitates this by encouraging Directors to participate in various training courses and taking responsibility for any training expenses incurred. PTTEP also arranges regular briefings and presentations to provide useful information and offer updates on their responsibilities and best practices in accordance with relevant laws and good corporate governance principles.

In 2024, PTTEP organized briefing and presentation sessions as well as facilitated its Board of Directors' participation in external training, conferences, and seminars beneficial to fulfilling their duties as PTTEP directors, as follows:

Director	Activities and Other Courses
1) Mr. Krairit Euchukanonchai	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - Study visit on Carbon Capture and Storage (CCS) and Hydrogen in Japan - Study trip and site visit to PTT Gas Separation Plants in Rayong - The Energy Intelligence Forum in the UK - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability

Director	Activities and Other Courses
2) Ms. Penchun Jarikasem	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - Study trip and site visit to PTTEP and PTT Group, as follows: 1) PTTEP Technology and Innovation Center (PTIC) in Rayong 2) PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Sustainability - Training Courses provided by the Thai Institute of Directors Association (IOD), as follows: 1) Board Nomination & Compensation Program (BNCP) 2) The Board's Role in Mergers & Acquisitions (BMA)
3) Mr. Veerathai Santiprabhob	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - Study trip and site visit to PTTEP and PTT Group, as follows: 1) PTTEP Technology and Innovation Center (PTIC) in Rayong 2) PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability 4) CCS as a service in Thailand

Director	Activities and Other Courses
4) Mr. Teerapong Wongsiwawilas	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study trip and site visit to PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability
5) Mr. Wuttikorn Stithit	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - CERAWEEK 2024 - Study trip and site visit to PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability 4) CCS as a service in Thailand

Director	Activities and Other Courses
6) General Nithi Chungcharoen	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - CERAWEEK 2024 - Study trip and site visit to PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability 4) CCS as a service in Thailand - Risk Management for Corporate Leader (RCL) by the Thai Institute of Directors Association (IOD)
7) Mrs. Natjaree Anuntasilpa	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study trip and site visit to PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability
8) Mr. Ekniti Nitithanprapas	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability

Director	Activities and Other Courses
9) Mr. Danucha Pichayanan	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability
10) Mr. Phongsthorn Thavisin	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study trip and site visit to PTTEP and PTT Group, as follows: 1) PTTEP Technology and Innovation Center (PTIC) in Rayong 2) PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability - Training Courses provided by the Thai Institute of Directors Association (IOD), as follows: 1) Director's Guide to Legal Obligations & Duties (DLD) 2) ESG in the Boardroom : A Practical Guide for Board (ESG)
11) Mr. Thongthit Chayakula	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study trip and site visit to PTTEP and PTT Group, as follows: 1) PTTEP Technology and Innovation Center (PTIC) in Rayong 2) PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability - Advanced Audit Committee Program (AACP) by the Thai Institute of Directors Association (IOD)

Director	Activities and Other Courses
12) Admiral Pogkrong Monthardpalin	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study trip and site visit to PTT Gas Separation Plants in Rayong - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability - Director Certification Program (DCP) by the Thai Institute of Directors Association (IOD)
13) Mr. Kongkrapan Intarajang	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability
14) Mr. Wattanapong Kurovat	- The National Defence Course (Class 67)
15) Mr. Montri Rawanchaikul	- Internal Lecture and Discussion Session on Annual Strategy Review - Internal Lecture and Discussion on Business Strategies of AI and Robotics Ventures Company Limited (ARV) - Internal Lecture and Discussion on Digital Transformation Strategies, Master Plan, and Strategic Working Model - Study visit on Renewable Energy, Decarbonization, and Energy Innovations in France and the Netherlands - Study visit on Technology, Digitalization, and Renewable Energy in the People's Republic of China - CERAWEEK 2024 - Study trip and site visit to PTT Gas Separation Plants in Rayong - The Energy Intelligence Forum in the UK - Internal Lectures on the following topics: 1) Hydrogen and Low Carbon Fuels 2) Decarbonization 3) Sustainability - The Cullinan: The Making of the Digital Board by Digital Economy Promotion Agency (depa) in collaboration with the Thailand Management Association (TMA)

As of December 31, 2024, the Company had 15 directors in total, and all of them had participated in the directors' roles programs provided by the Thai Institute of Directors Association (IOD). 14 of the Company's directors (93 percent of the total number) had participated in IOD's Director Certification Program (DCP), while four of the Company's directors (27 percent of the total number) had attended the IOD's Director Accreditation Program (DAP). In addition, the Company regularly provided them with information on new and useful seminars and training courses. Details of the training courses attended by the directors are disclosed in Attachment 1: "Information of the Board of Directors, Management, Controlling Persons, and Company Secretary."

(4) Performance Appraisal of the Board

The Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) stipulates that there should be an annual performance appraisal of the Board derived from the Board Performance Target and Performance Appraisal Form. This allows the Company's directors to review their performance, key issues, and obstacles that they have faced during the year as well as to enhance their directorship efficiency.

Four types of the Board's performance appraisal are:

1) Individual self-appraisal and individual cross-appraisal by other directors, including four evaluation topics, namely (1) qualifications, (2) independence, (3) roles and responsibilities, and (4) training and self-development.

2) Appraisal of the entire Board, including five evaluation topics, namely (1) strategic planning and corporate policies, (2) Board performance, (3) management governance and cooperation, (4) Board meetings, and (5) Board structure and qualifications.

3) Appraisal of the sub-committees, which includes questions on each of the sub-committee's performance and efficiency according to the roles and responsibilities stated in their charters.

4) Appraisal of the Chairman, which includes questions about the efficiency of the Chairman's performance, according to the roles and responsibilities of the Chairman as stated in the SEC's Corporate Governance Code for Listed Companies 2017 (CG Code) and the CG&BE of PTTEP Group under Section 6.3: Roles of the Board of Directors and Management. This includes topics such as acting as the Chairman of the Board's meetings and the Annual General Shareholders' Meeting, setting the agenda for the Board's meetings, and enhancing the relationship between the Board and the management.

In 2024, the Board Performance Target was established by the Board, covering three aspects, namely (1) the building of the Company's stability, growth, and appropriate return to the Shareholders, (2) PTTEP's Corporate Governance assessment results and meeting attendance, and (3) the efficiency of directors' performance. The criteria and performance appraisal form were also reviewed by the Nomination and Remuneration Committee according to the SEC's CG Code. The 2024 performance appraisal form is divided into four types as mentioned above. The questions appearing in the form are revised to be more concise and in line with the purpose of the assessment as indicated in the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE). Moreover, the questions are adjusted to increase clarity, measurability, and the capability to produce an effective improvement plan. To increase the clarity, the scoring has changed to the use of 1–3 scale: 1 = do not agree/needs improvement, 2 = agree/meets the standard, and 3 = strongly agree/good.

Process

The Corporate Secretary and Assurance Division, a focal point of the Board's performance appraisal coordination and preparation, distributes the appraisal form to each director, gathers and processes the result of the assessment in order to summarize and propose the result and improvement plan to the Nomination and Remuneration Committee and the Board for their acknowledgment.

Summary of the 2024 Board Performance Appraisal's Results

1) Self-appraisal average score was 2.92. For individual cross-appraisal by other directors, the average score was 2.93, representing an increase from 2.89 in 2023 (total score = 3).

2) The average score from self-appraisal of the entire Board was 2.90, slightly decreased from 2.91 in 2023 (total score = 3).

In addition, the 2024 self-appraisal of the entire Board included an assessment of cooperation between the Board and the management. The same set of questions was evaluated by the management to further develop their relationships and cooperation and to promote two-way communication.

3) The 2024 appraisal scores of the four sub-committees were as follows:

   3.1) The appraisal score of the Audit Committee was 3.00, the same as the 2023 score (total score = 3).
   3.2) The appraisal score of the Nomination and Remuneration Committee was 3.00, the same as the 2023 score (total score = 3).
   3.3) The appraisal score of the Corporate Governance and Sustainability Committee was 2.75, increasing from 2.50 in 2023 (total score = 3).
   3.4) The appraisal score of the Risk Management Committee was 3.00, increasing from 2.89 in 2023 (total score = 3).

4) The 2024 appraisal of the Chairman of the Board was 2.96, increasing from 2.89 in 2023 (total score = 3).

PTTEP reported the aforementioned results to the Board for acknowledgment. Recommendations from the Board's appraisal will be used in the future to improve the efficiency of the Board, sub-committees, Chairman, and the management, such as proposing more agenda items relating to the performance of the subsidiaries with high-value investments.

(5) Performance Appraisal of the Chief Executive Officer (CEO)

The Board has set the target and Key Performance Indicators (KPIs) annually for PTTEP Chief Executive Officer, which aligns with PTTEP's corporate KPIs. The Nomination and Remuneration Committee is responsible for the assessment in order to evaluate and monitor the performance of the Chief Executive Officer against both short-term and long-term goals.

6.1.2 Meeting Attendance and Individual Directors' Remuneration

(1) The Board's Meetings

The Board's monthly meetings and agenda are scheduled and set in advance each year by the Board itself. There are at least 12 regular meetings annually, held every Friday on the third week of each month. Additional meetings may also be held as deemed appropriate. Meetings related to the Company's strategic directions and policies are held at least once a year. The Non-Executive Directors meeting and Independent Directors Committee meeting are also arranged at least once a year each. The Board members had been informed of the meeting schedule of 2025, along with the monthly regular agenda since August 2024. In 2024, there were 20 Board meetings held in a hybrid format according to the Emergency Decree on Electronic Meeting, B.E. 2563 (2020) to facilitate the Board members who are unable to attend in person. In order to allow the Board Members to study and consider the contents of the meeting agenda in advance, the Board usually receives meeting invitations from the Company Secretary, along with agenda and important documents related to the meetings, for review at least seven calendar days prior to the meeting date, except when there is insufficient information or in urgent situations. In addition, the meeting documents are delivered to the directors through a dedicated application to facilitate and speed up their reviews as well as to promote a paperless process.

Generally, the Company's Chairman, the CEO, and the Company Secretary are responsible for agenda proposals for Board meetings; however, the Company's

directors are also eligible to propose agenda items. The Board's meeting agenda items are clearly classified, including monthly items of performance review as well as budget execution.

During each of the meetings, which usually lasts approximately four hours, the Chairman allocates adequate time for each agenda item to provide an opportunity for directors to express their opinions independently. The Company's executives are also invited to attend the meetings to provide necessary information and answer any questions on the agenda as well as to acknowledge the policies and issues being raised to effectively implement them. The Company Secretary provides advice to the Board on related rules and regulations for proper practices, takes minutes of the meetings, as well as keeps complete filing of all the necessary meeting information and documents.

The Board's resolutions are based on a majority vote, where one director has one vote. Should a director have a stake in one of the issues, he or she will not be allowed to attend the meeting and/or exercise his or her vote on that issue. In the circumstance where the voting is tied, the Chairman of the meeting is to cast the decisive vote.

The issues which require an approval of no fewer than three-fourths of the total votes of the Company's eligible shareholders attending the meeting are as follows:

1) The sale or transfer of whole or important parts of the business of the Company to other persons;

2) The purchase or acceptance of business transferred from other public limited companies or private companies to the Company;

3) The making, amending, or canceling of contracts relating to the leasing out of the businesses of the Company, wholly or certain important parts, the assignment to any other persons to manage the businesses of the Company or the amalgamation of the businesses with other persons with objectives towards profit and loss sharing;

4) To amend the Memorandum or Articles of Association;

5) To increase or reduce the registered capital, issue debentures, amalgamate, and dissolve the Company;

6) In case where the Company or one of the subsidiaries agrees to enter connected transactions, or disposition or acquisition of the Company's or the subsidiary's assets, as determined by the Securities and Exchange law and notifications in relation to such transactions, or the acquisition or disposal of assets of a listed company, as applicable.

The minutes of the Board's meetings cover all significant matters. For issues seeking approval, all resolutions are unanimous. The names of the persons attending or absent from the meetings, the names of the meetings' attendants, opinions of directors, questions, the management's responses, or clarifications are recorded in detail, while the minutes and related documents are system atically filed and kept safely. All directors of the Board usually attend every meeting unless an absence is deemed necessary, in which case the director in question must submit a leave application to the Board's Chairman, specifying the reason. The leave application must be communicated to all the Board members prior to the meeting and will be subsequently recorded in the report of individual directors' meeting attendance. In 2024, the majority of the Board members attended every meeting.

In 2024, non-executive directors held one meeting in the absence of the management. The purpose was to follow up on the undertakings of the management and for the Board to discuss issues of priority, such as the procurement process and promoting a corporate culture based on the Outward Mindset approach. The results were summarized and communicated to the CEO for further implementation. Additionally, a meeting of Independent Directors was held to discuss key issues that are of interest to the Company, shareholders, and minority shareholders. The topics included the qualifications of directors and compliance with the regulations and best practices established by the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET).

Meeting Attendance of PTTEP Directors in 2024

Director's Name	Board of Directors			Independent Directors Committee	Non-Executive Directors Committee	Corporate Governance and Sustainability Committee	Audit Committee	Nomination and Remuneration Committee	Risk Management Committee	Annual General Shareholders' Meeting 2024
	Total number of meetings	Physical	Online	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings
	20 Times			1 Time	1 Time	4 Times	15 Times	9 Times	13 Times	1 Time
1. Mr. Krairit Euchukanonchai	20/20	20/20	-	1/1	1/1	-	-	-	-	1/1
2. Ms. Penchun Jarikasem	19/20	17/20	2/20	1/1	1/1	-	15/15	-	-	1/1
3. Mr. Veerathai Santiprabhob	19/20	12/20	7/20	1/1	1/1	4/4	-	-	13/13	1/1
4. Mr. Teerapong Wongsiwawilas	20/20	16/20	4/20	1/1	1/1	-	15/15	9/9	-	1/1
5. Mr. Wuttikorn Stithit	20/20	17/20	3/20	-	1/1	-	-	-	13/13	1/1
6. General Nithi Chungcharoen	20/20	18/20	2/20	1/1	1/1	-	-	9/9	13/13	1/1
7. Mrs. Natjaree Anuntasilpa	19/20	8/20	11/20	1/1	1/1	-	13/15	-	-	1/1
8. Mr. Ekniti Nitithanprapas	20/20	12/20	8/20	-	1/1	4/4	-	-	-	1/1
9. Mr. Danucha Pichayanan[1]	17/17	10/17	7/17	1/1	1/1	4/4	-	-	-	1/1
10. Mr. Phongsthorn Thavisin[2]	16/16	15/16	1/16	1/1	1/1	4/4	-	7/7	-	-
11. Mr. Thongthit Chayakula[3]	16/16	13/16	3/16	1/1	1/1	-	14/15	-	-	-
12. Admiral Pogkrong Monthardpalin[4]	16/16	10/16	6/16	1/1	1/1	-	-	7/7	-	-
13. Mr. Kongkrapan Intarajang[5]	12/12	10/12	2/12	-	1/1	-	-	-	-	-
14. Mr. Wattanapong Kurovat[6]	3/4	3/4	-	-	-	-	-	-	1/1	-
15. Mr. Montri Rawanchaikul	20/20	19/20	1/20	-	-	-	-	-	-	1/1

Director's Name	Board of Directors			Independent Directors Committee	Non-Executive Directors Committee	Corporate Governance and Sustainability Committee	Audit Committee	Nomination and Remuneration Committee	Risk Management Committee	Annual General Shareholders' Meeting 2024
	Total number of meetings	Physical	Online	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings	Total number of meetings
	20 Times			1 Time	1 Time	4 Times	15 Times	9 Times	13 Times	1 Time
Resignation of Former Directors during 2024										
1. Mr. Pitipan Tepartimargorn[7]	4/4	1/4	3/4	-	-	-	-	2/2	2/3	1/1
2. Mrs. Angkarat Priebjrivat[8]	4/4	4/4	-	-	-	-	3/3	-	-	1/1
3. Mr. Auttapol Rerkpiboon[9]	7/7	5/7	2/7	-	-	-	-	-	-	1/1
4. Mr. Veerapat Kiatfuengfoo[10]	13/13	10/13	3/13	-	0/1	-	-	-	6/6	1/1

Remarks:

1 Mr. Danucha Pichayanan was elected as a director effective from March 1, 2024, and Corporate Governance and Sustainability Committee member effective from April 1, 2024.

2 Mr. Phongsthorn Thavisin was elected as a director, a Chairman of Corporate Governance and Sustainability Committee, and Nomination and Remuneration Committee member effective from April 1, 2024.

3 Mr. Thongthit Chayakula was elected as a director and Audit Committee member effective from April 1, 2024.

4 Admiral Pogkrong Monthardpalin was elected as a director and Nomination and Remuneration Committee member effective from April 1, 2024.

5 Mr. Kongkrapan Intarajang was elected as a director effective from May 21, 2024.

6 Mr. Wattanapong Kurovat resigned from directorship effective from February 6, 2024 and subsequently resumed the positions of Director and Risk Management Committee member effective from November 15, 2024.

7 Mr. Pitipan Tepartimargorn concluded the directorship term at the annual shareholders' meeting, effective from April 1, 2024.

8 Mrs. Angkarat Priebjrivat concluded the directorship term at the annual shareholders' meeting, effective from April 1, 2024.

9 Mr. Auttapol Rerkpiboon resigned from directorship, effective from May 13, 2024.

10 Mr. Veerapat Kiatfuengfoo was elected as a director effective from March 1, 2024, and was elected as Risk Management Committee effective from April 1, 2024. Mr. Veerapat resigned from directorship, effective from September 30, 2024.

Number of PTTEP Shares held by the Directors, Their Spouses/Cohabiting Couple, and Minor Children as of December 31, 2024

Director's Name	Number of Ordinary Shares		
	As of December 31, 2023	As of December 31, 2024	Increase/(Decrease) during the Year
1. Mr. Krairit Euchukanonchai	-	-	-
2. Ms. Penchun Jarikasem	-	-	-
3. Mr. Veerathai Santiprabhob	-	-	-
4. Mr. Teerapong Wongsiwawilas	-	-	-
5. Mr. Wuttikorn Stithit	-	-	-
6. General Nithi Chungcharoen	-	-	-
7. Mrs. Natjaree Anuntasilpa	-	-	-
8. Mr. Ekniti Nitithanprapas	-	-	-
9. Mr. Danucha Pichayanan[1]	n/a	-	n/a
10. Mr. Phongsthorn Thavisin[2]	n/a	-	n/a
11. Mr. Thongthit Chayakula[3]	n/a	-	n/a
12. Admiral Pogkrong Monthardpalin[4]	n/a	-	n/a
13. Mr. Kongkrapan Intarajang[5]	n/a	-	n/a
14. Mr. Wattanapong Kurovat[6]	n/a	-	n/a
15. Mr. Montri Rawanchaikul	52,050	52,050	-
Former Directors Whose Tenures Lapsed during 2024			
1. Mr. Pitipan Tepartimargorn[7]	-	-	-
2. Mrs. Angkarat Priebjrivat[8]	-	-	-
3. Mr. Auttapol Rerkpiboon[9]	-	-	-
Spouse/Cohabiting Couple	500	500	-
4. Mr. Veerapat Kiatfuengfoo[10]	-	-	-

Remarks:

1 Mr. Danucha Pichayanan was elected as a director effective from March 1, 2024, and Corporate Governance and Sustainability Committee member effective from April 1, 2024.

2 Mr. Phongsthorn Thavisin was elected as a director, a Chairman of Corporate Governance and Sustainability Committee, and Nomination and Remuneration Committee member effective from April 1, 2024.

3 Mr. Thongthit Chayakula was elected as a director and Audit Committee member effective from April 1, 2024.

4 Admiral Pogkrong Monthardpalin was elected as a director and Nomination and Remuneration Committee member effective from April 1, 2024.

5 Mr. Kongkrapan Intarajang was elected as a director effective from May 21, 2024.

6 Mr. Wattanapong Kurovat resigned from directorship effective February 6, 2024 and subsequently resumed the positions of Director and Risk Management Committee member effective from November 15, 2024.

7 Mr. Pitipan Tepartimargorn concluded the directorship term at the annual shareholders' meeting, effective from April 1, 2024.

8 Mrs. Angkarat Priebjrivat concluded the directorship term at the annual shareholders' meeting, effective from April 1, 2024.

9 Mr. Auttapol Rerkpiboon resigned from directorship, effective from May 13, 2024.

10 Mr. Veerapat Kiatfuengfoo was elected as a director effective from March 1, 2024, and was elected as Risk Management Committee effective from April 1, 2024. Mr. Veerapat resigned from directorship, effective from September 30, 2024.

(2) Remuneration of the Board and Members of the Sub-Committees

PTTEP has a clear and transparent policy with regard to the remuneration of the Company's members of the Board of Directors and sub-committees. The Nomination and Remuneration Committee, which is responsible for the policy, reviews the remuneration with prudence by taking into consideration the remuneration of affiliated companies within the PTT Group and the leading listed companies in The Stock Exchange of Thailand, the Board's performance, duties and responsibilities of directors, PTTEP operational performance, overall economic situation. The 2024 Annual General Shareholders' Meeting (AGM) approved the following remuneration for members of the Board and sub-committees, as proposed by the Nomination and Remuneration Committee.

Remuneration for Members of the Board

1) Monthly allowance of THB 40,000 per person per month in a full-month payment;

2) Meeting allowance of THB 50,000 per person per meeting attendance;

3) Bonus for the Board if there is a dividend of that year, totaling 0.2 percent of the Company's consolidated net profit of that year, but no more than THB 60 million per year;

4) The chairman's remuneration is an additional 25 percent of the above.

Remuneration for Members of the Sub-Committees

Members of the Company's sub-committees, according to the Articles of Association, receive the following remuneration:

1) Meeting allowance of THB 45,000 per person per meeting attendance;

2) The sub-committee chairman's remuneration is an additional 25 percent of the above.

Other Remuneration for PTTEP Directors

- None -

Remuneration of Members of the Board and Sub-Committees in 2024

Director's Name	Board of Directors		Audit Committee	Corporate Governance and Sustainability Committee	Nomination and Remuneration Committee	Risk Management Committee	2024 Bonus Paid in 2025	Total
	Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
1. Mr. Krairit Euchukanonchai	600,000	1,250,000	-	-	-	-	5,126,530	6,976,530
2. Ms. Penchun Jarikasem	480,000	950,000	843,750	-	-	-	4,101,223	6,374,973
3. Mr. Veerathai Santiprabhob	480,000	950,000	-	180,000	-	697,500	4,101,223	6,408,723
4. Mr. Teerapong Wongsiwawilas	480,000	1,000,000	675,000	-	506,250	-	4,101,223	6,762,473
5. Mr. Wuttikorn Stithit	480,000	1,000,000	-	-	-	585,000	4,101,223	6,166,223
6. General Nithi Chungcharoen	480,000	1,000,000	-	-	405,000	585,000	4,101,223	6,571,223
7. Mrs. Natjaree Anuntasilpa	480,000	950,000	585,000	-	-	-	4,101,223	6,116,223
8. Mr. Ekniti Nitithanprapas	480,000	1,000,000	-	180,000	-	-	4,101,223	5,761,223
9. Mr. Danucha Pichayanan	400,000	850,000	-	180,000	-	-	3,428,892	4,858,892
10. Mr. Phongsthorn Thavisin	360,000	800,000	-	225,000	315,000	-	3,081,520	4,781,520
11. Mr. Thongthit Chayakula	360,000	800,000	495,000	-	-	-	3,081,520	4,736,520
12. Admiral Pogkrong Monthardpalin	360,000	800,000	-	-	315,000	-	3,081,520	4,556,520

Director's Name	Board of Directors		Audit Committee	Corporate Governance and Sustainability Committee	Nomination and Remuneration Committee	Risk Management Committee	2024 Bonus Paid in 2025	Total
	Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
13. Mr. Kongkrapan Intarajang	320,000	600,000	-	-	-	-	2,521,244	3,441,244
14. Mr. Wattanapong Kurovat	160,000	150,000	-	-	-	45,000	930,059	1,285,059
15. Mr. Montri Rawanchaikul	480,000	1,000,000	-	-	-	-	4,101,223	5,581,223
Former Directors Retiring by Rotation or Resigning during 2024								
1. Mr. Pitipan Tepartimargorn	160,000	200,000	-	-	90,000	112,500	1,030,909	1,593,409
2. Mrs. Angkarat Priebjrivat	160,000	200,000	135,000	-	-	-	1,030,909	1,525,909
3. Mr. Auttapol Rerkpiboon	200,000	350,000	-	-	-	-	1,490,335	2,040,335
4. Mr. Veerapat Kiatfuengfoo	280,000	650,000	-	-	-	270,000	2,386,778	3,586,778
Total	7,200,000	14,500,000	2,733,750	765,000	1,631,250	2,295,000	60,000,000	89,125,000

Remarks:

1) 2024 Directors' Bonus to be proposed for approval from the Annual General Meeting of Shareholders for the year 2025 at the rate of 0.2 percent of the Company's net profit from the 2024 consolidated financial statements of the Company is due to be approved by the shareholders in 2025. If the dividend is paid to shareholders, the payment for a director will be made according to the directorship's terms of service. The chairman of the board receives a 25 percent higher bonus, but no more than THB 60 million per year.
2) PTTEP provides the Chairman with a corporate car to carry out corporate-related purposes only during the term of chairmanship.

6.1.3 Corporate Governance Concerning Subsidiaries and Associated Companies

PTTEP supervises its subsidiaries and associated companies through the management structure of PTTEP Group companies. We establish adequate and appropriate monitoring and assessment systems, which include risk management, internal audit and control, compliance with rules and regulations, and compliance with good corporate governance and business ethics. Undertakings are regularly reported to the Corporate Governance and Sustainability Committee. We are also aware of the significance of information disclosure in accordance with the principles of good corporate governance. Details are disclosed in the "Internal Controls and Connected Transactions" section, the "Sufficiency and Suitability of the Internal Control System" topic.

6.2 The Audit Committee Report

PTTEP is determined to ensure appropriate business management with efficiency and effectiveness as well as recognition of its good corporate governance by investors and related parties. The Audit Committee, in line with this direction, is appointed by the Board to govern, oversee, and review the Company's processes as well as promote the Company to have appropriate Governance, Risk Management, and Compliance (GRC) Management. This is to achieve the Company's goals and meet future challenges in accordance with the Company's strategic direction and create sustainable value for the Company and its stakeholders.

The Audit Committee consists of four independent directors. Ms. Penchun Jarikasem is the Chairman of the Audit Committee. Mr. Teerapong Wongsiwawilas, Mrs. Natjaree Anuntasilpa, and Mr. Thongthit Chayakula are members of the Audit Committee. All directors have sufficient knowledge and experience to review the accuracy and reliability of the financial statements.

In 2024, the Audit Committee executed its Board-assigned duties and those under its own charter, in conformity with best practices and related laws & regulations. The Committee met 15 times including a co-meeting with the Risk Management Committee. In December 2024, the Audit Committee Meeting was attended by the Chief Executive Officer (CEO), the Company's internal and external auditors at the same time. Details of the number of meetings attended by directors are as follows:

List of the Directors		No. of Meeting Attendance
Ms. Penchun Jarikasem	Chairman of the Audit Committee	15/15
Mr. Teerapong Wongsiwawilas	Member of the Audit Committee	15/15
Mrs. Natjaree Anuntasilpa	Member of the Audit Committee	13/15
Mr. Thongthit Chayakula	Member of the Audit Committee	14/15

The Committee's activities in 2024 according to the Audit Committee Charter can be summarized as follows:

1) Review of Financial Reports

The Committee reviewed the Company's quarterly and annual financial statements with the auditor (PricewaterhouseCoopers ABAS – PwC) without the presence of the management, to independently discuss significant matters that occurred in each accounting period, independence in performance of duties, auditor's opinion, significant events and auditor's focus areas, accounting standard updating, and any matters which may have impact on the Company's financial reporting. The Committee also had a meeting with the management to review the financial statements. This is to ensure that the Company's financial reporting is accurate and reliable, the statements disclosed complete, sufficient, and timely information, and complied with all relevant laws and regulations as well as generally accepted accounting standards. The Committee also provided recommendations regarding the Company's Management's Discussion and Analysis (MD&A) to cover an analysis of relevant factors affecting the Company's operations and financial statements.

2) Review of the Internal Control System and Risk Management

The Committee reviewed the efficiency and effectiveness of the Company's internal control system through the audit results reported by the Internal Audit Division and also endorsed the assessment results of the Company's internal control system including the Self-Assessment Form required by the Securities and Exchange Commission of Thailand (SEC), which found that the Company had a proper and sufficient internal control system. This included internal control related to financial objectives and processes with high fraud risk. The Company also improved internal control continuously to align with its operations, objectives, and relevant laws and regulations and to ensure that it had sufficient monitoring and control on subsidiaries.

The Committee reviewed the effectiveness of risk management through the Corporate Risk Profile and the Strategic Risk report as presented to the Board of Directors meeting, together with the review of significant risk reporting in audit reports of the Internal Audit Division. In addition, a meeting with the Risk Management Committee was arranged to discuss any linkage between the Company's risks and the audit plan to ensure that the audit work covers major risks together with dynamic risks. In addition, the significant audit results were taken into consideration in the Company-wide risk assessment.

3) Review of Connected Transactions or Transactions with Potential Conflicts of Interest

The Committee reviewed connected transactions or transactions with potential conflicts of interest prior to the Board's consideration to ensure that they were reasonable and beneficial to the Company and to safeguard the benefits of minority shareholders.

For connected transactions with the parent company, which are petroleum sales agreements, the Committee considers the negotiation transparency, pricing, and contract duration to ensure the reasonableness of the transactions. The joint venture companies, which have no connection with their parent companies, have reviewed the conditions of such transactions. The terms and conditions of the petroleum sales agreements under the Petroleum Act, B.E. 2514 (1971) have also been approved by the relevant regulatory authorities.

The Committee also reviewed the disclosure of the transactions in the Annual Report (56-1 One Report) and was of the opinion that the transactions were correctly and completely disclosed. Prices and conditions were fair and in the best interests of the Company. Moreover, the transactions were appropriately approved by the management or the Board of Directors prior to their commencement.

4) Monitor acquisition or disposal of assets with significant value (Material Transactions: MT)

The Committee reviewed and provided opinions on investment transactions during the Board meetings to ensure that the investment transactions are reasonable and in the best interests of the Company as well as to ensure that these transactions comply with the laws and SET's regulations. In addition, the Committee established a reporting process for investment transactions under management's authority. Afterward, the Committee keeps monitoring the progress of the transactions in a co-meeting with the Risk Management Committee to ensure that the investment plan is achieved, and risk assessment is in place. The Committee also made recommendations on the format of progress reporting in accordance with the type of the investment project, as well as emphasized that the topics to be reported must be determined to meet the expectations in accordance with the Audit Committee's best practices to prevent and deter inappropriate behavior of listed companies issued by the Securities and Exchange Commission, Thailand (SEC).

5) Review of Compliance with Related Laws and Regulations

The Committee reviewed PTTEP Group's compliance with the Securities and Exchange laws, SET's Regulations, and/or other related laws, both Thai laws and the laws of other countries in which PTTEP Group operates or invests. Moreover, the Committee acknowledged the compliance report prepared by Compliance Function, in addition to the audit results related to compliance with related laws and regulations which are reported by the Internal Audit Division. The Committee also recommended additional relevant action plans and followed up on the progress of those action plans.

6) Oversight of Internal Audit Activities

The Committee reviewed and approved the annual audit plan and long-term audit plan, which were prepared according to the risk-based approach (Risk-Based Audit Plan) and emphasized an increase in the frequency of audit cycles for projects that are crucial to the company's performance. The Committee also reviewed audit results as well as followed up on the progress of action plans in response to audit findings. In addition, the Committee reviewed the performance against the audit plan, the independence of internal auditors, and key performance indicators of the Internal Audit Division and assessed the performance of the Head of the Internal Audit Division. Moreover, the Committee reviewed the Audit Charter on an annual basis. In 2024, the Audit Charter and operational documents were revised to comply with the Global Internal Audit Standards, effective on January 9, 2025.

The Committee recognized the importance of digital technologies and promoted its adoption in the audit process. This enabled audit work to adapt to organizational transformation in the digital era. Digital technologies also come into play in enhancing audit work to become more accurate, complete, and rapid as well as equipped with better analysis for precise and timely problem-solving. An example is the implementation of the Audit Management System (TeamMate+) which has assisted the audit process from the audit planning process to the audit issues follow-up process (end-to-end process) and the enhancement of Follow-Up Dashboard to facilitate management in monitoring the interim outstanding audit issues. In addition, in 2024, the Internal Audit Division developed projects applying information technology systems to support the audit process (IA BOT project), such as automated audit programs and connected transaction reports preparation systems, etc.

The Committee also promoted the human resource management of the Internal Audit Division by considering and supporting the internal auditor's manpower to be adequate for current tasks and increasing audit assignments which are in line with the company's business growth. The Committee encouraged internal audit staff to attend training especially on necessary skills and digital technologies for further use in audit work and to ensure that internal audit activities are appropriate and effective. The Committee also supported advisory services role of the Internal Audit Division in order to add long-term value to the Company and fulfill stakeholders' expectations.

7) Nomination of the External Auditor for 2025 and Meeting with the External Auditor

The State Audit Office of the Kingdom of Thailand (SAO) requested the Company to outsource an external auditor in accordance with the State Fiscal and Financial Disciplines Act, B.E. 2561 (2018), Section 71, requiring the SAO or the external auditor endorsed by the SAO to audit the financial reports of the government agency. The Company then proposed Ms. Amornrat Pearmpoonvatanasuk, Certified Public Accountant Registration No. 4599 or Mr. Boonrueng Lerdwiseswit, Certified Public Accountant Registration No. 6552 or Mr. Kan Tanthawirat, Certified Public Accountant Registration No. 10456, the auditors from PricewaterhouseCoopers ABAS Limited (PwC), to serve as the Company's external auditor in 2025. The Committee considered that PwC is a leading company with reliable performance, independence, and experience in auditing; with reasonable audit fee. Therefore, the Committee agreed to propose PwC to be the Company's external auditor together with its audit fees to the Board, SAO, and the 2025 Annual General Meeting for further consideration and approval.

In addition, the Committee met with the external auditor to acknowledge the audit plan and observations as well as key audit matters in the auditor's report, and also met separately with the external auditor in the absence of the management to gather additional opinions from the auditor.

The Committee considered the independence of the auditor for non-audit service transactions that engage the company and its affiliates which the external auditor worked for. The Committee also considered and approved the framework for the services on an annual basis (pre-approval). The management reports the summary of such services to the Committee on a quarterly basis. These are to ensure the external auditor's independence. Additionally, the Committee had an opinion on clear disclosure of non-audit fees in the Annual Report (56-1 One Report) so that shareholders are informed of information that may affect the independence of the external auditors.

8) Oversight of Good Corporate Governance and Fraud Prevention

The Committee encouraged the improvement of the Company's business processes and internal control system to ensure comprehensive control over fraud prevention. For example, the Committee promoted procurement through a competitive bidding process and supported the use of analysis of past procurement reports for preparing annual procurement plans in advance. As a result, the proportion of bidding transactions is continuously higher than direct negotiation transactions every year. The Committee also encouraged staff whistleblowing, which allowed a person to raise suspicious misconduct or potential fraud. In addition, the Committee verified the results of the Company's self-evaluation form relating to the anti-corruption system to re-certify as a member of the Thai Private Sector Collective Action Against Corruption (CAC) every three years. In 2024, PTTEP was certified as a member of the CAC for the fourth consecutive time.

9) Review of the appropriateness of the Audit Committee Charter

The Committee reviews the Audit Committee Charter on an annual basis. In 2024, the Committee recommended the revision of the Audit Committee Charter by adding the scope of the Committee's duties on the arrangement of an investigation and analysis of impacts and issues, as well as establishing measures or actions to immediately restrain any suspicious conduct in case that the external auditor finds practices of a person responsible for the operation of the juristic person that appears to be suspicious of committing management malpractice in a fraudulent manner. This is to be in accordance with the Securities and Exchange Act, B.E. 2535 (1992), Section 89/25.

In addition, the Committee also added the scope of duties to monitor the acquisition or disposal of assets with significant value (Material Transactions: MT) including investment transactions under the management's authority, and to consider the reasonableness of fundraising transactions as well as monitor that the use of funds aligns with the objective of fundraising. The additional duties have been identified to conform with the Audit Committee's best practices to prevent and deter inappropriate behavior of listed companies issued by the Securities and Exchange Commission, Thailand (SEC).

In conclusion, in 2024, The Committee fully and independently conducted its roles and responsibilities to ensure that the Company was equipped with good corporate governance and operated with same performance standard as other leading companies in the industry. The Committee reported the results of all meetings to the Board on a monthly basis.

The Committee is confident in the competency of the Internal Audit Division, which consists of personnel with various qualifications, skills, and experiences, enabling them to perform their duties in auditing to cover various aspects efficiently.

The Committee's overall opinion regarding the work in 2024 is that the Company's financial reports were accurate and in compliance with generally accepted accounting standards and International Financial Reporting Standards. The Company also conducted its operations in compliance with the relevant laws and obligations. In addition, the Company has proper risk management, fraud risk management, internal controls, internal audit, and corporate governance.

The Committee's performance was graded "Very Good" by themselves, the Board of Directors, and related agencies.

(Ms. Penchun Jarikasem)
Chairman of the Audit Committee

6.3 The Sub-Committees Report

6.3.1 The Corporate Governance and Sustainability Committee Report

PTTEP emphasizes on operating our business for sustainability by taking into consideration Thailand's goals and the global trends in addressing climate change, driving operations to correspond with energy transition, while adhering to Good Corporate Governance and Business Ethics.

PTTEP's Board of Directors has appointed the Corporate Governance and Sustainability Committee to establish the Company's sustainability target, policy, and roadmap, which covers Governance, Risk Management, and Compliance (GRC) principles, to drive sustainable business operations and growth. The Committee comprises four directors, which includes three independent directors, namely Mr. Phongsthorn Thavisin, Mr. Veerathai Santiprabhob, Mr. Ekniti Nitithanprapas, and Mr. Danucha Pichayanan.

In 2024, the Committee convened four times in which all directors attended every meeting. The agenda items and outcomes of the Committee's undertakings this year can be summarized as follows:

1) Revised PTTEP Good Corporate Governance and Business Ethics (CG&BE) to align with current international standards, including the Organization for Economic Co-operation and Development Principles (OECD) 2023, Corporate Governance Code 2017 from The Securities and Exchange Commission, along with the Ten Principles of the United Nations Global Compact. This is to consequently assure that the CG&BE is an integral part of achieving the Company's sustainability framework under the GRC element.

2) Reviewed GRC targets and work plan (GRC Strategy, Target, and Roadmap) to not only ensure the alignment with international standards but also to promote the application of GRC principles to achieve operational objectives sustainably. The crucial part included the specification of targets and work plans to cultivate a strong GRC-driven culture throughout the Company.

3) Continuously promoted the application of Good Corporate Governance and Business Ethics (CG&BE) throughout operational areas of PTTEP, including the undertakings of directors, the management, and employees through activities, such as workshops to review and enhance understanding of CG&BE principles, enabling all employees to apply in their work. At the same time, vendors were encouraged to participate in the Company's online training on anti-corruption. Employees were also reminded of the importance of conflicts of interest and were required to self-assess their conflicts of interest at least once a year. The Company also raised employees' awareness of the No Gift Policy and invited employees to participate in Anti-Corruption Day activities, PTT Group CG Day 2024, and evaluation programs to help enhance corporate governance standards of the Company. This helps develop PTTEP's good governance standards. More importantly, employees were encouraged to adopt GRC principles to further foster a strong corporate culture for the Company.

4) Considered, monitored, and provided advice on PTTEP implementation of the sustainability strategy, which can be divided as follows:

4.1) Considered the 2025 work plan and budget on sustainability to ensure operational continuity in alignment with PTTEP's sustainability material topics, as well as to achieve the long-term sustainability targets covering Environmental, Social, and Governance (ESG) dimensions. The Committee particularly focused on the work plans under the decarbonization strategy aimed at achieving Net Zero Greenhouse Gas (GHG) Emissions by 2050.

4.2) Reviewed and provided recommendations on GHG emissions reduction management in line with the established implementation plan. This involved revisiting the guideline of the ration on effects of GHG emissions for investment decisions in new Exploration and Production (E&P) projects, including the application of PTTEP's Internal Carbon Pricing (ICP) and its implementation. The Committee also considered the carbon credit management and governance model, as well as set carbon credit portfolio aspiration and strategy through various methods, such as forest conservation and restoration, collaboration with external agencies, and carbon credit acquisition through potential platforms with clear governance structure. Furthermore, the Committee suggested strengthening the GHG measurement, reporting, and data verification along with establishing a concrete decarbonization work plan to proactively cope with global trends in fossil fuel consumption and closely monitor the emerging laws and regulations. The progress shall be presented to the Committee on a quarterly basis to ensure the achievement of decarbonization targets which include reducing the GHG emissions intensity by at least 30 percent by 2030 and 50 percent by 2040, according to the 2020 baseline, and achieving Net Zero GHG Emissions by 2050.

4.3) Monitored the sustainability performance on a quarterly basis to ensure alignment with the annual work plans and targets. Additionally, the promotion of public communication was encouraged to raise public awareness about the effectiveness of the Company's sustainability initiatives, especially by new approaches that could enhance recognition of PTTEP's initiatives such as publicizing the PTTEP Ocean Data Platform to enhance data utilization for studies and research and communicating the importance and benefits of the Carbon Capture Storage (CCS) for Thailand's economy. Furthermore, the Committee provided extensive recommendations on the Company's sustainability efforts, such as creating an adaptation plan relative to "Ocean for Life" strategy, with regard to climate change expanding the PTTEP Ocean Data Platform database and integrating the data with other global platforms to stimulate new research and knowledge for Thailand benefits, along with waste management to ensure target achievement of the Zero Waste to Landfill for domestic operations by 2025.

4.4) Monitored PTTEP's implementation of Corporate Social Responsibility (CSR) projects based on 2023 and 2024 work plans. The Committee recommended the Company to focus on the implementation of CSR projects that are associated with PTTEP's sustainability strategy and advised to prioritize projects based on evaluation of their implementations and social return on investment (SROI). This was to ensure concrete benefits for society and environment, both domestically and internationally, as well as being in line with the concept of sustainability.

4.5) Reviewed sustainability performance reporting and public disclosure to ensure alignment with PTTEP's sustainability material topics as well as Good Corporate Governance and Business Ethics under the 56-1 One Report 2024. Moreover, it was recommended that the content undergo verification by external parties for accuracy and reliability.

5) Supported the continuous arrangement of site visit activities for shareholders. The objectives are to enhance an understanding of PTTEP business, build confidence in investing in the PTTEP, and strengthen long-term relationships between shareholders and the Company.

Throughout the year, the Committee has performed its assigned duty with prudence, competence, and independence to strengthen PTTEP's corporate governance, business ethics, and sustainability development for the optimal benefit of the organization, shareholders, and stakeholders. The Committee also informed the Board of Directors on the performance report on a quarterly basis.

(Mr. Phongsthorn Thavisin)
Chairman of the Corporate Governance
and Sustainability Committee

6.3.2 The Nomination and Remuneration Committee Report

PTTEP's Nomination and Remuneration Committee is an important tool or mechanism under PTTEP's good corporate governance in selecting persons who are qualified to be nominated for election as directors or Chief Executive Officer. The selection method is based on principles and transparency. The work of the Committee also includes consideration of proposals for remuneration for members of the Board of Directors, members of sub-committees, and Chief Executive Officer (CEO), as well as salary structures for senior executives, based on fair and reasonable methods and criteria. PTTEP's Board appointed the Nomination and Remuneration Committee which comprised four independent directors as follows: (1) Mr. Teerapong Wongsiwawilas, (2) Mr. Phongsthorn Thavisin, (3) Admiral Pogkrong Monthardpalin, and (4) General Nithi Chungcharoen

In 2024, the Nomination and Remuneration Committee held a total of nine meetings, and all Nomination and Remuneration Committee members attended every meeting. The summary of their undertakings is as follows:

1) Established the principles for evaluating the performance of the Board of Directors in 2024 (Board Performance Target), with key considerations including monitoring performance results against the Corporate KPIs to achieve established goals, adherence to good corporate governance practices, active participation of directors in meetings, engagement in training and self-development, and the overall performance evaluation of the Board of Directors by external parties, such as the Corporate Governance Survey Project of Listed Companies (CGR) conducted by the Thai Institute of Directors Association (IOD).

2) Evaluated the performance of the Board of Directors, Sub-Committees, and Chairman of the Board, including reviewing and improving the performance evaluation form to ensure it is clear and measurable based on established goals, as well as interpreting the results to develop an operational improvement plan with precision and efficiency, while adhering to the principles of good corporate governance for listed companies (CG Code) as stipulated by the Securities and Exchange Commission. Evaluation results were reported to the Board of Directors.

3) Reviewed and improved the criteria for the qualifications (Skill Matrix) of the Board and considered determining the Board Target Skill Mix to guide the selection of directors replacing those whose terms will expire in 2025 or under other circumstances. This approach aligns with the evolving business environments. In 2025, PTTEP will prioritize three key Skill Mix areas which are (1) Accounting, (2) Legal, and (3) Economics and Finance in order to support both E&P and Beyond E&P business operations, foster investment in new areas, and drive the development of advanced technologies to enable the development of new businesses, enhance the efficiency of current E&P operations, and strengthen compliance with laws and contracts to effectively manage legal risks.

4) Proposed candidates for the Board of Directors and sub-committees with appropriate qualifications based on the Skill Matrix to the Board when a vacancy arises, considering the Board's composition, as well as the knowledge, skills, and experience beneficial to PTTEP. Also, the Committee evaluated factors such as the number of other positions held by the candidate and any potential conflicts of interest. The Committee provided shareholders, both major and minor, with the opportunity to nominate qualified individuals for directorship, ensuring equal treatment, fairness, and appropriateness in the selection process.

5) Determined the qualifications and criteria for selecting the organization's leaders, developed, and formulated a succession plan for the organization's leaders to support the organization's sustainable growth, in line with the business situation and both short-term and long-term strategic plans. Moreover, the Committee considered the criteria for evaluating and determining appropriate compensation for the CEO position.

6) Considered setting the remuneration for the Board of Directors and sub-committees at a level that is appropriate to their responsibilities, aligned with the Company's strategic plans and long-term goals, and comparable to similar businesses within the same industry.

7) Considered the organization's remuneration policy and salary structure to ensure alignment with business objectives, enabling effective implementation of the strategic plan.

The Nomination and Remuneration Committee has diligently performed its duties with prudence and independence, providing advice which is beneficial and appropriate to shareholders and stakeholders. The Committee has also consistently reported its performance to the Board throughout 2024.

(Mr. Teerapong Wongsiwawilas)
Chairman of the Nominating
and Remuneration Committee

6.3.3 The Risk Management Committee Report

PTT Exploration and Production Public Company Limited (PTTEP) is committed to continuously enhancing its risk management practices to ensure that the Company fulfills its vision, mission, goals, and strategies, while also creating long-term value for both the Company and its stakeholders. In 2024, PTTEP continued to be resilient in the face of challenges and risks across in multiple aspects, including the energy transition, severe and unpredictable climate change, natural disasters, disruptive technologies and innovations, escalating geopolitical tensions, fluctuations in oil prices and exchange rates, and evolving cyber threats.

The Board of Directors has appointed the Risk Management Committee to oversee the Company's overall risk management in accordance with the established policies and the risk management framework. The Risk Management Committee comprised of four members, including two independent directors: Mr. Veerathai Santiprabhob, Mr. Wuttikorn Stithit, General Nithi Chungcharoen, and Mr. Wattanapong Kurovat.

In 2024, the Risk Management Committee convened 13 times, including a co-meeting with the Audit Committee. Three members attended all the meetings, while one member was absent once due to a prior commitment. The key meeting agenda items and the Committee's performance can be summarized as follows:

1) Governed strategic risk management at both the corporate strategy and strategy execution levels focusing on three strategic pillars: (1) Drive Value – enhancing the value of the petroleum exploration and production business, (2) Decarbonize – reducing greenhouse gas emissions, and (3) Diversify – growing new business sectors. This ensured that PTTEP could execute its strategies or resiliently adjust them in response to changing internal and external factors in a timely manner. Additionally, the Committee considered the 2025 Work Program and Budget as well as the five-year (2025–2029) investment plan.

2) Monitored risks, including geopolitical events associated with existing projects, and provided recommendations to mitigate the likelihood of potential risks and impacts. This included risk assessments and mitigation plans for G1/61 Project to ensure natural gas delivery to meet contractual obligations, Myanmar Project to maintain continuous operations, and Southwest Vietnam Project for the final investment decision to enter the development phase, while considering both risks and potential economic returns.

3) Screened and provided opinions on the investment expansion in the petroleum exploration and production business, including stake acquisitions and exploration ventures in new areas that align with the investment strategy in key strategic regions, as well as divestments to manage the overall portfolio in alignment with strategic objectives. The Committee also advised on risks and potential opportunities, mitigations, and monitored those risks.

4) Screened and provided opinions on the investment expansion into new businesses and future energy technologies to support the energy transition, as well as advising on investment strategies, risks, and potential opportunities, such as conducting option analyses, forming joint ventures with expert companies to gain insights and expand business opportunities, and monitoring emerging technologies from leading countries to assess potential investment opportunities.

5) Considered the Risk Management Committee Charter, the Risk Governance Framework, the Risk Appetite Statement, Corporate-Level Risk Metrics and Limits, and the Enterprise Risk Management Policy, ensuring that they reflected the implementation of strategies and aligned with evolving business objectives, particularly in strategic risk management and promoting risk management as a core element of the corporate culture. The Committee also advised on enhancing risk management efficiency, such as quarterly monitoring of key assumptions for strategies and applying scenario planning concepts to manage risks in situations with multiple potential outcomes.

6) Attended co-meetings with the Audit Committee to monitor progress on any material transactions involving the Company's investment or divestment projects from 2023 to the present, in accordance with the best practices of the Securities and Exchange Commission (SEC). The Committee also exchanged insights on the 2025 annual audit plan, key recurring audit findings, and strategic risks.

In addition to the above, the Risk Management Committee has continuously overseen the Company's key risks to ensure that they remain within acceptable levels as defined by the Company. These include risks related to exploration and production operations, finance, cybersecurity, legal matters, the environment, and emerging risks. The Committee regularly reports the results of risk management to PTTEP Board on a monthly basis, including prompt updates on key risks that impact the corporate level.

The Risk Management Committee has carried out its duties to the best of its ability, with careful consideration and independence, in overseeing PTTEP's risk management in line with the scope, authority, and responsibilities defined in the Risk Management Committee charter. As a result, PTTEP's risk management has been effectively implemented, successfully achieving the Company's objectives and goals, and ensuring maximum benefits for PTTEP, its shareholders, and stakeholders.

(Mr. Veerathai Santiprabhob)
Chairman of the Risk Management Committee

7. Internal Control and Connected Transactions

7.1 Internal Control

PTTEP places great emphasis on the continuous development of the internal control system by applying the Committee of Sponsoring Organizations of the Treadway Commission (COSO) or COSO 2013 Framework to our business activities adequately and appropriately. This is to provide reasonable assurance that the Company's operations, including utilization of resources and safeguarding of assets, are efficient and effective, the reporting for both financial and non-financial reports are accurate, reliable, timely, and suitable for all applications, and that all business operations are in compliance with relevant laws and regulations. PTTEP also establishes the Internal Control unit, reporting to the Corporate Governance and Subsidiary Management Department, to be responsible for governing and supporting our business operations in alignment with the Internal Control Policy as well as to assess the efficiency of the internal control system throughout the organization. The assessment is subsequently reported and reviewed by the Audit Committee every year.

7.1.1 Adequacy and Suitability of the Internal Control System

PTTEP assesses internal control system annually based on the internal control adequacy evaluation form of the Securities and Exchange Commission (SEC), which adhered to the five components of COSO 2013 Framework, namely (1) Control Environment, (2) Risk Assessment, (3) Control Activities, (4) Information and Communication, and (5) Monitoring Activities. The 2024 assessment results are as follows:

1) Control Environment

PTTEP has established a sufficient and suitable control environment which promotes effective and efficient business operations. The Board of Directors (Board) and the management have cultivated an ethical working environment under the principles of Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) to achieve objectives of "Growth, Prosperity, Stability, Sustainability, and Dignity." Main activities conducted by our control environment can be summarized as follows:

- PTTEP has incorporated a written principle of CG&BE in the internal regulations of PTTEP Group. The Board, the management, and employees at all levels are required to sign the commitment form to formally acknowledge and strictly conform to the CG&BE. They are also required to self-assess their conflicts of interest annually. Moreover, Integrity & Ethics is also embedded as one of PTTEP's Corporate Values (*EP* SPIRIT) to reflect the Company's emphasis and strong intention that the CG&BE principles be implemented as fundamental for our transparent and auditable business operations. All employees also receive a formal communication regarding our CG&BE along with a booklet to be used as a reference at the very beginning of their employment.

- PTTEP emphasizes the communication of good practices according to the CG&BE and the consequential penalties in case of a breach to ensure that it is well understood by the management and employees, both domestically and internationally,

through email and other communication activities. Topics that are communicated include the use and protection of information and assets of the Company including confidential information, anti-fraud and corruption, trade competition, and anti-money laundering. There are additional communications on dos/don'ts regarding actions that may result in fraud, email alerts regarding blackout periods for securities trading to prevent insider trading issues, induction programs for new directors, the management, and employees, as well as e-learning and CG&BE Train the Trainer courses. PTTEP also publicizes CG&BE on the Company's website to communicate with external stakeholders and demonstrate a strong will through the Company's policy in encouraging our business alliances, including joint venture partners, suppliers/ vendors, and company representatives, to operate with integrity and to avoid involvement in any form of corruption. In addition, online training and assessments are also specifically arranged for our vendors to ensure that PTTEP's anti-corruption practices are well-understood. Moreover, whistleblowing cases and consequences have been appropriately managed, in case an actual offense is committed. The Company also has a strong stance against corruption together with the public sector and civil society by continually participating in anti-corruption activities, such as the certification of the Thai Private Sector Collective Action Against Corruption (CAC), as well as joining Thailand's National Anti-Corruption Day and International Anti-Corruption Day activities.

- PTTEP monitors and assesses whether the Company's Business Ethics are being followed by the performance of responsible Second Line units in related areas, such as the use of information technology and electronic devices by the Information Management System unit, monitoring of legal compliance by the Compliance unit, procurement and contract by the Supply Chain Intelligence and Solutions unit along with the Procurement unit. The Internal Audit Division plays the Third Line role with the task of independently auditing operations to verify compliance with internal regulations and efficiency of the Company's internal control system in accordance with international standards. This is to ensure that the management and employees can effectively integrate ethical conduct into the course of their work. Moreover, PTTEP is regularly evaluated by external independent parties such as the Corporate Governance Report of Thai Listed Companies held by the Thai Institute of Directors Association (IOD), the Dow Jones Sustainability Indices (DJSI), the ASEAN CG Scorecard, the Thai Private Sector Collective Action Against Corruption (CAC), and the NACC Integrity Awards by the National Anti-Corruption Commission (NACC).

- PTTEP establishes clear Segregation of Duties (SoD) between the Board and the management. The Board's duties are to oversee corporate strategies and goals without performing routine operations as the management does, as well as to follow up on business performance by the management to ensure the achievement of strategic plans, operational directions, objectives, and policies as determined. The Board also ensures that strategies and policies are agile, suitable, as well as adequate to allow smooth and efficient operations under the business environment at the particular times; thus enabling the Company's sustainable growth. Meanwhile, the management has the responsibilities to oversee and operate

the organization in alignment with the established Board's direction and report operational performances to the Board on a regular basis.

- In 2024, the Board had continuously focused on the operations according to corporate strategies which are determined to sustain energy security, respond to emerging crisis and energy transition, along with preserving the environment. Since decarbonization constitutes a key strategy, the Board has set the target to achieve Net Zero Greenhouse Gas Emissions in 2050, and reduce greenhouse gas emission intensity by at least 30 percent by 2030 and 50% by 2040 (from the 2020 base year) by the following actions:

  1) Managing E&P portfolio to transform PTTEP into a low-carbon organization by investing in projects that are in line with the Company's Net Zero Greenhouse Gas Emissions target.

  2) Developing the technology to reduce excess greenhouse gas emissions from the petroleum production process (Production and Planet in Balance) with the aim of zero routine flare for future projects which is to be used in parallel with Carbon Capture and Storage (CCS). In addition, more renewable energy, such as solar and wind power, are to be utilized, along with exploration for new forms of energy, such as hydrogen for electrical generation at operating sites. The Company has also explored opportunities and technologies on Carbon Capture and Utilization (CCU) by converting carbon into valuable products or materials for the future.

  3) Accumulating carbon credits to offset the excess from greenhouse gas emission target in 2050, which is in accordance with the guidelines from the Board. These include Carbon Credit Management, Net Zero Greenhouse Gas Emissions in all countries where the company operates, and opportunities to develop greenhouse gas offsetting projects in the future. The management shall report the progress to the Board on a quarterly basis for the purposes of monitoring and evaluating the performance to ensure balance and effectiveness, in order to achieve maximum benefits for the Company and all stakeholders in the long-term and sustainable manner.

- PTTEP's organization structure is designed to accommodate the Company's businesses, which involve both petroleum exploration and production business (E&P) and businesses beyond E&P, with the flexibility and ability to drive strategic business plans and emerge through the energy transition. The Company has been able to manage corporate resources efficiently with cost competitiveness under safety standards. In addition, the Company's segregation of duty as well as checks and balances are in line with internal control principles. In 2024, the Company has undergone organizational restructuring to enhance efficiency in operations and support growth for E&P and new businesses, including carbon management and decarbonization targets. The restructuring included, for instance, the establishment of Supply Chain Intelligence and Solutions Department to focus on the long-term supply chain strategies, the establishment of Maintenance and Asset Integrity Division to strategically drive maintenance and inspection executions along with continuous productions and support relative operations from beyond E&P businesses, and the centralization of E&P and beyond E&P legal work scopes under the Legal Division.

- PTTEP has determined reporting lines, duties, and responsibilities in the organizational structure as well as authorities corresponding to the Company's business requirements and responsibilities. They are clearly defined and documented under the Company's Functional Description and the Delegation of Authority and Signature (DAS) as well as communicated to all employees in case of any changes. All information is consolidated on PTTEP intranet to serve as a reliable reference for employees.

- PTTEP has established a written regulation on human resource management which focuses on recruiting, developing, and retaining competent employees to support businesses and accommodate short-term and long-term organizational growth.

- PTTEP regularly assesses current and future manpower demands by reviewing the qualifications of required and requested positions to support business growth both short-term and long-term. Manpower plans and human resource management strategies are reviewed annually in parallel with the development of the Company's strategy and business directions. In addition, specific development plans for high potentials, management succession plans, as well as job rotation and promotion plans have also been conducted. Since 2022, PTTEP has reviewed and added human resource development goals to support the beyond E&P businesses, allocate manpower, develop success profiles, management succession plans, internal and external recruitment plans, as well as employee development plans (reskill/upskill) to support new businesses. In 2024, PTTEP has conducted Employee Engagement Survey which is carried out every two years to obtain current employee satisfaction levels and develop the policies and improvement plans aimed at motivating, developing, and retaining the employees. Executives will communicate the survey results to employees and establish improvement plans to enhance employee engagement.

- PTTEP has established a clear process of employee performance appraisal where factors such as achievability, practicality, and alignment with current corporate strategy have been taken into account. Employees and their supervisors are encouraged to periodically review their KPI targets, progress, or any limitations so that appropriate revisions on the KPIs and targets can be agreed upon. The Company also maintains a pay-for-performance compensation system to retain highly competent individuals and comprehensive performance appraisal system through the 360º Evaluation System which aligns with PTTEP's corporate values (*EP* SPIRIT). In addition, the Company adopts an integrated system for employees' annual remuneration increase and bonus payment to enhance the efficiency of performance evaluation as well as compensation budget monitoring and management.

- PTTEP has established both the Internal Control Policy and the Internal Control Standard. These documents have been consistently communicated with the management and employees through training courses, activities, and publications, such as the organization-wide communication on internal control to domestic and overseas employees, and the online learning materials on internal control. This is to ensure an accurate understanding of the principles, roles, and responsibilities of each individual in relation to the internal control system. Moreover, PTTEP, which is defined as a state enterprise under the State Fiscal and Financial Disciplines Act, B.E. 2561 (2018), has appointed the Internal Control Committee as stipulated by the Ministry of Finance's Rule on Internal Control Standard and Guidelines for Government Agency, B.E. 2561 (2018) to ensure that the Company's operations are in compliance with the mentioned laws and regulations. In addition, the Board has assigned the Audit Committee to oversee and provide advice on the Company's internal control and internal audit systems, as well as financial reports, along with the selection and nomination of the Company's external auditor according to the roles and responsibilities as detailed in the Audit Committee Charter.

- In 2023, PTTEP has conducted the GRC Maturity Assessment and used the results to develop key improvements in Governance, Risk Management, and Compliance (GRC) operations during 2024, with the goal of enhancing GRC effectiveness and achieving targeted objectives. Initiatives included the refinement of GRC Operating Model as a foundation for oversight, management, monitoring, and reporting

of GRC activities, the establishment of Integrated GRC Work Process to ensure clearer and more efficient connections within and across GRC-related functions, as well as the fostering of GRC culture through regular communication, activities, and training programs. These efforts aim to raise awareness, understanding, and practical application of GRC principles among all management and employees, both domestically and internationally. Additionally, PTTEP emphasizes extending GRC knowledge to various stakeholders, including suppliers and contractors.

2) Risk Assessment

PTTEP places importance on risk management by appointing the Risk Management Committee to be responsible for setting related policy and risk appetite, as well as overseeing the effectiveness of company-wide risk management. The Company has also applied the ISO 31000 Risk Management and COSO Enterprise Risk Management (ERM) concepts across the organization whereby all types of risk and corruption possibilities, as well as key changes that may affect business operations, are taken into consideration to manage such risks in a timely manner. These risk management approaches can be summarized as follows:

- PTTEP has specified the Risk Management Committee Charter, Risk Governance Framework, and key documents related to risk management including Risk Appetite Statement, Corporate Level Risk Metrics & Limits, Enterprise Risk Management Policy, and Risk Management Guideline to clearly define roles, responsibilities, and authorities relevant to risk management at all levels across the Company, including the Board, Risk Management Committee, the management, as well as supporting and operational business units. It is also ensured that the contents of each document are aligned with the dynamic business environment and communicated corporate-wide on a regular basis.

- PTTEP regularly communicates Standard, Guideline, Process, and Tools related to risk management to the management and employees through various channels, such as training for the management, employees as well as Risk Coordinators, along with workshops and email communications to enhance understanding of all personnel and to ensure the concepts and practices can be applied to their respective work in order to ensure that the Company achieves its objectives.

- PTTEP manages risks throughout the organization based on five key areas: (1) Strategic Planning and Management, (2) Investment and Divestment Decision-Making, (3) Capital Project Management, (4) Operational and Business Process, and (5) Environmental, Social, and Governance (ESG). With these, five risk categories have been set up to comprehensively cover all risk areas: (1) Strategic/ Portfolio Risk, (2) Financial/Market Risk, (3) Shareholder/ Political & Regulatory Risk, (4) Operational Risk, and (5) Major Project Management Risk. In 2024, the Company developed a web-based risk registration system (Risk Register) by adding strategic risk registration which is high-level management for relevant units to better identify and assess risk at all levels, allowing for the development of Risk Profile at various levels through Event Risk Profile, ranging from the level of corporate to function group, division, department, and asset/project level. In addition, strategic risks are regularly reported to Management Committee (MC) and Risk Management Committee (RMC) on a quarterly basis.

- PTTEP integrates risk management reports with other assurance reports within the GRC One Dashboard to centralize GRC database and provide management with real-time reporting.

- PTTEP performs risk assessment from all-round factors that may impact corporate performance, including (1) internal factors such as strategic risk, risks in exploration, development, and production,

investment risk of existing and new projects, personnel competency risk, financial risk, and (2) external factors such as volatility risks in oil and petroleum product prices, foreign exchange rates, and interest rates, geopolitical risk, legal risk, climate change, and cybersecurity risk.

- PTTEP prepares and reviews risk management action plans and reports to the management and Risk Management Committee regularly. Key Risk Indicators (KRIs) are also established as an early warning tool to monitor and determine risk mitigations in a timely manner.

- PTTEP appointed the Hedging Committee to oversee and manage petroleum price risk and financial risk more efficiently.

- PTTEP has established the Business Continuity Management Policy, Business Continuity Management Standard, Corporate Business Continuity Procedure, Business Continuity Management System (BCMS) Audit Procedure, Business Impact Analysis Guideline, and Business Continuity Plan Guideline which are in alignment with the ISO 22301:2019 standard as demonstrated by the certifications possessed by critical assets. In 2023, PTTEP developed a centralized BCMS Management (PTTEP ONE ISO 22301 BCMS) and enhanced BCMS Digital Platform to maximize the competency of the Company's business continuity management.

- At the corporate level, PTTEP assesses business activities that face high exposure to fraud risk, which comprises risks from asset misappropriation, corruption, fraudulent practices, or misstatement of financial reporting. The Company considers historical information and future possibilities of fraud to evaluate the likelihood and develop the corresponding Corporate Risk Profile.

- At the process level, process owners are responsible for managing both fraud and operational risks arising from processes under their responsibilities and developing internal control corresponding to such risks with the aim to efficiently and effectively improve our internal control measures.

- PTTEP's Audit Committee assigns the Internal Audit Division to carry out audits on high-risk areas which may lead to fraud and be responsible for regularly assessing audit results and measures taken to prevent and mitigate fraud.

- PTTEP regularly considers, revises, and approves strategic plans, as well as monitors and reviews related performance, to ensure that business goals remain reasonable and consistent with the changing situations. The Company closely monitors changes in key factors that may affect PTTEP, such as oil prices, global and domestic economic situations, geopolitics, foreign exchange rates, laws and regulations, government policies, climate change, and technological advancements. This is to ensure that PTTEP is able to respond to the risks that have arisen from such factors or any emerging risks in a timely manner.

- PTTEP prepares for the energy transition and attempts to achieve sustainable growth goals by establishing the Technology, Carbon Solutions, and Sustainable Growth Group to drive and oversee new businesses in alignment with ongoing industry transformations. The Strategy and Business Management unit is responsible for studying, developing strategic plans, overseeing new business activities, monitoring progress and performance, and managing risks, all of which are presented to the Board and management for consideration. Additionally, the Company has implemented Standard of PTTEP Group Governance & Subsidiary Management for the companies PTTEP Group to effectively oversee subsidiaries with varying business models, such as AI and Robotics Ventures Company Limited (ARV), FutureTech Energy Ventures Company Limited (FTEV), and Xplor Ventures Company Limited (XPV).

3) Control Activities

PTTEP has adequate control activities according to the Company's risk appetite as well as to each business unit's operational environment or activities. Appropriate control activities, including preventive, detective, and corrective controls, have been established to mitigate risks along with being periodically reviewed and improved. Deployment of controls is, for instance, the application of policies, work processes, appropriate organizational restructuring, and technological systems. The Company also encourages employees to be strictly and constantly aware of the importance of adherence to control activities and compliance with related laws and regulations to ensure that our internal control system is as effective as designed. The key control activities can be summarized as follows:

- PTTEP has prescribed sets of written regulations, policies, standards, and procedures that the management and employees must strictly comply with. The management is responsible for overseeing and monitoring compliance with such regulations, policies, standards, and procedures. In 2024, to ensure higher work efficiency within the organization, the Company developed and updated corporate regulations, policies, standards, and procedures to revisit and improve work efficiency, such as Procurement Regulation, Compliance Policy, Human Resource Management Standards, and Corporate Business Continuity Procedure. In addition, authorizations concerning procurement, including financial amount and management level, are also specified under the Delegation of Authority and Signature (DAS).

- PTTEP recognizes the significance of control activities at the process level, including Segregation of Duties (SoD), review, and authorization of transactions, to ensure that the Company's business operations are efficient and able to prevent fraudulent acts. In 2024, the Company, together with external consultant, performed the Control Self-Assessment (CSA) whereby the processes conducted this year comprised Safety Security Health and Environment (SSHE), Branding and Communications & Knowledge Intelligence and Operational Excellence, Thai Offshore 2 & 3 Assets (G2/61 and Arthit projects), Thai Onshore Assets (Suphanburi and Sinphuhorm projects), Tax Management, and PTTEP Services Limited (PSL) to ensure the adequacy and appropriateness of the existing controls to achieve related business objectives.

- PTTEP develops general control measures over information technology (IT) system and physical equipment security, including data backup and recovery, to ensure business continuity amidst any disruptions. The Company's IT security policy has been issued and implemented across the organization to ensure compliance with good corporate governance guidelines. The Company has also complied with the COBIT 2019 framework and information security management system standard (Zero Trust, ISO 27001, NIST) by; for example, requiring that all employees must be able to access crucial database and communicate among each other internally and externally from anywhere at any time with the highest security via Office 365 Cloud Platform in order to support the Hybrid Workplace Policy. Other examples include the development and integration of various approval workflow systems on the ServiceNow Cloud Platform so that requests and approvals can be performed from anywhere at any time, the implementation of Azure Active Directory technology to control access of the management and employees to various information resources of the Company, the requirement of all personnel to use Multi-Factor Authentication (MFA) to add an extra layer of protection when accessing an account or application where additional credentials must be verified from the mobile phone registered with PTTEP apart from the regular username and password. Moreover, in accordance with the Personal Data Protection Act, B.E. 2562 (2019), the Company has also developed a management system for collecting and destroying cookies, including the cookie consent banner, privacy notice, and data consent form for

any of PTTEP's applications. For external access into PTTEP system, external service providers shall request access through the Privilege Access Management (PAM) in order to effectively control the scope and period of time that the external service providers can access PTTEP's computer system. In 2023, the Company was certified on the Information Security Management System (ISMS) related to data center and supporting facilities governed by PTTEP in accordance with the Statement of Applicability dated September 2, 2023.

- PTTEP manages risks on information management system and implements the Software Asset Management to monitor and control the use of licensed software.

- PTTEP launches an integrated risk management among business units relative to digital technology, covering information technology (IT), operational technology (OT), and other related functions. This collaboration aims to jointly manage potential IT-related risks across all domains.

- PTTEP communicates laws and regulations, information on data security, and guidelines on the usage of information, as well as conducts compulsory training to raise cyber security awareness among employees with annual monitoring to ensure that all employees are fully aware of cyber threats. This shall consequently reduce related risks, such as phishing email or ransomware. Additionally, cybersecurity awareness training is also offered to the Company's contractors and service providers.

- PTTEP regularly oversees its subsidiaries, associated companies, and joint ventures by assigning the Company's management and employees to manage these entities. The Company has developed the Subsidiary Directors Guideline for the assigned persons to ensure standardized subsidiary directors' roles and responsibilities in alignment with PTTEP Group Governance and Subsidiary Management. As for the governance of PTTEP and our subsidiaries, PTTEP's DAS is the reference for E&P businesses, while the assigned directors from PTTEP are in charge of beyond E&P businesses. The Internal Audit Division also has the responsibility to audit assets/projects in which the Company has invested independently.

4) Information and Communication

PTTEP realizes the significance of information and communication systems, particularly the quality of data processing systems to provide quality, appropriate, and sufficient information to support business operations and make effective decisions. The Company has functional internal and external communication channels and systems in place to support the internal control system. Moreover, communication channel is made available for PTTEP employees, external parties, or stakeholders to confidentially report their concerns or complaints. The Company's key information and communication activities can be summarized as follows:

- PTTEP validates data and information from internal and external sources after being reviewed by responsible units before making business decisions. In addition, the Company imposes the confidentiality and accessibility of usage as well as protection of information in both physical and digital formats, including data classification to prevent the disclosure of the Company's sensitive or confidential information.

- PTTEP has developed the Corporate Reference Document Center or FindMe as the information infrastructure to store and manage important business documents in accordance with document management standards within a single access channel.

- In terms of internal communication, PTTEP has effective and efficient internal channels to ensure that the management and employees have access to essential information to fulfill their work requirements and achieve their respective targets, along with restricted communications to relative employees.

The Company has arranged town halls, at both corporate and function group levels, to ensure that employees from all units are updated and have their views heard on key developments and information, contributing to the Company's overall directions. The Company also stresses the importance of implementing internal control in a thorough and consistent manner.

- As for external communication, PTTEP establishes business units that are responsible for communicating with each specific group of stakeholders, such as Investor Relations; Corporate Communication; Corporate Secretary and Assurance; and Safety, Security, Health, and Environment units. This is to ensure that any information disclosed to external stakeholders is accurate, complete, sufficient, transparent, timely, and regularly communicated. The Company continually provides updated information to our stakeholders in various areas, particularly on business growth, activities related to Corporate Social Responsibility (CSR), and policy on Safety, Security, Health, and Environment. PTTEP also provides publications for analysts, fund managers, shareholders, and contractors to enhance a better understanding of the E&P business through various activities, such as analyst meetings, conference calls, digital roadshow, virtual conference, and Contractor Forum.

- PTTEP maintains the availability of whistleblowing channels according to the Whistleblowing Regulation for employees and external stakeholders to accurately, completely, and timely report wrongdoings of the Company via letters, emails, and online reporting system on PTTEP's website.

5) Monitoring Activities

PTTEP regularly monitors and assesses the effectiveness of our internal control system through ongoing evaluations, which are built into the Company's daily operational activities together with independent evaluations, to ensure that the system is sufficient and suitable for the current business environment and dynamic risk factors. Should any deficiency be identified, improvement plans will be developed and responsible parties will be assigned to respond with timely resolutions. In terms of independent evaluations, the Company has developed Control Self-Assessment (CSA) on an annual basis at both corporate and business process levels. In addition, the Internal Audit Division, which has a direct reporting line to the Audit Committee, has the responsibility of performing independent audits correspondingly. PTTEP's monitoring activities can be summarized as follows:

- PTTEP performs two levels of Control Self-Assessment (CSA), namely (1) corporate level where the evaluation is conducted by all management and in line with the COSO Framework and (2) process level where related process owners are required to assess controls of their processes and review the assessment results at a specific timeframe. The Internal Control unit then monitors the progress of the internal control improvement implementation. Moreover, a digital platform for online assessment, UControl System, has been developed to systematically present the management with information on key risks of individual processes and relative existing controls, as well as to make available the integrated analysis of control assessments which can be accessed at any time.

- The Corporate Governance and Subsidiary Management Department is responsible for monitoring and reporting on (1) compliance with external laws and regulations, where the report is to be submitted to the Chief Executive Officer (CEO) and the Risk Management Committee on a monthly basis and reported to the Audit Committee twice a year and (2) compliance with internal regulations and policies in key areas, where the report is to be submitted to the CEO and Management Committee on a monthly basis. The Company utilizes the NC Easy Report system for overall non-compliance reporting to facilitate the management in analyzing and considering ways forward to appropriately and effectively improve the relevant processes, thereby reducing the occurrence of non-compliance cases in the future. In 2024, Compliance Testing has been performed in three business units/areas, namely (1) Engineering, Development, and Maintenance Group, (2) PTTEP Technology and Innovation Center (PTIC), (3) FutureTech Solar (Thailand) Company Limited (FST), PTTEP subsidiary. Furthermore, the Company has also developed the Compliance Testing Report system to record and monitor Compliance Testing performance to ensure that PTTEP fully and accurately complies with relevant laws.

- PTTEP requires all employees to submit the annual conflicts of interest disclosure once per year and at least twice per year for employees under the Procurement and Contract unit, or employees shall declare every time when there is involvement in such activities. The report shall be submitted via printed form or online channel, PTTEP CG&BE Report System, which aims to enhance the convenience and efficiency of reporting.

- The Internal Audit Division is responsible for auditing and providing recommendations for improvement to ensure that the determined internal controls have been complied with. The Internal Audit Division is also responsible for providing recommendations or developing improvement plans to resolve any issues identified and subsequently communicate with responsible parties. The Internal Control unit is also informed to further support the improvement plans as well as to regularly report the findings and improvement progress to the Audit Committee. The Internal Audit Division is required to annually perform the Quality Assurance Review – Internal Self-Assessment, and is additionally subject to audit quality assessment performed by an external agency every five years. In 2023, the internal assessment was performed in the first quarter of 2024 and concluded that the internal audit practice was in alignment with international standards, with improvement plans recommended for quality enhancement.

- The Continuous Control Monitoring System (CCMS) was established to monitor Procure to Pay Process and Inventory Management Process and notify the responsible parties in case any irregular transactions are detected to proceed with appropriate corrections. Furthermore, PTTEP's whistleblowing system is another method to monitor and assess the Company's CG&BE implementation.

Board of Directors' Evaluation of PTTEP's Internal Control System

In 2024, the Board of Directors evaluated PTTEP's internal control system, subsequent to the Audit Committee's review on the information according to the Internal Control Sufficiency Evaluation Form of the Securities and Exchange Commission (SEC) which is based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Framework and includes the aforementioned five components: (1) Control Environment, (2) Risk Assessment, (3) Control Activities, (4) Information and Communication, and (5) Monitoring Activities. The Board, after reviewing the report from the Audit Committee, considers that PTTEP's internal control system is adequate and appropriate and that the Company has arranged sufficient personnel to efficiently operate businesses in accordance with an internal control system. Moreover, PTTEP has implemented the internal control system to oversee and monitor the operations of our subsidiaries, to ensure the protection of the assets of the Company and its subsidiaries from improper or unauthorized use by directors or management as well as to prevent transactions with persons who may have conflicts of interest and connected transactions.

7.1.2 Internal Control Deficiencies

- None -

7.1.3 Audit Committee's Evaluation in Case it is Different from the Board of Directors

- None -

7.1.4 Audit Committee's Opinion on the Position of the Head of the Internal Audit Division

The Audit Committee is of the opinion that the Head of the Internal Audit Division has the appropriate and sufficient educational background, work experience, and necessary knowledge to perform duties. Details are disclosed in the "Governance Structure and Key Data on the Board of Directors, Sub-Committees, Management, Employees and Others" section, under the sub-topic of "Head of the Internal Audit Division."

7.1.5 Practices for the Appointment, Removal, and Transfer of the Head of the Internal Audit Division

The Audit Committee has a duty to endorse the appointment, transfer, removal, promotion, and performance appraisal of the Head of the Internal Audit Division. Details are disclosed in the "Governance Structure and Key Data on the Board of Directors, Sub-Committees, Management, Employees and Others" section, under the sub-topic of "Head of the Internal Audit Division."

7.2 Connected Transactions

7.2.1 Connected transactions between PTTEP and our subsidiaries and other entities that may result in conflicts of interest in the fiscal year ending December 31, 2024, were as follows:

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
PTT Public Company Limited (PTT)	• PTT, the Company's major shareholder, (directly) holds 63.79% of the Company's registered and paid-up capital.	Petroleum product sales: crude oil, natural gas, liquefied petroleum gas, and condensate ◦ Total income ◦ Accounts receivable	5,788.15 540.65	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Other income includes: • Income from infrastructure services to support petroleum development such as warehouse, helicopter, and accommodation for PTT personnel at Arthit, G1/61, and G2/61 projects • Income from charges to PTT for working areas at Arthit, Bongkot, G1/61, and G2/61 projects' production platforms based on the Gas Sales Agreement • Income from charges to PTT for gas receiving areas, working areas, and accommodation on platforms based on the Greater Bongkot South Field's Gas Sales Agreement • Income from the jetty and warehouse rentals provided by the Petroleum Development Support Base (PSB) • Income from the Company's personnel seconded to PTT • Income from service charges for the management's drivers based on the agreement between PTT and PTTEP Services, a subsidiary of PTTEP • Income from office building rental and facility management such as water, electricity, air conditioning, parking, and project management fees provided by Energy Complex Company Limited (EnCo), a subsidiary of PTTEP		• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
		• Income from Flare Tip Inspection PRP ERP 2024 provided by AI and Robotics Ventures Company Limited (ARV) Group, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 18.24 4.20	
		Purchase of petroleum products and related expenses, manpower charges for PTT personnel seconded to the Company and subsidiaries, and other expenses ◦ Total expenses ◦ Accounts payable	 4.71 0.46	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations. • Manpower rates are based on the actual rates PTT pays to employees seconded to PTTEP.
		Deferred compensation that is the Company's obligation based on the Arthit Project's Gas Sales Agreement ◦ Accounts payable	 1.41	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.24	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
Energy Complex Company Limited (EnCo)	• PTT, the Company's major shareholder, holds 50% of EnCo's registered and paid-up capital. • PTTEP, EnCo's major shareholder, holds 50% of EnCo's registered and paid-up capital.	Income from the following: • Dividend income • Income from the Company's personnel seconded to EnCo ◦ Total income ◦ Accounts receivable including prepaid expenses of the hotel fee at THE EnCony Residential Hotel	 2.09 0.06	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations. • Manpower rates are based on the actual rates the Company pays to employees seconded to EnCo.
		Lease and services expenses from the following: • The Company has signed a three-year lease agreement with Energy Complex to rent the office building, storage, and common areas at EnCo. The Company is eligible to extend its lease agreement for another three years. • The storage fee at EnCo Terminal (EnTer) • The hotel fee at THE EnCony Residential Hotel ◦ Total lease and service expenses ◦ Accounts payable	 10.85 0.45	• The leasing rate is based on the market rate of the office building lease and follows normal business operations, at an arm's length basis for non-related persons or operations.
PTT Digital Solutions Company Limited (PTT Digital)	• PTT, the Company's major shareholder, holds 20% of PTT Digital's registered and paid-up capital. • PTTEP holds 20% of PTT Digital's registered and paid-up capital.	Income from the following: • Income from the Company's personnel seconded to PTT Digital • Dividend income • Income from equipment storage rentals provided by the Petroleum Development Support Base (PSB) • Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 2.79 0.50	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations. • Manpower rates are based on the actual rates the Company pays to employees seconded to PTT Digital.
		The Company and its subsidiaries have signed a contract with PTT Digital for IT services and communications. ◦ Total expenses ◦ Accounts payables	 56.39 7.98	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.25	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Business Services Alliance Company Limited (BSA)	• PTT, the Company's major shareholder, holds 25% of BSA's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.35 0.10	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Expenses from the following: • Expenses for field trip • Manpower charges for BSA personnel providing service as the management's drivers. • Manpower charges for BSA personnel providing services, based on the agreement between BSA and EnCo, a subsidiary of PTTEP at (1) Energy Complex, (2) PTT headquarters, (3) PTT Research and Technology Institute in Wang Noi District, Phra Nakhon Si Ayutthaya Province, and (4) PTT Research and Technology Institute in Wang Chan District, Rayong Province ◦ Total expenses ◦ Accounts payable	 1.02 0.19	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.21	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
IRPC Public Company Limited (IRPC)	• PTT, the Company's major shareholder, holds 45.05% of IRPC's registered and paid-up capital.	Income from the following: • Income from the jetty and warehouse rentals provided by the Petroleum Development Support Base (PSB) • Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 1.15 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Service fee for equipment inspection of "Pressure Transmitter Yokogawa Model & Pressure gauge precision range" which is used for measurement of gas pressure for S1 Project ◦ Total expenses ◦ Accounts payable	 0.0004 -	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.24	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Thai Oil Public Company Limited (TOP)	• PTT, the Company's major shareholder, holds 45.03% of TOP's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.95 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.22	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Global Chemical Public Company Limited (GC)	• PTT, the Company's major shareholder, holds 45.18% of GC's registered and paid-up capital.	Income from the following: • Income from meeting room rentals • Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 2.27 0.51	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
		Mercury analysis fees for the Gas Processing Plant (GPP) of PTTEP SP Limited, a subsidiary of PTTEP ◦ Total expenses ◦ Accounts payable	 0.05 0.04	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.60	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Natural Gas Distribution Company Limited (PTT NGD)	• PTT, the Company's major shareholder, holds 58% of PTT NGD's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.16 0.0021	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.04	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Retail Management Company Limited (PTTRM)	• PTT, the Company's major shareholder, holds 75% of PTT Oil and Retail Business Public Company Limited (OR)'s registered and paid-up capital. • OR, the major shareholder of PTTRM, holds 100% of PTTRM's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.03 0.0024	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
		Expenses for drinking water for EnCo, a subsidiary of PTTEP ◦ Total Expenses ◦ Accounts payable	 0.0017 0.0009	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Tank Terminal Company Limited (PTT Tank)	• PTT, the Company's major shareholder, holds 100% of PTT Tank's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.05 0.002	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Trans Thai-Malaysia (Thailand) Limited (TTM)	• PTT, the Company's major shareholder, holds 50% of TTM's registered and paid-up capital.	Income from warehouse rentals provided by the Petroleum Development Support Base (PSB) ◦ Total income ◦ Accounts receivable	 0.01 0.0018	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT International Trading Pte. Ltd. (PTTT)	• PTT, the Company's major shareholder, holds 100% of PTTT's registered and paid-up capital.	Petroleum product sales: crude oil ◦ Total income ◦ Accounts receivable	 560.28 47.67	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
		Income from oil price hedging contracts ◦ Total income ◦ Accounts receivable	 6.05 1.39	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Expenses from oil price hedging contracts ◦ Total expenses ◦ Accounts payable	 6.45 3.38	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT International Trading London Ltd. (PTTT LDN)	• PTT, the Company's major shareholder, holds 100% of PTTT LDN's registered and paid-up capital.	Petroleum product sales: crude oil ◦ Total income ◦ Accounts receivable	 318.01 50.52	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Global Power Synergy Company Limited (GPSC)	• PTT, the Company's major shareholder, holds 47.27% of GPSC's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.70 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.17	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Sarn Palung Social Enterprise Company Limited (SPSE)	• PTT, the Company's major shareholder, holds 20% of SPSE's registered and paid-up capital. • PTTEP holds 15% of SPSE's registered and paid-up capital.	Expenses from Me to We project's t-shirts ◦ Total expenses ◦ Accounts payable	 0.06 -	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
PTT Global LNG Company Limited (PTTGL)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital. • SMH holds 100% of PTTGL's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.09 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT LNG Company Limited (PTTLNG)	• PTT, the Company's major shareholder, holds 100% of PTTLNG's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.08 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.02	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
PTT Oil and Retail Business Public Company Limited (OR)	• PTT, the Company's major shareholder, holds 75% of OR's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 5.26 1.52	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Expenses from the following: • Purchase of petroleum products and related expenses • Expenses such as fuel, petrol, and drinking water paid by EnCo, a subsidiary of PTTEP ◦ Total expenses ◦ Accounts payables	 104.96 11.87	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.59	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Green Energy Company Limited (PTT GE)	• PTT, the Company's major shareholder, holds 100% of PTT GE's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.004 -	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.0024	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Treasury Center Company Limited (PTT TCC)	• PTT, the Company's major shareholder, holds 100% of PTT TCC's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.03 0.0003	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Innobic (Asia) Company Limited	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Innobic (Asia) Company Limited.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking and refurbishment fees provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	0.12 0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Expense paid by Enco, a subsidiary of PTTEP ◦ Total expenses ◦ Accounts payable	- 0.0003	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.03	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
ARUN PLUS Company Limited (ARUN PLUS)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital.	Income from parking rentals and electricity provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	0.02 0.0014	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Interest expenses for electric vehicle (EV) contract and installation expenses for EV chargers paid by EnCo, a subsidiary of PTTEP ◦ Total expenses ◦ Accounts payable	0.004 0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
	• GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital. • SMH holds 100% of Alpha Com Company Limited (Alpha Com)'s registered and paid-up capital. • Alpha Com holds 100% of ARUN PLUS's registered and paid-up capital.			
EVME PLUS Company Limited (EVME PLUS)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.0016 -	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Interest expenses for electric vehicle (EV) contract paid by EnCo, a subsidiary of PTTEP ◦ Total expenses ◦ Accounts payables	 0.0009 0.0007	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
	• SMH holds 100% of Alpha Com Company Limited (Alpha Com)'s registered and paid-up capital. • Alpha Com holds 100% of ARUN PLUS Company Limited (ARUN PLUS)'s registered and paid-up capital. • ARUN PLUS holds 100% of EVME PLUS's registered and paid-up capital.	Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.0001	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Nuovo Plus Company Limited (NUOVO PLUS)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	0.04 0.0049	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
	• SMH holds 100% of Alpha Com Company Limited (Alpha Com)'s registered and paid-up capital. • Alpha Com holds 100% of ARUN PLUS Company Limited (ARUN PLUS)'s registered and paid-up capital. • ARUN PLUS holds 51% of NUOVO PLUS's registered and paid-up capital.			
Horizon Plus Company Limited (Horizon Plus)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◉ Total income ◉ Accounts receivable	- 0.0002	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
• SMH holds 100% of Alpha Com Company Limited (Alpha Com)'s registered and paid-up capital. • Alpha Com holds 100% of ARUN PLUS Company Limited (ARUN PLUS)'s registered and paid-up capital. • ARUN PLUS holds 60% of Horizon Plus's registered and paid-up capital.				
PTT and TGES Optec Company Limited (OPTEC)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.05 0.03	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
	• PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital. • SMH holds 51% OPTEC's registered and paid-up capital.	Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.0046	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Innobic Nutrition Company Limited	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Innobic (Asia) Company Limited (INBA) • INBA holds 100% of Innobic LL holding Company Limited (INBL). • INBL holds 100% of Innobic Nutrition Company Limited.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.01 0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Purchase of goods by EnCo, a subsidiary of PTTEP ◦ Total expenses ◦ Accounts payables	 0.0004 0.0004	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
Global Multimodal Logistics Company Limited (GML)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital. • SMH holds 100% GML's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.02 0.001	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	 0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Global Renewable Power Company Limited (GRP)	• PTT, the Company's major shareholder, holds 47.27% of GPSC's registered and paid-up capital. • GPSC holds 100% of GRP's registered and paid-up capital.	Income from office building rentals and facility services, such as water, electricity, air conditioning, and parking provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.02 -	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
Aionex Company Limited (Aionex)	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital. • SMH holds 100% of Alpha Com Company Limited (Alpha Com)'s registered and paid-up capital. • Alpha Com holds 100% of ARUN PLUS's registered and paid-up capital. • ARUN PLUS holds 51% of Aionex's registered and paid-up capital.	Income from ozone service provided by EnCo, a subsidiary of PTTEP ◦ Total income ◦ Accounts receivable	 0.0007 -	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Connected Person	Relationship	Transaction	Value (Unit: USD million)	Pricing Policy and/or Reason
ExpresSo NB SG Company Limited	• PTT, the Company's major shareholder, holds 100% of PTT Global Management Company Limited (PTTGM)'s registered and paid-up capital. • PTTGM holds 100% of Global Management Holding Company Limited (GMH)'s registered and paid-up capital. • GMH holds 100% of Siam Management Holding Company Limited (SMH)'s registered and paid-up capital. • SMH holds 100% of Alpha Com Company Limited (Alpha Com)'s registered and paid-up capital. • Alpha Com holds 100% of ExpresSo NB SG's registered and paid-up capital.	Rental deposit for office building/services provided by EnCo, a subsidiary of PTTEP ◦ Accounts payable	0.01	• Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Remark: Please see historical data of 2023 and 2022 for a three-year comparison from the Company's website.

7.2.2 Preconditions and Reasons for Connected Transactions

PTTEP's Audit Committee reviewed the connected transactions which were recorded during the fiscal year ending December 31, 2024, as summarized above, and considered them to be indispensable, fair, and justifiable in terms of conditions and prices, and/or within the arm's length basis. The transactions were also approved by the management or PTTEP's Board of Directors (Board) according to the Company's policy prior to execution.

7.2.3 Policy and Future Possibility of Connected Transactions

(1) Policy for Connected Transactions

PTTEP treats connected transactions as normal business transactions without any intention to transfer benefits between or among the Company and related companies, or persons. The Company strictly adheres to securities and exchange laws and regulations, including those imposed by the Capital Market Supervisory Board, the Stock Exchange of Thailand, and other related supervisory agencies regarding connected transactions. The Company takes into serious consideration the reasonable business terms and conditions, and use of the market reference prices, to ensure that the Company's shareholders and stakeholders are treated equally and in their interests, in accordance with the Company's good corporate governance principle.

(2) Future Possibility of Connected Transactions Potentially Leading to Conflicts of Interest

PTTEP will continue to have connected transactions with related entities in the future. Most of these transactions include normal business, office building leasing, and business support, which can be summarized as follows:

1) **Sales of petroleum products and purchases of fuel:** Since the transactions are a normal part of the Company's business and are executed under conditions and requirements as stated in the contracts, they will continue due to their necessity to the operations.

2) **Lease of office buildings:** Since leasing of office buildings is reasonable and necessary for the Company's business operations, the transactions will be continued.

3) **Hiring of information and technology services:** Since it remains reasonable and necessary for the Company to be supported with information and technology services to operate our business, the transactions will be continued.

8. General Information and Other Significant Information

8.1 References

(1) Securities Registrar

1.1) Name: Thailand Securities Depository Company Limited
Address: 93 Ratchadaphisek Road, Din Daeng, Bangkok 10400, Thailand
Telephone: +66 2009 9999
Website: http://www.set.or.th/tsd

(2) Registrar and Paying Agent for Debentures

2.1) Registrar and paying agent for THB 11,400 million debentures (PTTEP296A) issued in June 2014
Name: Siam Commercial Bank Public Company Limited
Address: 17th Floor, Zone B&C, 9 Ratchadaphisek Road, Chatuchak, Bangkok 10900, Thailand
Telephone: +66 2777 6784
Facsimile: -

2.2) Registrar and paying agent for THB 6,000 million debentures (PTTEP26NA) issued in November 2021
Name: Krungthai Bank Public Company Limited
Address: 3rd Floor, 977/2 SM Tower, Phahonyothin Road, Samsen Nai, Phaya Thai, Bangkok 10400, Thailand
Telephone: +66 2298 0830-31
Facsimile: -

2.3) Registrar and paying agent for following debentures:
- THB 5,000 million (PTTEPT274A), THB 1,000 million (PTTEPT294A), and THB 6,000 million (PTTEPT324A) issued in April 2022
- THB 1,500 million (PTTEPT265A) issued in May 2023

Name: KASIKORNBANK PUBLIC COMPANY LIMITED
Address: 1 Soi Rat Burana 27/1, Rat Burana Road, Rat Burana, Bangkok 10140, Thailand
Telephone: +66 2470 1042, +66 2470 5978
Facsimile: -

(3) Debenture Holders' Representative

3.1) Debenture holders' representative for following debentures:
- THB 6,000 million debentures (PTTEP26NA) issued in November 2021
- THB 5,000 million (PTTEPT274A), THB 1,000 million (PTTEPT294A), and THB 6,000 million (PTTEPT324A) issued in April 2022
- THB 1,500 million (PTTEPT265A) issued in May 2023

Name: KASIKORNBANK Public Company Limited
Address: 1 Soi Rat Burana 27/1, Rat Burana Road, Rat Burana, Bangkok 10140, Thailand
Telephone: +66 2470 1042, +66 2470 5978
Facsimile: -

(4) Trustee

4.1) Trustee for outstanding USD 458 million debentures issued in June 2012

Name	Citicorp International Limited
Address	20th Floor, Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Hong Kong
Telephone	+852 2868 7964, +852 2868 7982
Facsimile	+852 2323 0279

4.2) Trustee for outstanding USD 600 million debentures issued in December 2019, outstanding USD 350 million debentures issued in January 2020, and outstanding USD 500 million debentures issued in June 2020

Name	BNY Mellon Corporate Trust
Address	#03-01 Millenia Tower, 1 Temasek Avenue, Singapore 039192
Telephone	+65 6632 0193, +65 6432 4147
Facsimile	+65 6883 0338

(5) Process Agent

5.1) Process agent for USD 400 million Committed Revolving Credit Facilities

Name	Law Debenture Corporate Services Limited
Address	8th Floor, 100 Bishopsgate, London, EC2N 4AG, United Kingdom
Telephone	+44 20 7606 5451
Facsimile	+44 20 7606 0643

5.2) Process Agent for Common Shares

Name	CT Corporation System
Address	28 Liberty Street, New York, New York 10005, United States of America
Telephone	+1 212 894 8940
Facsimile	-

(6) Cross Currency Swap Counterparties

6.1)

Name	Siam Commercial Bank Public Company Limited
Division	Financial Market Division
Address	12th Floor, Zone B, 9 Ratchadaphisek Road, Chatuchak, Bangkok 10900, Thailand
Telephone	+66 2544 5741-9
Facsimile	+66 2937 7968

6.2)

Name	Krungthai Bank Public Company Limited
Division	Markets Solutions and Innovation Team, Global Markets Group
Address	8th Floor, 35 Building 1 (Nana Nuea), Sukhumvit Road, Khlong Toei Nuea, Watthana, Bangkok 10110, Thailand
Telephone	+66 2208 4678, +66 2208 4699
Facsimile	+66 2256 8398

6.3)

Name	Bangkok Bank Public Company Limited
Division	Treasury Division
Address	9th Floor, 333 Head Office, Silom Road, Silom, Bang Rak, Bangkok 10500, Thailand
Telephone	+66 2021 1155
Facsimile	+66 2231 4223

6.4)

Name	Deutsche Bank AG, Filiale Singapur
Division	Risk Management Solutions APAC
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Telephone	+65 6423 6880
Facsimile	-

6.5)

Name	J.P. Morgan Chase Bank, N.A.
Division	Currencies and Emerging Markets
Address	50th-51st Floors, 548 One City Centre Building, Phloen Chit Road, Lumphini, Pathum Wan, Bangkok 10330, Thailand
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Facsimile	+66 2684 2260

(7) FX Contracts Counterparties

7.1) Name: KASIKORNBANK Public Company Limited
Division: Capital Markets Business Division
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Telephone: +66 2470 3006
Facsimile: +66 2271 4486

7.2) Name: Krungthai Bank Public Company Limited
Division: Markets Solutions and Innovation Team, Global Markets Group
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Telephone: +66 2208 4649, +66 2208 4676
Facsimile: +66 2256 8398

7.3) Name: Siam Commercial Bank Public Company Limited
Division: Financial Market Division
Address: 12th Floor, Zone B, 9 Ratchadaphisek Road, Chatuchak, Bangkok 10900, Thailand
Telephone: +66 2544 5741-9
Facsimile: +66 2937 7968

7.4) Name: Bank of America National Association
Division: Fixed Income Currencies and Commodities
Address: 33rd Floor, 87/2 CRC Tower, All Seasons Place, Wireless Road, Lumphini, Pathum Wan, Bangkok 10330, Thailand
Telephone: +66 2305 2986-9
Facsimile: +66 2685 3224

7.5) Name: Citibank N.A., Bangkok Branch
Division: Global Markets
Address: 18th Floor, 399 Interchange 21 Building, Sukhumvit Road, Khlong Toei Nuea, Watthana, Bangkok 10110, Thailand
Telephone: +66 2079 2222
Facsimile: +66 2079 4342

7.6) Name: CIMB Thai Bank Public Company Limited
Division: Treasury Sales, Treasury & Markets
Address: 44 Langsuan Road, Lumphini, Pathum Wan, Bangkok 10330, Thailand
Telephone: +66 2670 4623
Facsimile: +66 2657 3280

7.7) Name: Bank of Ayudhya Public Company Limited
Division: Global Corporate Banking Division
Address: 550 Phloen Chit Road, Lumphini, Pathum Wan, Bangkok 10330, Thailand
Telephone: +66 2296 2000
Facsimile: +66 2296 6921

7.8) Name: Bangkok Bank Public Company Limited
Division: Treasury Division
Address: 333 Head Office, Silom Road, Silom, Bang Rak, Bangkok 10500, Thailand
Telephone: +66 2021 1111
Facsimile: +66 2636 4633

7.9) Name: TMB Thanachart Bank Public Company Limited
Division: Global Markets
Address: 3000 Phahonyothin Road, Chom Phon, Chatuchak, Bangkok 10900, Thailand
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Facsimile: +66 2292 4690-2

7.10) Name: Deutsche Bank AG, Filiale Bangkok
Division: Risk Management Solutions
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Telephone: +66 2646 5138
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7.11) Name: BNP Paribas Bangkok Branch
Division: Global Markets & ALM Treasury
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Facsimile: -

7.12) Name: United Overseas Bank (Thai) Public Company Limited
Division: Global Markets
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7.13) Name: J.P. Morgan Chase Bank, N.A.
Division: Currencies and Emerging Markets
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Facsimile: +66 2684 2260

7.14) Name: The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch
Division: Markets & Securities Services
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Facsimile: +66 2353 7311

7.15) Name: Sumitomo Mitsui Banking Corporation
Division: Treasury Department
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(8) Auditor

Name: Ms. Amornrat Pearmpoonvatanasuk
Certified Public Accountant No. 4599
PricewaterhouseCoopers ABAS Ltd.
Address: 15th Floor, Bangkok City Tower, 179/74-80 South Sathon Road, Thung Maha Mek, Sathon, Bangkok 10120, Thailand
Telephone: +66 2844 1000
Facsimile: +66 2286 5050

(9) Legal Advisors

9.1) Name: Kudun & Partners Company Limited
Address: 4th, 5th, and 6th Floors, Vivre Langsuan, 34/3 Soi Langsuan, Lumphini, Pathum Wan, Bangkok 10330, Thailand
Telephone: +66 2838 1750
Facsimile: -

9.2) Name: Chandler MHM Limited
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Facsimile: +66 2009 5080

9.3)	**Name**	TTT & Partners Company Limited
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	Telephone	+66 2080 5699
	Facsimile	-

9.4)	**Name**	Baker & McKenzie Ltd.
	Address	195 One Bangkok Tower 4 30th-33rd Floors, Wireless Road, Lumphini, Pathum Wan, Bangkok 10330, Thailand
	Telephone	+66 2636 2000
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9.5)	**Name**	Vigour Step Co., Ltd. & Pracha Tooppoltup Law Office
	Address	48/51 Soi Sukhonthasawat 38 (Soi Pradit Manutham 27), Sukhonthasawat Road, Lat Phrao, Bangkok 10230, Thailand
	Telephone	+66 2553 1858, +66 2553 1898
	Facsimile	+66 2102 3032

9.6)	**Name**	Rouse & Co. International (Thailand) Co., Ltd.
	Address	14th Floor, Unit 1401-3 and 1408, Two Pacific Place Building, 142 Sukhumvit Road, Khlong Toei, Bangkok 10110, Thailand
	Telephone	+66 2653 2730
	Facsimile	+66 2653 2734

9.7)	**Name**	Linklaters (Thailand) Ltd.
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	Telephone	+66 2305 8000
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9.8)	**Name**	Watson Farley & Williams (Thailand) Limited
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9.9)	**Name**	Vialto Partners (Thailand) Ltd
	Address	25th Floor, Suite 2504, Empire Tower, 1 South Sathon Road, Yannawa, Sathon, Bangkok 10120, Thailand
	Telephone	+66 2821 1003
	Facsimile	-

9.10)	**Name**	Satit & Partners Company Limited
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	Telephone	+66 9 8624 5326
	Facsimile	-

9.11)	**Name**	Siam Premier International Law Office Limited
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	Telephone	+66 2646 1888
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9.12)	**Name**	Atthaworadej & Associates Co., Ltd.
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	Telephone	+66 2613 9449
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Facsimile +66 2716 1719

9.15) **Name** Adnan Sundra & Low
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9.16) **Name** Allens
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9.17) **Name** Ashurst Australia
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9.18) **Name** Baker Botts (Singapore) LLP
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Facsimile -

9.19) **Name** Baker & McKenzie Abogados, S.C.
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Facsimile +52 55 5279 2999

9.20) **Name** Bennani & Associés LLP
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9.21) **Name** Corrs Chambers Westgarth
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9.22) **Name** Foley Hoag LLP
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9.23) **Name** Gilbert + Tobin
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9.24) **Name** Henrique Abecasis, Andresen Guimarães & Associados – Socuedade de Advigadis, SP, RL (HAAG)
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9.25) **Name** Herbert Smith Freehills
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9.26) **Name** Herbert Smith Freehills LLP
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9.32) **Name** Loucif & Co
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9.33) **Name** Myanmar Legal Services Limited
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9.35) **Name** Rajah & Tann Singapore LLP
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9.36) **Name** Skrine - Advocates & Solicitors
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Facsimile +60 3 2094 3211

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9.38) **Name** Steptoe & Johnson LLP
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9.39) Name Tilleke & Gibbins Myanmar Ltd.
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9.40) Name VDB Loi Myanmar
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Nay Pyi Taw Office: No. Da/30125, Da/30127, Shwe Thapyay Street, Dekkhina Thiri Township, Nay Pyi Taw 15011, Myanmar
Telephone +95 9 650 000 260 (Yangon Office) / +95 9 785 592 433 (Nay Pyi Taw Office)
Facsimile +95 1837 1902 (Yangon Office)

(10) Advisor to the Board of Directors

- None -

8.2 Other Significant Information

Other information that has a significant impact on Investors' Decision

- None -

Restrictions on Foreign Shareholders

- None -

8.3 Legal Dispute

As of December 31, 2024, the outstanding legal dispute which PTTEP or one of the Company's subsidiaries is a party involved and which can significantly affect our operation or the subsidiary's, excluding dispute from the normal operation and circumstance, is as follows:

PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) was sued for damages at the Federal Court of Australia (the Court) by a group of Indonesian seaweed farmers.

Reference is made to the class action lawsuit brought by a group of Indonesian seaweed farmers against PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) in the Federal Court of Australia (the Court) in 2016, claiming that damages to their seaweed crops were allegedly caused by the 2009 Montara incident, followed by the trial judge judgments (decisions) on March 19, 2021, and October 25, 2021, and Final Orders on November 15, 2021, of the Court, and PTTEP AAA's filing of Notice of Appeal in the Court on December 13, 2021. However, in parallel in Q4/2022, PTTEP AAA participated in mediation, as ordered by the Court and in line with the normal legal process under Australian law for class action, and reached an in-principle agreement on November 21, 2022, in full and final settlement of the class action (including PTTEP AAA's appeal) on a no admission of liability basis. In Q1/2023, the Court approved this in principle settlement agreement and the approach to the distribution of the settlement sum to the group members. In Q2/2023, PTTEP AAA paid the approved settlement amount. Nevertheless, the class action remains on foot until the claims administrator appointed by the Court has completed the distribution process in accordance with the approved distribution scheme under the supervision of the Court.

8.4 Secondary Market in Case of Listing on the Stock Exchange of Other Countries

- None -

Part 3

Driving Business for Sustainability

Amid rapidly changing global trends, the current business operations, especially in the energy industry, must be prepared to face various challenges comprehensively. PTTEP strives to develop its operations towards becoming a sustainable organization by fostering growth in both core and new businesses. This is achieved through operations and investments supporting greenhouse gas emissions reduction, alongside driving technology and innovation. Concurrently, the Company conducts our business responsibly, integrating environmental, social, and governance (ESG) considerations while embedding a culture of Safety, Security, Health, and Environment (SSHE) in every work process. This includes minimizing environmental impacts, conserving and restoring natural resources, and creating long-term value for stakeholders and society, ensuring mutual sustainable growth without leaving anyone behind.

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9. Pathway to Sustainability

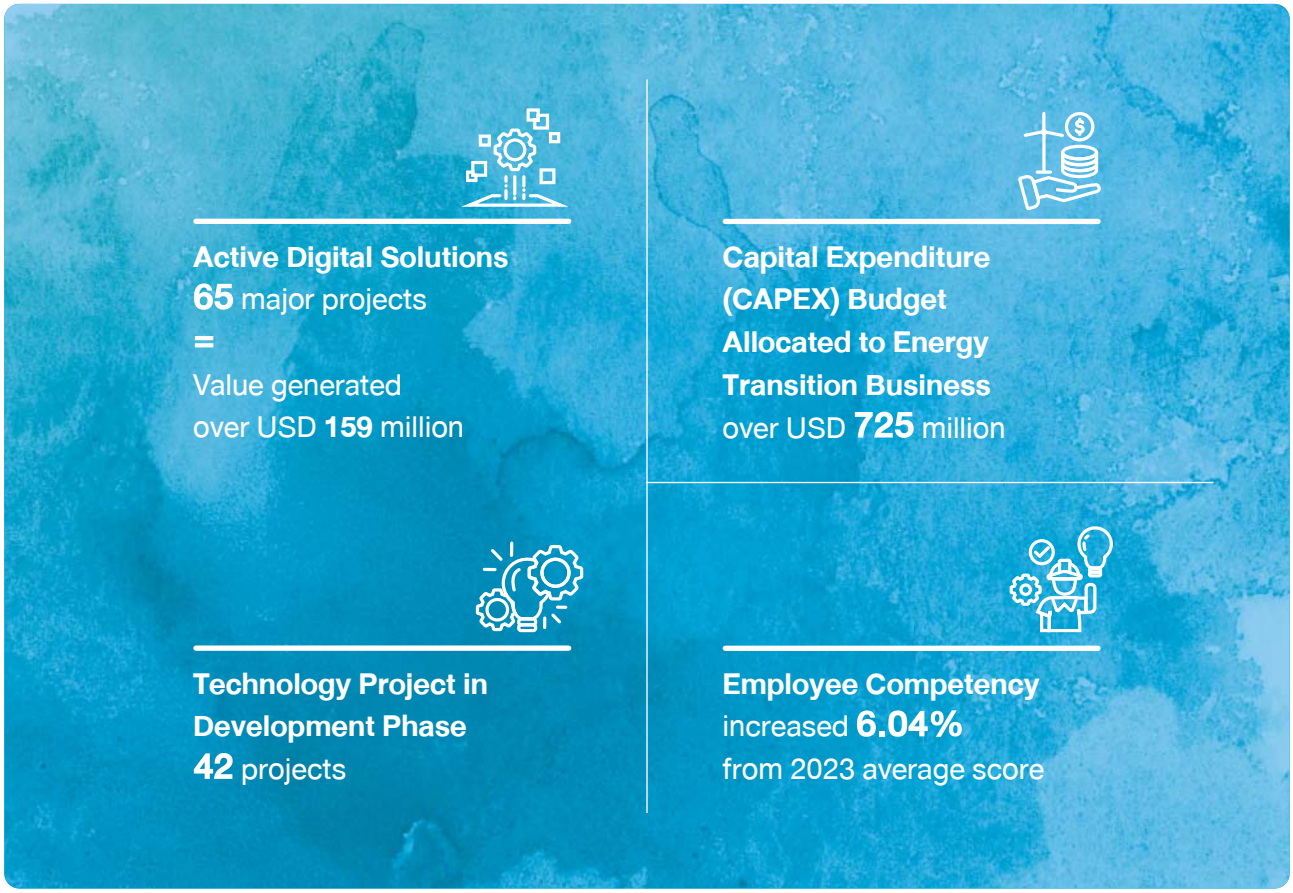
PTTEP has developed a Sustainability Framework rooted in the principles of High Performance Organization (HPO), Governance, Risk Management, and Compliance (GRC), and Sustainable Value Creation (SVC), encompassing all dimensions of the Company's operations. The Company emphasizes creating the right balance of economic, social, and environmental aspects, believing that a strong business foundation provides the capability and power to deliver value to the world (From We to World).

To reinforce a shared understanding among all employees regarding the meaning and importance of sustainability – focusing on enhancing operational efficiency, competitiveness, and business adaptability in response to rapidly evolving global conditions, as well as integrating GRC (Governance, Risk Management, and Compliance) practices into both work processes and daily life – while also encouraging contributions toward the advancement of both the organization and the country in achieving sustainability goals, PTTEP once again organized Sustainability Day 2024 under the theme "Together for a Better Tomorrow." The event aimed to cultivate sustainability and GRC principles among employees, featuring visions from the Corporate Governance and Sustainability Committee, the CEO, honorary guests, as well as influencers sharing their perspectives on sustainable living. More than 1,500 employees from both domestic and international locations participated. The event also showcased key projects from various functions within the Company that align with our nine United Nations Sustainable Development Goals (SDGs) in focus. Additionally, employees had the opportunity to support community products under PTTEP's Ocean for Life strategy.

Additionally, PTTEP emphasizes enhancing sustainability knowledge and understanding among our employees in various channels. In 2024, the Company has organized executive insights for the Board of Directors and the Management Committee, as well as training programs on sustainability and greenhouse gas emissions reduction for mid-level executives. These programs provide in-depth information on industry trends, best practices, and key issues related to the oil and gas sector. The initiatives aim to strengthen the workforce capability in assessing and addressing sustainability risks and opportunities, as well as in reducing greenhouse gas emissions. Furthermore, the acquired knowledge can be applied in alignment with the Company's business operations.

9.1 Driving Business Excellence

PTTEP adheres to driving the organization towards business excellence in alignment with the Company's strategic pillars of Drive Value – strengthening and monetizing the petroleum exploration and production business; and Diversify – expanding into new businesses. This approach encompasses various aspects of business operations, including ensuring national security in the countries where PTTEP operates, leveraging digital technology to drive the organization, investing in new energy-related businesses to support greenhouse gas emissions reduction, advancing technology and innovation, and developing a skilled workforce to support business operations across multiple areas. These have enabled us to adapt to global societal changes and proactively address future business challenges, positioning PTTEP for sustainable growth and long-term success.



9.1.1 Driving Organization with Digital Technology

Recognizing the importance of Digital Transformation, PTTEP launched the ENTERPRISE project in 2019 to enhance business efficiency and sustainability. This marked a significant step in driving the organization with digital technology. Throughout the project, digital solutions have been developed and applied across all business units, including geology, exploration and drilling, production operations, engineering, maintenance, and various business support functions.

In 2024, PTTEP set a vision to elevate ourselves into a Digital-Driven Organization, fully powered by data and digital technology. The ENTERPRISE project evolved into DigitalX project to enhance and integrate digital solutions

across all business operations. Artificial intelligence (AI) and machine learning technologies were deployed to enable faster and precise data analysis throughout the business value chain, such as supporting petroleum drilling, production planning, and process optimization. A reliable and standardized data foundation integration was established. Furthermore, a modern Enterprise Resource Planning (ERP) system was introduced to enhance resource management across all dimensions, under proactive cybersecurity measures to safeguard organizational data and systems against potential cyber threats.

The development of digital solutions is accompanied by enhancing employee capabilities through the establishment of a Digital Ecosystem. This includes developing digital leadership, establishing an Incubation Center, defining clear governance for data and digital solutions, building a digital excellence community, and encouraging participation in both internal and external digital innovation activities.

Along the Digital Transformation journey, from the ENTERPRISE project up to the current DigitalX project, PTTEP has developed digital solutions implemented organization-wide. In 2024, there are 65 major active digital solutions, enhancing production, reducing costs, and improving efficiency. A total value from completed projects amounted to over USD 159 million, demonstrating the project's tangible success.

9.1.2 Expanding Investments to Support Greenhouse Gas Emissions Reduction

In addition to our mission of ensuring energy security through petroleum exploration and production in preparation, PTTEP invests in new businesses beyond petroleum exploration and production to support the energy transition and greenhouse gas emissions reduction. In 2024, a Capital Expenditure (CAPEX) budget of over USD 725 million was allocated to energy transition businesses. Continuous investment has enabled PTTEP to develop future energy businesses, including key projects such as:

The Seagreen Offshore Wind Farm project, the largest offshore wind power plant in Scotland, is located in the North Sea where it harnesses strong wind resources, with a total generating capacity of approximately 1.1 gigawatts. FutureTech SG Pte. Ltd. (FGS), a PTTEP subsidiary, completed the investment after the conditions as prescribed in the Share Purchase Agreement have been satisfied, with completion of the transaction occurring in May 2024. PTTEP holds an indirect 25.5 percent stake in the Seagreen Offshore Wind Farm project.

The Lan Seng Arun project generates electricity from solar power for use in the petroleum production process of S1 Project in Lan Krabue District, Kamphaeng Phet Province. The project is operated by FutureTech Energy Ventures Company Limited (FTEV), a wholly owned subsidiary of PTTEP. With an electricity generation capacity of 9.98 megawatts, solar panels covering 180,000 square meters help reduce the greenhouse gas emitted from natural gas power generation by approximately 13,000 tonnes of CO_2 equivalent per year. The project contributes to local employment and serves as a learning center for interested individuals.

Additionally, FTEV, along with leading consortium partners from the Republic of Korea and the French Republic, is conducting a feasibility study for a green hydrogen production project in the Block Z1-02 concession area in the Sultanate of Oman, covering approximately 340 square kilometers in Duqm City. The project targets an annual capacity of 1.2 million tonnes of green ammonia, focusing on clean energy production from green hydrogen in collaboration with leading consortiums. This investment supports the growth of new businesses aligning with the Company's business plan and provides an opportunity to apply knowledge and experience in green hydrogen production in Thailand, in line with future energy policies. PTTEP completed the installation of wind and solar potential measurement stations and has begun collecting data to support the project operations. The ongoing feasibility study phase includes geographical, geotechnical, and hydrological assessments, as well as a Preliminary Environmental and Social Impact Assessment (Pre-ESIA). The investment decision is expected in 2027, with production commencing in 2030.

9.1.3 Developing Technology and Innovation and Investing in Corporate Venture Capital Business

PTTEP prioritizes research and development of technology and innovation to support the Company's strategies and targets. The primary objectives include (1) enhancing value creation and competitiveness in petroleum exploration and production, (2) reducing greenhouse gas emissions, and (3) supporting energy transition and new business opportunities through the development and application of advanced in-house technology. To facilitate these objectives, PTTEP has established PTTEP Technology and Innovation Center (PTIC) in Wang Chan District, Rayong Province, and PTTEP Rapid Scale-up Center (RASC) in Map Ta Phut Industrial Estate, Rayong Province. These centers serve as hubs for research and the development of cutting-edge technologies.

In 2024, there were 42 technology projects in development phase, such as the Low BTU Flare Tip technology development to support the reduction of greenhouse gas emissions from PTTEP's production processes. This technology minimizes the amount of assist gas required to ignite flare stacks, sustainably enhancing

efficiency and reducing costs. A pilot test was successfully implemented at G2/61 Project in 2024, with an estimated natural gas recovery valued at approximately USD 9–15 million and a CO_2 emissions reduction of 0.07–0.17 million tonnes of CO_2 equivalent per year.

Additionally, PTTEP established Xplor Ventures Company Limited (XPV) to strategically invest in Corporate Venture Capital (CVC), focusing on future energy technologies, decarbonization technologies, and technologies that enhance petroleum exploration and production business operations (E&P Deep Tech). XPV has acquired a minority stake in Zap Energy, Inc., a leading fusion energy technology developer based in Washington, the United States of America. PTTEP recognizes the opportunities in fusion energy technology as a better energy source for humanity, supporting Thailand's energy security through a cleaner energy mix.

9.1.4 Enhancing Workforce for Future Business Operations

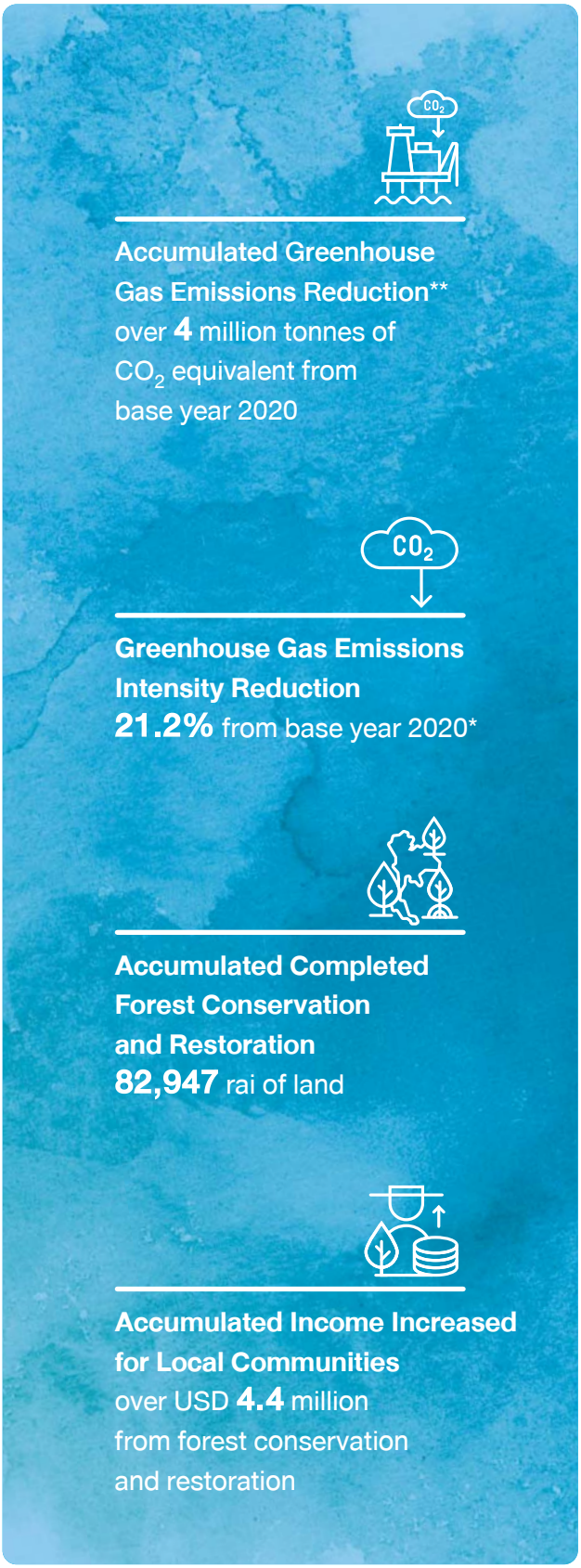
To align the Company's human resources strategy with our core and new business operations and effectively navigate the challenges of the energy transition, PTTEP has formulated a Future Workforce Strategy. This strategy aims to enhance employee capabilities to maintain competitiveness through talent development plans and work process redesign. Talent development plans focus on equipping employees with knowledge, skills, and abilities beyond their core expertise by promoting multi-skill development. This approach ensures employees gain both broad and deep knowledge and skills aligned with new work processes which require digital acumen for effective application in various scenarios, preparing them for business transitions. This will foster career growth and advancement opportunities for employees in both petroleum exploration and production and new businesses in line with the Company's strategy. Additionally, PTTEP promotes a global mindset, understanding global changes, and embracing diversity, enabling employees to adapt, build strong relationships, and collaborate and work effectively with people from diverse cultures, ethnicities, and beliefs. The Outward Mindset is also promoted as a fundamental principle.

Additionally, PTTEP redesigned work processes to enhance operational agility and responsiveness to business needs. This involves identifying and prioritizing work processes, focusing on the development and improvement of high-impact processes. Currently, PTTEP is advancing work process improvements as part of an ongoing plan carried forward from the previous year. This development and improvement rely on the integration of technology to increase speed, reduce redundancies, eliminate unnecessary steps, and enhance flexibility, leading to higher efficiency and employee productivity. Furthermore, this process requires collaboration between management and employees from different departments, fostering teamwork and internal communication. This enables employees to handle diverse and complex tasks more effectively. As a result of PTTEP's dedication to implementing talent development plans and redesigning work processes in 2024, employee competency has increased by 6.04 percent compared to 2023 average score.

9.2 Advancing Climate Action

PTTEP recognizes the impact of climate change on human well-being, the environment, and the economy, with increasingly severe natural disasters in recent years. PTTEP strives to mitigate these impacts and address the challenges of the global energy transition. Therefore, the Company has set a target of achieving Net Zero Greenhouse Gas Emissions by 2050, which includes both direct (Scope 1) and indirect (Scope 2) emissions from the exploration and production business under PTTEP's operational control. In addition, to ensure continuous reduction in greenhouse gas emissions intensity, the Company has set interim targets to reduce greenhouse gas emissions intensity by at least 30 percent by 2030 and 50 percent by 2040 from a 2020 baseline. PTTEP pursues these targets by reducing greenhouse gas emissions from production processes, selecting projects with low greenhouse gas emissions intensity for the portfolio, and offsetting greenhouse gas emissions through voluntary emission reduction, absorption and storage of greenhouse gases projects outside the Company's business scope.

In 2024, PTTEP was able to reduce greenhouse gas emissions intensity by 21.2 percent compared to the base year of 2020*, resulting in a cumulative greenhouse gas emissions reduction of over 4 million tonnes of CO_2 equivalent from base year 2020.** This progress stemmed from various initiatives, including flare gas recovery and utilization, energy efficiency improvements, production efficiency enhancements, methane leak mitigation, integration of renewable energy in operations, and efficient logistics fleet management.



* The base year data was updated to align with the Company's additional investments.

** Calculated from active greenhouse gas emissions intensity reduction performance

9.2.1 Studying and Applying Carbon Capture and Storage (CCS) Technology

The Carbon Capture and Storage (CCS) project is a crucial component of Thailand's Nationally Determined Contribution (NDC) action plan for greenhouse gas reduction. It also plays a pivotal role in establishing the foundational infrastructure necessary for large-scale CCS developments, supporting emission reduction in the industrial sector, and contributing to Thailand's commitment to achieving Carbon Neutrality and Net Zero Greenhouse Gas Emissions by 2050 and 2065 respectively. PTTEP initiated Thailand's first CCS project study at Arthit Project, an offshore petroleum exploration and production field in the Gulf of Thailand (GoT), leveraging our expertise and experience in petroleum exploration and production. Presently, PTTEP has completed the Front-End Engineering Design (FEED) for Arthit CCS project in accordance with international geological and engineering standards, ensuring the permanent underground storage of CO_2 with robust safeguards in place to prevent environmental impact. The project also incorporates a comprehensive monitoring, measurement, and verification system to ensure the safe and effective management of CO_2 storage at every stage. The project is now progressing toward the Final Investment Decision (FID), with an estimated three-year development timeline before CCS technology full implementation at Arthit Project. The project is designed to inject approximately 0.7–1 million tonnes of CO_2 per year from its petroleum production process.

In addition, PTTEP collaborated with PTT Group companies to conduct a feasibility study on the application of CCS technology in the Northern Gulf of Thailand, known as the Eastern Thailand CCS Hub. This initiative, established under a memorandum of understanding to apply the CCS Hub Model technology, aims to support the study of CCS projects with the potential to capture millions of tonnes of CO_2 annually from production processes, which can then be safely and permanently stored in suitable geological formations. This collaboration is expected to serve as an essential foundational infrastructure for future national-scale expansion. The study is currently focused on PTT Group's operations in the Eastern Economic Corridor (EEC), covering Rayong and Chon Buri provinces, with operations expected to commence by 2034. The initiative has a CO_2 storage capacity of 6 million tonnes per year, contributing significantly to the achievement of both private sector and national greenhouse gas emissions reduction targets. It also provides a solution for mitigating risks associated with mandatory carbon regulations, such as the European Union's Carbon Border Adjustment Mechanism (CBAM) and carbon taxes. At the national level, this technology can attract foreign investments in supporting greenhouse gas emissions reduction, strengthening Thailand's competitive advantage in the Southeast Asian region through robust greenhouse gas emissions reduction infrastructure. Furthermore, it unlocks new business opportunities, such as blue hydrogen production, while generating domestic employment by offering CCS services to industrial and energy sectors.

9.2.2 Implementing Concrete Methane Management

PTTEP is taking urgent action to address climate change, with methane management as one of the key approaches. The Company aims to enhance and strengthen our methane management by improving practices in monitoring, reporting, and verifying methane emissions from our operations through collaboration with international organizations and partners in the oil and gas industry. This includes participating in the ASEAN Energy Sector Methane Leadership Program (MLP), signing the Oil & Gas Methane Partnership 2.0 (OGMP 2.0) under the United Nations Environment Programme (UNEP), and joining

the Oil & Gas Decarbonization Charter (OGDC) at the 28th UN Climate Change Conference of the Parties (COP28), which sets goals for near-zero upstream methane emissions and zero routine flaring* by 2030.

PTTEP has continuously elevated and developed our methane measurement and reporting practices based on the Leak Detection and Repair (LDAR) principles, ensuring greater accuracy and coverage. In 2024, PTTEP trial-tested the application of methane detection and measurement, building on industry-recognized solutions to effectively measure methane emissions at both the source and site levels aligning with our operating areas. These efforts aim to measure and reconcile the methane emissions inventory. This project covers technologies such as SPOT Robot Mounted Methane Sensors, Drone Mounted Methane Sensors, and Fixed LiDAR Cameras. The results will enable PTTEP to develop strategies and plans for reducing methane emissions effectively.

* As defined in the "Zero Routine Flaring by 2030" by the World Bank.

9.2.3 Offsetting Greenhouse Gas Emissions through Nature-based Solutions

PTTEP manages greenhouse gases by prioritizing reductions within our own operational boundaries as much as possible. The Company also considers the approach to offset greenhouse gas emissions that exceed targets or cannot be reduced, in appropriate amounts and in accordance with international standards. This includes focusing on acquiring high-quality and integrity carbon credits through Nature-based Solutions (NBS) or Technology-based Solutions (TBS). In 2024, PTTEP began developing the offsetting management standards, which include offsetting framework, governance process, carbon credit acquisition, portfolio development, and disposition. This ensures PTTEP's carbon credit management remains transparent and efficient, comprehensively addressing risks such as potential greenwashing and future controversies.

PTTEP has developed NBS initiatives targeting the restoration and conservation of 200,000 rai of land by 2030. This aims to increase CO_2 absorption areas, enhance biodiversity, and enrich Thailand's natural resources while promoting local community involvement in forest resource conservation. The project is carried out in collaboration with the Department of Marine and Coastal Resources, the Royal Forest Department, the Department of National Parks, Wildlife, and Plant Conservation, and the Mae Fah Luang Foundation under Royal Patronage.

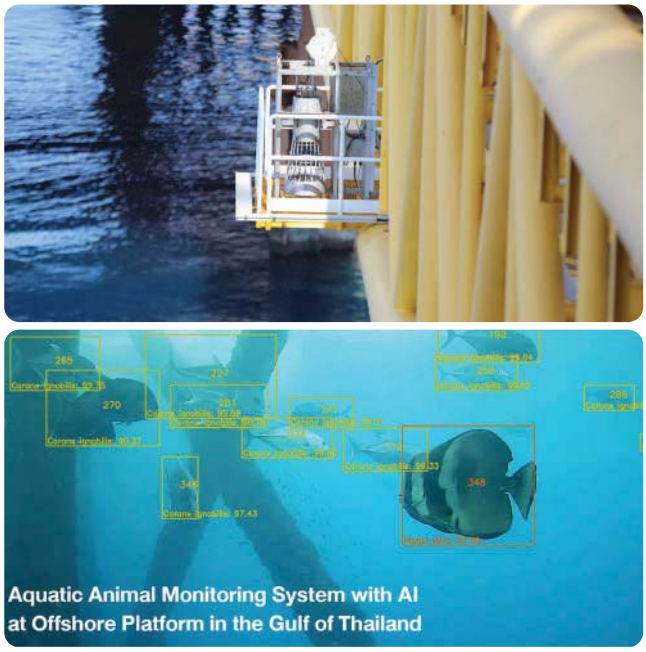
In 2024, PTTEP secured government approval to conserve and restore a total accumulated 109,370 rai of mangrove and terrestrial forests across 17 provinces – 5,007 rai of mangrove forests (4,007 rai of land completed and 1,000 rai of land in progress) and 104,363 rai of terrestrial forests (78,940 rai of land completed and 25,423 rai of land in progress). This resulted in an accumulated increase of over USD 4.4 million in income and employment for local communities. Additionally, PTTEP collaborated with Kasetsart University to conduct research on biodiversity in reforested areas of the Department of Marine and Coastal Resources, the Royal Forest Department, and the Department of National Parks, Wildlife, and Plant Conservation. Findings from continuous monitoring and evaluation of reforestation effectiveness have indicated over 89 percent tree survival rate in the plantations, surpassing the government benchmark of 80 percent. These efforts also led to an establishment of the network comprising more than 3,400 members dedicated to conserving and protecting mangrove and terrestrial forest areas. The project achieved a Social Return on Investment (SROI) of 5.46 : 1.

In addition, PTTEP supported the conservation and restoration of the Ban Khong Ta Bang community forest area in Phetchaburi Province, covering 1,397 rai of land. The Company also completed a study on greenhouse gas reduction, absorption, and sequestration potential in the agricultural sector through rubber plantation management following the Forest Stewardship Council (FSC) standards. PTTEP is currently exploring opportunities to implement a rubber plantation project and biochar project to further expand CO_2 absorption areas and mitigate environmental impacts in Thailand.

9.3 Safeguarding Marine Sustainability

With most of the Company's operating areas located offshore, PTTEP recognizes the importance of safeguarding marine balance, which we regard as our second home. The Company is aspired to conserving and restoring natural resources, including marine ecosystems, by leveraging our strengths in operating areas, technological and innovation capabilities, and strong partnerships and communities – our closest neighbors. This approach aims to foster the systematic and sustainable management of natural resources and marine ecosystems through the Ocean for Life strategy. This strategy encompasses petroleum exploration and production with a focus on responsible operations, monitoring marine health and biodiversity, and delivering shared value to coastal stakeholders to enhance marine resources, biodiversity and blue carbon while improving the quality of life for communities that depend on marine resources for sustainable self-reliance. Additionally, the Company aims to elevate ocean data from our projects, making it publicly accessible for broader benefits.

Currently, PTTEP shares information on all projects under the Ocean for Life strategy with the public through the PTTEP Ocean Data Platform, which has recorded over 14,000 cumulative accesses to the information. This promotes the integration of ocean science research while supporting the sustainable conservation and restoration as well as effective management of marine and coastal resources. This project also contributes to the Ocean Health Index (OHI) for Thailand, aligning with PTTEP's and the nation's sustainable development goals to protect Thailand's seas and natural resources, ensuring their long-term sustainability for future generations.



9.3.1 Applying Technology for Ocean Health Monitoring

Currently, climate change is significantly impacting marine ecosystems in various dimensions, with an increasing frequency and severity of natural disasters such as floods, strong waves, and typhoons. These events cause substantial damage to coastal communities, the economy, and biodiversity. PTTEP recognizes the importance of cross-sector collaboration to effectively address these challenges. This includes partnerships with the Hydro-Informatics Institute (Public Organization), or HII, under a Memorandum of Understanding to develop ocean data platforms and with Kasetsart University under a Memorandum of Understanding to promote ocean sustainability. As part of the project, PTTEP utilizes offshore operating areas of Arthit and G2/61 as meteorological and oceanographic monitoring stations to collect offshore data, which is limited in Thailand. Additionally, PTTEP implements the project to develop ocean current mapping and study of seawater surface temperature using current mapper buoys and satellite tracking for the second consecutive year. At present, ocean current maps, including seawater surface temperature data have been made publicly available based on current mapper buoys deployed from Arthit and G1/61 projects, contributing to integrated oceanographic research in the GoT.

By combining HII's knowledge and expertise in linking, analyzing, and managing water resources and climate with PTTEP's meteorological and oceanographic data from offshore monitoring stations, the Company has elevated the project into a continuous disaster warning initiative. The objective is to mitigate disaster impacts in pilot areas within the community in the GoT by installing additional onshore telemetry monitoring stations to collect meteorological and surface runoff data, which will be integrated with PTTEP's offshore data. This data will support the development of a water level monitoring and early warning application to assess potential impacts on communities. Additionally, the initiative aims to strengthen community networks and resilience, enhancing their capacity to prevent and respond to natural disasters caused by climate change in a timely and efficient manner.

Additionally, to ensure environmentally friendly offshore operations, PTTEP studies the biodiversity around our offshore petroleum production platforms using applied technology and innovation, in collaboration with the Faculty of Fisheries, Kasetsart University, and AI and Robotics Ventures Public Company Limited (ARV) Since 2021, the project has developed artificial intelligence software to automatically identify aquatic iconic species from underwater motion recording cameras on offshore petroleum platforms' jacket legs of Arthit and G2/61 projects. At present,

12 aquatic species can be identified, such as Blue Sea Chub, Redbelly Yellowtail Fusilier, Dark-Banded Fusilier, Spotted Soapfish, and Orbicular Batfish. The project continues to enhance the software for additional species identification and accuracy by learning from an increasing database of underwater motion recording cameras and expanding camera installations to offshore petroleum platforms' jacket legs of G1/61 Project in 2025. Under the Memorandum of Understanding to strengthen cooperation on climate change and biodiversity conservation between PTTEP, the Department of Climate Change and Environment (DCCE), and the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Company has enhanced the connectivity between data from this project and the Thailand Biodiversity Information Facility (TH-BIF), supporting national biodiversity research, with ONEP as the lead government agency responsible for biodiversity conservation efforts in Thailand.

PTTEP recognizes the significance of data collected from offshore operational areas, which provides valuable knowledge applicable across various fields, particularly in marine science and conservation. This information benefits marine-related agencies, researchers, students, and academic institutions. Furthermore, data from the existing projects can serve as a crucial foundation for developing marine ecosystem conservation initiatives. It can also be integrated into climate change and biodiversity forecasting models, supporting balanced and sustainable natural resource management practices. These efforts contribute to achieving both national and global environmental and sustainability goals.

9.3.2 Sustainable Community around the Ocean

With a focus on creating long-term shared value for all stakeholders, fostering sustainable community and social development, and supporting PTTEP's Ocean for Life strategy to increase the value of ocean Biodiversity and Ecosystem Services (BES) in offshore operating areas as well as to increase income of focused communities participating in PTTEP projects, PTTEP has been implementing social development projects under the Memorandum of Understanding on Ocean for Life in collaboration with the Department of Marine and Coastal Resources (DMCR), covering marine conservation in 17 provinces around the GoT since 2020.

In 2024, PTTEP launched the Aquatic Animal Hatchery Learning Center Project, focusing on building a network for marine resource conservation and promoting sustainable fishing practices. The project has established 14 Aquatic Animal Hatchery Learning Centers in 12 provinces around the GoT, releasing a cumulative total of over 31.2 billion crab larvae and aquatic animals. Additionally, the Company has established coastal conservation areas and fish homes, providing natural shelter for young aquatic animals across the cumulative area of 15.3 square kilometers from 29 locations through 16 provinces around the GoT to increase the quantity of aquatic animals and enhance marine abundance. Furthermore, PTTEP has also implemented the Sea Products Development Project, which aims to strengthen community potential through enhancing the quality and competitiveness of community products and services, such as fresh seafood, processed seafood, and ecological community tourism, to compete at the national level. PTTEP supports communities in terms of knowledge, technology, capital, packaging design, and the invention of new products aligning with market demand. The Company also promotes sales through various channels by establishing 13 seafood production and distribution groups in 13 provinces around the GoT.

As a result of continuous projects implementation, the communities have been able to catch more crabs and aquatic animals, increasing the income of focused communities participating in the Aquatic Animal Hatchery Learning Center Project and the Sea Products Development Project to THB 33,900 per household per year, representing an increase of over 53.8 percent compared to baseline data before PTTEP project implementation. Additionally, an accumulated total of 7,891 marine and coastal resources conservation networks have been established, and an accumulated total of over 89,600 visitors have participated in studying about conservation at the Learning Center.

9.4 Building Stronger Society

PTTEP recognizes that business operations today go beyond profit generation – they also involve fostering a strong and sustainable society by creating long-term value for stakeholders. Therefore, PTTEP places great importance on systematic and effective stakeholder management. The Company upholds respect for and protection of human rights in all operational areas from its activities, including taking care of vendors and suppliers through sustainable supply chain management.

* For operations in Thailand only

** Referred from Global Gender Gap Report 2024, World Economic Forum

9.4.1 Managing Stakeholders Systematically

Effective stakeholder management, which considers the expectations of all stakeholder groups, is a crucial factor in enabling PTTEP to operate sustainably and appropriately create shared value with all stakeholders. PTTEP categorizes stakeholders into eight groups: Government Agencies and Regulators, Suppliers and Contractors, Customers, Employees and Directors, Shareholders and Financial Institutions, Business Partners and Joint Ventures, Communities and Society, and Media. The Company's stakeholder management is conducted under the Stakeholder Management Strategy, which includes (1) building awareness, understanding, and confidence among stakeholders regarding the Company's operations (Trust), (2) integrating networking organizations and enhancing the engagement process effectively (Synergy), and (3) enhancing stakeholders' commitment to creating shared value (Commitment).

Effective stakeholder management not only mitigates risks and operational impacts but also fosters understanding, trust, and strong relationships with stakeholders to achieve the Company's goals. At the same time, PTTEP's stakeholders can communicate, express opinions, concerns, and expectations, and receive appropriate responses to their expectations, ensuring mutual sustainable growth for communities, society, and the organization. In 2024, PTTEP stakeholder engagement reached the "Support" level, indicating that stakeholders are ready to support and participate in PTTEP's activities to achieve shared future goals.

Meanwhile, the Company remains dedicated to creating value for society and communities by building trust and gaining acceptance through social development projects, both domestically and internationally. Our projects are carried out under four main themes: addressing basic needs, education, environment, and culture, encompassing a total of 139 projects, with an average Social Return on Investment (SROI) of 3.68:1 achieved from strategic CSR projects. These projects have directly and indirectly benefited over 1.3 million people in various forms, both in Thailand and internationally. In the Republic of the Union of Myanmar, PTTEP continues to implement social development projects that currently benefit more than 200,000 people annually. Additionally, PTTEP has provided humanitarian aid, including donations of rice, food, medicines, and mobile medical units to assist those affected by the ongoing conflict who have sought refuge in safe areas. The Company has also contributed to flood relief efforts nationwide by providing emergency relief kits and financial donations.

9.4.2 Respecting and Protecting Human Rights throughout the Business Value Chain

Human rights are one of the materiality issues significant to PTTEP's sustainability, serving as a foundation that enables the Company to conduct business ethically by avoiding rights violations. This approach fosters acceptance among stakeholders and enhances the Company's long-term reputation. Therefore, the Company dedicated to managing human rights in alignment with international standards, including the Universal Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights (UNGPs), the Ipieca Human Rights Due Diligence Guidance, and other relevant global frameworks. PTTEP focuses on addressing human rights issues across four key areas: workplace; Safety, Security, Health, and Environment (SSHE); supply chain; and communities including vulnerable groups. These efforts aim to prevent potential human rights violations resulting from the Company's direct operations.

In 2024, PTTEP aligned our human rights implementation with Phase 2 (2023–2027) of the National Action Plan on Business and Human Rights (NAP). This phase introduces new focus areas reflecting current global challenges, including climate change, decarbonization, alternative energy adoption, and PM2.5 air pollution mitigation. These efforts align with the universal human right to a Clean, Healthy, and Sustainable Environment, additionally recognized by the United Nations General Assembly in 2022. PTTEP has leveraged our strengths in knowledge, technology, and innovation to drive significant progress in addressing these challenges. These initiatives also support Thailand's and PTTEP's Net Zero Greenhouse Gas Emissions targets.

Based on the review of PTTEP's human rights risk issues in 2024, covering 100 percent of the operating assets and non-operating joint ventures, it was found that the high-level risks, also identified as salient human rights issues, remain: workplace safety for both employees and contractors, and environmental impacts on communities from the Company's operations. Subsequently, PTTEP has closely monitored these risks to prevent and mitigate potential human rights violations.

As PTTEP operates in multiple countries around the world, we place great importance on Diversity, Equity, and Inclusion (DE&I), striving to create a work environment that embraces individual differences, without discrimination based on gender, race, or religion. This encourages employees to work together toward a common goal (One Team One Goal). In 2024, PTTEP's female representation at all levels (directors, executives, and employees) was 33 percent, better than the average of oil and gas industry*. At the same time, the proportion of local employments reached at 81 percent. In addition, the results of the 2024 Employee Engagement Survey show the Company's human rights initiatives in the workplace, including DE&I and Virtual Work Effectiveness, which enhance the quality of life and work for employees in alignment with the Labor Protection Act (No. 8) B.E. 2566 (2023), rank among the top topics with the highest employee satisfaction.

As a result of PTTEP's dedication to enhancing human rights management across our value chain and continuously aligning our human rights practices with international standards, PTTEP has become the first company in the State Enterprise Sector receiving the Gold-Level Top-Tier Award for 2024 Role Model Organization on Human Rights from the Department of Rights and Liberties Protection, Ministry of Justice. The award is granted to the companies having received the top-tier award for five consecutive years and is considered the highest level in 2024.

9.4.3 Managing Supply Chain for Sustainability

PTTEP puts an emphasis on supply chain management efficiency to proactively address and minimize environmental, social, and governance risks while fostering shared value with suppliers and enhancing their capabilities for mutual growth in order to navigate the energy transition. In this regard, the Company mandates all vendors to acknowledge PTTEP Vendor Sustainable Code of Conduct. Besides, PTTEP has continued to expand the knowledge and understanding of Good Corporate Governance and Business Ethics (CG&BE) to vendors through e-learning. To strengthen the safety culture among the Company, suppliers, and contractors, PTTEP has organized the annual Safety, Security, Health, and Environment (SSHE) Forum for over 20 years. The forum aims to improve SSHE performance and drive towards becoming a zero-incident organization, while also supporting PTTEP's Net Zero Greenhouse Gas Emissions or EP Net Zero 2050 target. Furthermore, throughout 2024, PTTEP has undertaken significant supply chain management activities as follows:

* Referred from Global Gender Gap Report 2024, World Economic Forum

Implementing Digital Technology in Supply Chain Management

With an aspiration to develop a sustainable supply chain management and strengthen the trust of suppliers in the efficiency and transparency of procurement processes as well as various organizational workflows, PTTEP has adopted digital technology to process and store data on a Cloud Platform, developed in collaboration with leading software providers. This initiative connects data and facilitates communication of work processes with vendors, such as vendor registration and bidding via computer systems. It also ensures the transparent preparation and reporting of data in compliance with government regulations and related entities. Moreover, PTTEP has developed various systems to enhance operational efficiency, such as artificial intelligence (AI) to analyze and summarize procurement contracts, recommend delivery routes, and calculate lead times, Robotic Processing Automation (RPA) to help automate vendor registration checks, issue purchase orders, and track supplier deliveries, and Real-Time Processing Dashboard to provide timely information to management, streamline workflow for operational staff, and communicate status and results to suppliers. To further underscore this aspiration, PTTEP hosted the 2024 Supplier Day under the themed “Shaping the Future – Digital Procurement and Transformation,” engaging representatives from 96 domestic and international suppliers.

Green Procurement

PTTEP has been continuously practicing green supply chain management since 2019 with focus on the procurement of environmentally friendly products and services, while ensuring fuel efficiency and energy conservation in transportation to minimize combustion-related greenhouse gas emissions, thereby mitigating impacts on global warming. Notably, in 2024, PTTEP implemented green supply chain management activities, amounting to USD 1,177 million, representing an improvement of approximately 23 percent compared to 2023*.

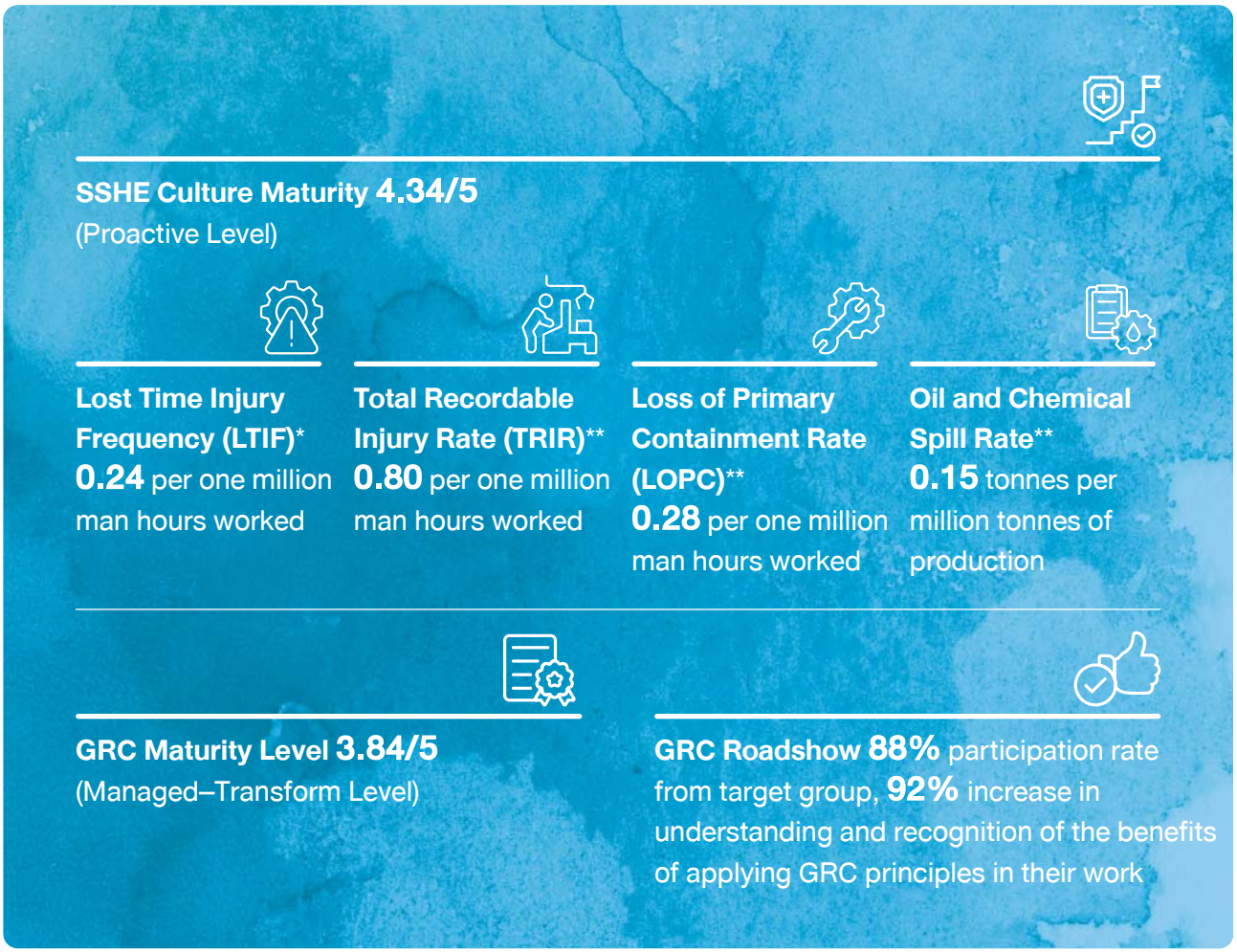
* For operations in Thailand only
** Local refers to the countries where PTTEP operates.

Local Content

PTTEP has been consistently advocating for local** products and services to promote the local economy. The Company places significant emphasis on local suppliers capable of innovating diverse goods and services that meet PTTEP’s standard and requirements. This collaborative development involves an exchange of information between PTTEP and our suppliers, including recommendations for process improvement and safety enhancement. Through this initiative, PTTEP has successfully generated job opportunities and income for local suppliers, resulting in a good relationship and acceptance within the countries of our operations. Notably, in 2024, PTTEP supported local businesses in operational areas, amounting to over USD 2,191 million, representing an improvement of approximately 20 percent compared to 2023*.

9.5 Strengthening SSHE and GRC Culture

Aligned with our Sustainability Framework – centered on becoming a High Performance Organization (HPO), Governance, Risk Management, and Compliance (GRC), and Sustainable Value Creation (SVC) – PTTEP has communicated our vision and direction for sustainability from the management level, including Board of Directors and CEO, to staff level through various activities throughout the past year. The focus has been on embedding Safety, Security, Health, and Environment (SSHE) and GRC as fundamental corporate cultures that shape behaviors and work practices, reinforcing the Company's identity among external stakeholders while driving long-term performance and success. PTTEP aims to instill and foster SSHE and GRC cultures in all activities involving employees, suppliers, and contractors. PTTEP believes that strong SSHE practices lead to excellent performance, particularly in the petroleum exploration and production business, while also positively influencing daily life. These practices help minimize risks to life and property, ensuring that employees, vendors, suppliers and contractors can work in a safe environment while reducing incidents and environmental impacts. At the same time, embracing GRC culture enables the Company to operate prudently and transparently, mitigating business risks and preventing corruption.



* On par with the latest average performance of IOGP
** Better than the latest average performance of IOGP

9.5.1 Valuing SSHE Culture as a Core of Operations and Daily Life

At PTTEP, Safety, Security, Health, and Environment (SSHE) are the core principles in our petroleum exploration and production business. PTTEP strictly adheres to these principles to achieve our zero incidents target or Target Zero. To support this, the Company has implemented the SSHE Management System (SSHE MS) to prevent major incidents and mitigate their impacts on stakeholders and the environment. In 2011, PTTEP's SSHE MS was revamped to align with international standards, including ISO 14001:2015 Environmental Management System and ISO 45001:2018 Occupational Health and Safety Management System.

PTTEP's SSHE culture was developed based on the model of the Energy Institute (EI) to promote proactive SSHE practices, focusing on both personal safety and process safety. Employees are empowered to report safety concerns and errors and have the authority to stop work if unsafe conditions are detected. PTTEP believes that a robust SSHE culture begins with competent workforces, complemented by various tools developed to reinforce SSHE cultures, such as the Safety Observation and Communication Card (SOC), Hazard Reporting Card (HRC), and Operational Control Verification Program. The Company conducts an SSHE culture survey every three years to continuously improve our SSHE culture. The first survey in 2011 showed the SSHE Culture Maturity Level at 3.31 out of 5, which increased to 4.34 in 2023, reflecting PTTEP's dedication to proactive SSHE management.

Employee and contractor training on SSHE is also essential for equipping them with the necessary knowledge and skills to prevent incidents, accidents, and occupational diseases, enabling them to work safely according to their assignments. In 2024, PTTEP provided 95 SSHE training courses through multiple channels to ensure accessibility, including classroom and e-learning. Furthermore, the Company has hosted the annual SSHE Forum since 2005 to communicate SSHE directions, exchange knowledge, and strengthen relationships with contractors. Additionally, SSHE-related information is communicated through various media, such as posters, motion graphics, short video communication, and LINE Official Account accessible to both employees and contractors.

To ensure that PTTEP's SSHE performance is on par with leading companies in the industry, the Company has benchmarked our SSHE performance against members of the International Association of Oil & Gas Producers (IOGP) since 2016. The results have been reported to management to identify areas for continuous improvement. In 2024, PTTEP's Total Recordable Injury Rate (TRIR), Loss of Primary Containment Rate (LOPC), and Oil and Chemical Spill Rate were all better than the latest IOGP averages. However, the overall number of incidents increased in 2024, prompting the Company to intensify efforts in contractor management, human factor integration, incident lessons learned, and the implementation of process safety campaign "Safeguarding our Future – Preventing MAEs" to reduce personal and process safety incidents in the future.

9.5.2 Enhancing and Expanding GRC Culture in All Areas and Work Processes

Governance, Risk Management, and Compliance (GRC) is one of the three core components of PTTEP's Sustainability Framework, ensuring the Company conducts business with transparency, efficiency, and stability while maintaining long-term sustainability. The Company strives to conduct business with good governance, manage risks and internal controls appropriately, and strictly comply with relevant laws and regulations.

PTTEP defined two essential GRC strategies: Smart Assurance – A strategy focused on achieving GRC targets and driving efficiency through digital technology; and Mindful GRC – A strategy aimed at raising awareness and encouraging GRC practices awareness among all employees. This involves extending beneficial GRC practices to PTTEP's stakeholders and other relevant parties. Currently, PTTEP's GRC Maturity Level stands at 3.84 out of 5, indicating that PTTEP is between the Managed and Transform levels.

In 2024, PTTEP reviewed and integrated GRC targets and workplans at both corporate and operational levels, refining the GRC Operating Model for enhanced clarity in governance, management, and monitoring of GRC activities across domestic and international projects, as well as subsidiaries. Furthermore, the Company established an operational framework to support future projects and businesses. PTTEP also introduced the GRC One Digital System, which integrates internal and external GRC data, maximizing the utilization of the information.

PTTEP adheres to continuously promoting GRC as an integral part of corporate culture, ensuring that management and employees recognize its importance and relevance and can apply GRC practices effectively in their work processes as well as daily life amid a dynamic business environments. This is achieved through various communications and activities for all management and employees, both domestically and internationally. In 2024, the Company organized GRC Roadshows across our operational locations and achieved 88 percent participation rate from the target group, with 92 percent of participants reporting a better understanding of GRC principles and recognizing the benefits of applying GRC principles in their work. Additionally, the Company also recognizes the importance of promoting good GRC practices among diverse stakeholders and reinforcing business operations aligned with GRC principles. PTTEP has shared our GRC knowledge and experience with society, including Thai listed companies and Small and Medium Enterprises (SMEs), which play a crucial role in driving the Thai economy.

Attachment 1: Information of the Board of Directors, Management, Controlling Persons, and Company Secretary

1. PTTEP's Board of Directors

As of December 31, 2024, PTTEP's Board of Directors consisted of 15 directors. Details of 15 current directors and four directors who retired from directorship during 2024 are as follows:

Mr. Krairit Euchukanonchai
Chairman and Chairman of the Independent Directors

Age: 69

Starting Date: February 1, 2021

Education:
- Master of Business Administration (Banking and Finance), North Texas State University, USA
- Bachelor of Science, Chulalongkorn University, Thailand

Training of Thai Institute of Directors Association:
- Role of the Chairman Program (RCP) 16/2007
- Director Certification Program (DCP) 59/2005

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- Certificate, Executive Program on Energy Literacy for a Sustainable Future (Class 12/2018), Thailand Energy Academy (TEA)
- Citibank's training courses in many countries

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2015 – Present
Vice Chairman, Chairman of the Board of Executive Directors, Chairman of the Risk Oversight Committee, Krungthai Bank Public Company Limited

2014 – Present
Chairman of Audit and Risk Committee, Independent Director, Advanced Info Service Public Company Limited

2018 – 2020
Chairman, Chairman of Independent Directors, PTT Public Company Limited

Other Companies

2020 – Present
Chairman, INFINITAS by Krungthai Co., Ltd.

1998 – Present
Chairman, V. Group Honda Cars Co., Ltd. and its affiliated companies

Other Organizations

April 2021 – Present
Commissioner (Finance), the Securities and Exchange Commission (SEC)

2020 – Present
Commissioner (Finance), Office of Insurance Commission

2017 – 2019
Chairman, Mass Rapid Transit Authority of Thailand

Ms. Penchun Jarikasem
Independent Director and Chairman of the Audit Committee

Age: 69

Starting Date: February 1, 2018

Education:
- Master of Business Administration, Thammasat University, Thailand
- Bachelor of Arts, Chulalongkorn University, Thailand

Training of Thai Institute of Directors Association:
- AC Forum 2024: Emerging Audit Standards and Implications for the Audit Committee
- Board Nomination and Compensation Program (BNCP) 19/2024
- The Board's Role in Mergers & Acquisitions (BMA) 7/2024
- Advanced Audit Committee Program (AACP) 47/2023
- IT Governance and Cyber Resilience Program (ITG) 15/2020
- Board Matters and Trends (BMT) 6/2018
- Risk Management Program for Corporate Leaders Class (RCL) 13/2018
- Ethical Leadership Program (ELP) 11/2018
- Role of Chairman Program (RCP) 36/2015
- Advanced Audit Committee Programs (AACP) 7/2012
- Director Certification Program (DCP) 113/2009
- Director Accreditation Program (DAP) 75/2008

Other Training:
- Internal Lectures by PTTEP on Sustainability
- ESG Knowledge Sharing: IFRS Sustainability Disclosure Standards, EY Office Limited and TISCO Financial Group
- AC Forum: From Backroom to Boardroom: Enhancing Fraud Risk Management by Phansak Sethsathira, Risk Partner – PwC Thailand and PTT Group
- Sustainable Development Workshop, Sustainability Business Development Institute (SBDi)
- Upstream Insight "Navigating Through Uncertainly: Upstream Transformation, Greener Pastures-Better Future, Corporate Strategies for Resilience & NOC's: What is the Path Forward?", IHS Markit
- Director's Briefing – Corporate Strategy Beyond the Crisis, a Chairman/Board Perspective, Bain & Company, Inc.
- The Executive Program in Energy Literacy for a Sustainable Future (Class 6), Thailand Energy Academy (TEA)
- Power of the Kingdom (Bhumipalung Phandin) (Class 3), Chulalongkorn University Executive Program
- Senior Executive Program No. 77 (SEP 77), London Business School (LBS)
- Capital Market Leadership Program (CMA4), Capital Market Academy (CMA)

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

June 2022 – Present
Independent Director, Chairman of the Audit Committee, and Member of the Nomination and Compensation Committee, TISCO Financial Group Public Company Limited

April 2018 – Present
Independent Director and Chairman of the Audit Committee, Osotspa Public Company Limited

April – June 2022
Independent Director, Member of the Audit Committee, and Member of the Nomination and Compensation Committee, TISCO Financial Group Public Company Limited

Other Companies

June 2022 – Present
Independent Director and Chairman of the Audit Committee, TISCO Bank Public Company Limited
April 2018 – Present
Chairman of the Audit Committee, Ritta Holdings Company Limited
March 2018 – Present
Independent Director, Ritta Holdings Company Limited
April – June 2022
Independent Director and Member of the Audit Committee, TISCO Bank Public Company Limited
April 2016 – April 2018
Chairman of the Audit Committee, Osotspa Company Limited
March 2016 – April 2018
Independent Director, Osotspa Company Limited

Other Organizations

December 2020 – September 2023
Sub-Committee on Finance and Accounting of the Energy Conservation and Promotion Fund
May – December 2020
The working group was established to resolve accounting issues of the Energy Conservation Fund from fiscal years 2014 to 2018, the Energy Conservation and Promotion Fund
December 2018 – December 2020
Sub-Committee on Consideration of Debt Securities, Derivatives and Structured Products, the Securities and Exchange Commission (SEC)
April 2018 – September 2019
Director, State Railway of Thailand
2018 – September 2019
Chairman of the Sub-Committee for Finance and Accounting, State Railway of Thailand
December 2017 – 2019
Advisory Committee for Fund Raising and Listed Company Oversight, the Securities and Exchange Commission (SEC)
2016 – December 2018
Sub-Committee for Finance and Budgeting Improvement, Office of the Public Sector Development Commission (OPDC)

Mr. Veerathai Santiprabhob

Independent Director, Chairman of the Risk Management Committee, and Member of the Corporate Governance and Sustainability Committee

Age: 55

Starting Date: October 15, 2020

Education:

- Ph.D. in Economics, Harvard University, Cambridge, MA, USA
- A.M. in Economics, Harvard University, Cambridge, MA, USA
- Bachelor of Economics (First Class Honors), Thammasat University, Thailand

Training of Thai Institute of Director's Association:

- National Director Conference 2021, "Leadership Behind Closed Door"
- Advanced Audit Committee Program (AACP) 41/2021
- Director Certification Program (DCP) 2014
- Director Accreditation Program (DAP) 2007

Other Training:

- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- Upstream Insight "Navigating Through Uncertainty: Upstream Transformation, Greener Pastures – Better Future, Corporate Strategies for Resilience & NOC's: What is the Path Forward?," IHS Markit

- Director's Briefing – Corporate Strategy Beyond the Crisis, a Chairman/Board Perspective, Bain & Company, Inc.
- Capital Market Leadership Program (CMA4), Capital Market Academy (CMA)
- Corporate Strategy Executive Education Program, MIT Sloan School of Management, Cambridge, MA, USA

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

September 2024 – Present
Independent Director, SCBX Public Company Limited
April 2021 – Present
Independent Director and Audit Committee Member, Bangkok Dusit Medical Services Public Company Limited
April 2021 – August 2024
Independent Director and Audit Committee Member, Univanich Palm Oil Public Company Limited

Other Companies

September 2024 – Present
Director, ThaiNamthip Corporation Limited
April 2024 – Present
Director, Siam Piwat Company Limited

Other Organizations

December 2024 – Present
Chairman of the Board of Directors, Thailand Development Research Institute
November 2024 – Present
Member of the International Advisory Board, Global Finance & Technology Network (GFTN), Singapore
May 2024 – Present
Board Member of Mae Fah Luang Foundation under Royal Patronage
November 2021 – Present
Member of the Independent Oversight Advisory Committee, World Food Programme
February 2021 – Present
Member of Chiangmai University Council
November 2020 – Present
Chairman of The Executive Board, Buddhadasa Indapanyo Archives Foundation
February 2021 – May 2024
Secretary-General and Chairman of the Executive Board of Mae Fah Luang Foundation under Royal Patronage
October 2015 – September 2020
Governor, Bank of Thailand
October 2015 – September 2020
Member of the Board, Office of the Insurance Commission
October 2015 – September 2020
Member of the Board, the Securities and Exchange Commission (SEC)
October 2015 – September 2020
Member, National Economic and Social Development Council

Mr. Teerapong Wongsiwawilas

Independent Director, Chairman of the Nomination and Remuneration Committee, and Member of the Audit Committee

Age: 60

Starting Date: January 1, 2022

Education:

- Bachelor of Law, Thammasat University, Thailand

Training of Thai Institute of Directors Association:

- Board Nomination and Compensation Program (BNCP) 13/2022
- Director Leadership Certification Program (DLCP) 6/2022
- Director Certification Program (DCP) 246/2017

Other Training:

- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- The National Defence Course (Class 57), Thai National Defence College
- Senior Executive Program (Class 8), Office of the Civil Service Commission
- Certificate, Public Law and Management (Class 12/2013), King Prajadhipok's Institute

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

December 2020 – Present
Independent Director, Chairman of the Compliance Committee, and Member of the Nomination and Remuneration Committee, Krungthai Bank Public Company Limited

2023 – September 2024
Chairman, MCOT Public Company Limited

2017 – 2021
Independent Director and Audit Committee, Bangchak Corporation Public Company Limited

Other Companies - None -

Other Organizations

November 2024 – Present
Expert Member on Administration, Management and Planning in Public Sector Audit and Evaluation Committee

October 2024 – Present
Advisor to the Prime Minister

2022 – Present
Council of State No. 7 (Natural Resources and Environment Law), Office of the Council of State

2022 – Present
Honorable Executive Director of the Judicial Administration (Administration and Management), Court of Justice

October 2022 – September 2024
Permanent Secretary of the Prime Minister's Office

October 2022 – 2024
Executive Director, Broadcasting and Telecommunications Research and Development Fund for Public Interest, Office of the National Broadcasting and Telecommunications Commission

2021 – 2022
Advisor to the Prime Minister for Government Officials, the Secretariat of the Prime Minister

2020 – 2022
Committee member of the Political Reform of Thailand's National Reform, Office of the National Economic and Social Development Council

2019 – 2023
Honorable Special Investigation Committee (Law), Department of Special Investigation, Ministry of Justice

2019 – 2021
National Science and Technology Development Committee, National Science and Technology Development Agency

2017 – 2021
Secretary-General to the Cabinet

Mr. Wuttikorn Stithit
Director and Member of the Risk Management Committee

Age: 60

Starting Date: January 1, 2023

Education:
- Master of Business Administration, Kasetsart University, Thailand
- Master of Science (Industrial & System Engineering), Ohio University, USA
- Bachelor of Engineering (Electrical Engineering), King Mongkut's Institute of Technology Ladkrabang, Thailand

Training of Thai Institute of Directors Association:
- Director Certification Program (DCP) 158/2012

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- The National Defence Course (Class 62), Thai National Defence College
- The Executive Program in Energy Literacy for a Sustainable Future (Class 16), Thailand Energy Academy (TEA)
- Leadership Development Program 3 (LDP3), PTT Leadership and Learning Institute (PLLI)
- Leadership Succession Program (LSP), Institute of Research and Development for Public Enterprises (IRDP)
- Senior Executive Education: Program, SIBA 2017, College of Management, Mahidol University
- Power of the Kingdom (Bhumipalung Phandin) (Class 4), Chulalongkorn University
- Senior Executive Program, SASIN 2011, Sasin Graduate Institute of Business Administration of Chulalongkorn University (SASIN)

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2022 – Present
Chief Operating Officer, Upstream Petroleum and Gas Business Group, PTT Public Company Limited

April 2022 – Present
Director and Member of the Nomination and Remuneration Committee (Non-Executive Director), Global Power Synergy Public Company Limited

2019 – March 2022
Director, Global Power Synergy Public Company Limited

2019 – 2022
Senior Executive Vice President, Gas Business Unit, PTT Public Company Limited

2015 – 2019
Executive Vice President, Natural Gas Supply & Trading, PTT Public Company Limited

Other Companies

2023 – Present
Chairman, PTT LNG Company Limited

2019 – 2023
Chairman, PTT Natural Gas Distribution Company Limited

2019 – 2023
Chairman, PTT Global LNG Company Limited

Other Organizations - None -

General Nithi Chungcharoen

Independent Director, Member of the Nomination and Remuneration Committee, and Member of the Risk Management Committee

Age: 53

Starting Date: January 1, 2023

Education:

- Master of Engineering (Mechanical), Stevens Institute of Technology, New Jersey, USA
- Bachelor of Science, Chulachomklao Royal Military Academy, Thailand

Training of Thai Institute of Directors Association:

- Risk Management Program for Corporate Leaders (RCL) 34/2024
- Refreshment Training Program: The Business Case and Ethics of AI: A Board's Imperative (RFP) 12/2023
- Director Leadership Certification Program (DLCP) 8/2022
- Boards that Make a Difference (BMD) 9/2019
- Driving Company Success with IT Governance (ITG) 5/2017
- IOD Talk 2/2017 "Cyber Security: Risks, Liabilities, and Best Practices"
- Role of the Nomination and Governance Committee (RNG) 8/2016
- Director Certification Program (DCP) 200/2015

Other Training:

- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2022 – 2022
Chairman of the Nomination and Remuneration Committee, PTT Global Chemical Public Company Limited

2019 – 2022
Director to Nomination and Remuneration Committee, PTT Global Chemical Public Company Limited

2014 – 2022
Independent Director (Non-Executive Director) and Director to the Corporate Governance and Sustainability Committee, PTT Global Chemical Public Company Limited

Other Companies - None -

Other Organizations

2022 – 2023
Director, Metropolitan Electricity Authority

2021 – 2022
Assistant Chief of Staff Officer to Minister of Defence, Ministry of Defense

2020 – 2021
Staff Officer, Ministry of Defence

2019 – 2020
Expert, Royal Thai Army

2018 – 2019
Assistant General Director, 2nd Coordination Centre, Office of the Internal Security Coordination, Royal Thai Army

2016 – 2018
Army Attaché, Royal Thai Embassy, Canberra, Australia

Mrs. Natjaree Anuntasilpa
Independent Director and Member of the Audit Committee

Age: 54

Starting Date: March 17, 2023

Education:
- Master of Business Administration, Shenandoah University, USA
- Bachelor of Business Administration (Accounting), Chulalongkorn University, Thailand

Training of Thai Institute of Directors Association:
- Director Accreditation Program (DAP) 159/2019
- Advanced Audit Committee Program (AACP) 34/2019

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- The National Defence Course (Class 65), Thai National Defence College
- Executive Development Program: Leaders with Vision and Morality (Nor Bor Sor.) (Class 79), Office of the Civil Service Commission

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2019 – April 2023
Independent Director, Member of Audit Committee, and Member of Remuneration Committee, Airports of Thailand Public Company Limited

January 2019 – March 2023
Chairman of the President's Performance Evaluation Sub-Committee, Airports of Thailand Public Company Limited

Other Companies - None -

Other Organizations

2022 – Present
Expert committee on organizational development for the Judicial Administration Commission

2021 – Present
Secretary-General of the Cabinet, The Secretariat of the Cabinet, Office of the Prime Minister

2021 – Present
Member in Sub-Committee to drive, monitor, and evaluate the performance of the Royal Scholarship Program

2021 – Present
Member in Charity lottery reviewing projects committee

2018 – 2022
Sub-Committee for Personnel Structure and Development Highland Research and Development Institute (Public Organization)

2019 – 2021
Special expert attached to the Office of the Prime Minister (Executive, Higher level), the Office of the Permanent Secretary Prime Minister's Office, Office of the Prime Minister

2017 – 2019
Deputy Secretary General of the Cabinet, The Secretariat of the Cabinet, Office of the Prime Minister

2016 – 2017
Advisor attached to the Secretariat of the Cabinet (Plan and Policy Analyst, Advisory Level), the Secretariat of the Cabinet, Office of the Prime Minister

Mr. Ekniti Nitithanprapas
Director and Member of the Corporate Governance and Sustainability Committee

Age: 53

Starting Date: April 3, 2023

Education:
- Ph.D. (Economics/Macroeconomics and International Finance), Claremont Graduate University, USA
- Master of Science (Economics/Policy Economics), University of Illinois at Urbana-Champaign, USA
- Bachelor of Economics (Honors), Thammasat University, Thailand

Training of Thai Institute of Directors Association:
- ESG in the Boardroom: A Practical Guide for Board 0/2023
- ESG as a vehicle for Business Transformation 2022
- Director Leadership Certification Program (DLCP) 2/2021
- Risk Management Program for Corporate Leaders (RCL) 25/2021
- Role of the Chairman Program (RCP) 45/2019
- Board Matters and Trends (BMT) 4/2017
- Role of the Nomination and Governance Committee (RNG) 8/2016
- Financial Statements for Directors (FSD) 29/2015
- Corporate Governance for Capital Market Intermediaries 4/2015
- Director Certification Program (DCP) 93/2007

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- Hot Issue for Directors: Climate Governance (Class 1/2023), The Stock Exchange of Thailand (SET) and the Thai Institute of Directors Association (IOD)
- Director Forum: Engaging Board in ESG: the Path to Effective Sustainability, The Stock Exchange of Thailand (SET) and the Thai Institute of Directors Association (IOD)
- The Wellness and Healthcare Business Opportunity Program for Executives (WHB) (Class 2)
- The Cullinan: The Making of the Digital Board (Batch 1/2022), the Ministry of Digital Economy and Society in Collaboration with the Digital Economy Promotion Agency (depa) and Thailand Management Association (TMA)
- Decentralized Finance (DeFi), Digital Marketing Strategy, Open Banking and Virtual Banking, and ESG – Environmental, Social, Governance, TMBThanachart Bank Public Company Limited
- Internal Ratings-Based Approach (IRB), Overview of Fund Transfer Pricing (FTP), Bank KPI Setting in Practice, and Generative AI In Banking, TMBThanachart Bank Public Company Limited
- Security Awareness Training: Cybersecurity and Cyber Resilience, TMBThanachart Bank Public Company Limited
- 2020 Cyber Security Awareness for BoD, Personal Data Protection Act, and Economic and Sectoral Outlook: A High-Frequency Data Perspective, TMB Bank Public Company Limited
- Cyber Resilience Leadership: Tone from the Top (Year 2020) and Cyber Resilience (Year 2019), Bank of Thailand
- Oxford Programme on Negotiation in Bangkok (Year 2019), SAID Business School of Oxford University, UK
- The Program for Senior Executives on Justice Administration (Class 24/2019), Judicial Training Institute
- The Civil Service Executive Development Program (Year 2011), Office of the Civil Service Commission
- Advanced Certificate Course in Public Administration and Law for Executive (Class 9/2010), the College of Politics and Governance, King Prajadhipok's Institute
- Financial Markets and New Financial Instruments (Year 2009), International Monetary Fund Institute

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

February 2020 – Present
Chairman, TMBThanachart Bank Public Company Limited
March 2016 – April 2023
Director and Member of the Risk Management Committee, IRPC Public Company Limited
November 2015 – April 2023
Director, IRPC Public Company Limited
February 2020 – November 2021
Chairman, Thanachart Bank Public Company Limited
June 2018 – January 2020
Chairman, Krungthai Bank Public Company Limited
July 2018 – October 2019
Chairman, Thai Airways International Public Company Limited
June 2018 – October 2019
Director, Thai Airways International Public Company Limited
November 2015 – May 2018
Director and Member of the Nomination, Compensation and Corporate Governance Committee, the Siam Commercial Bank Public Company Limited

Other Companies

January 2023 – November 2024
Director, Chairman of the Innovation Management Committee, and Member of the Risk Oversight Committee, Aeronautical Radio of Thailand Company Limited
2023 – November 2024
Director, Aeronautical Radio of Thailand Company Limited
November 2015 – May 2018
Chairman, National Credit Bureau Company Limited

Other Organizations

October 2024 – Present
Director General, The Treasury Department, Ministry of Finance
2020 – Present
Governing Board of Tax Inspectors Without Borders, OECD & UNDP
2022 – September 2024
Director General, the Excise Department, Ministry of Finance
May 2018 – May 2022
Director General, the Revenue Department, Ministry of Finance
October 2015 – May 2018
Director General, State Enterprise Policy Office, Ministry of Finance
2015 – 2018
Director and Secretary to the Private Investment State Undertakings Policy Committee
2015 – 2018
Director and Secretary to the Steering Committee of Vayupak Fund
2015 – 2018
Director, the Investment Committee of Vayupak Fund

Mr. Danucha Pichayanan
Independent Director and Member of the Corporate Governance and Sustainability Committee

Age: 54

Starting Date: March 1, 2024

Education:
- Master of Engineering Management, The George Washington University, USA
- Bachelor of Engineering, Faculty of Engineering, Chulalongkorn University, Thailand

Training of Thai Institute of Directors Association:
- Director Certification Program (DCP) 211/2015

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- Advanced Diploma Programme Democratic, Politics and Governance for Senior Executives (PPRP23), King Prajadhipok's Institute
- The National Defence Course (Class 65), Thai National Defence College
- The Executive Program in Energy Literacy for a Sustainable Future (Class 10), Thailand Energy Academy (TEA)
- The Civil Service Executive Development Program: Visionary and Moral Leadership (Class 78/2013) by Office of the Civil Service Commission
- Anti-Corruption Strategic Management for Senior Executives Program (Class 7/2016) by Office of the National Anti-Corruption Commission

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2017 – October 2023
Independent Director and Chairman of the Nominating Committee, PTT Public Company Limited

Other Companies - None -

Other Organizations

January 2024 – Present
Director of Faculty of Journalism and Mass Communication, Thammasat University

2020 – Present
Secretary-General of the Office of the National Economic and Social Development Council

2020 – Present
Director of the Bank of Thailand

2020 – Present
Member of the Board of Investment of Thailand (BOI)

2020 – Present
Director of Government Pension Fund

2020 – Present
Director of Thailand Productivity Institute

2020 – Present
Director and Secretary of National Strategic Plan Committee

2013 – 2023
Independent Director, Provincial Electricity Authority (PEA)

Mr. Phongsthorn Thavisin

Independent Director, Chairman of the Corporate Governance and Sustainability Committee, and Member of the Nomination and Remuneration Committee

Age: 65

Starting Date: April 1, 2024

Education:

- B.Sc. (Petroleum and Natural Gas Engineering), The Pennsylvania State University, USA

Training of Thai Institute of Directors Association:

- Director's Guide to Legal Obligations and Duties (DLD) 2/2024
- ESG in the Boardroom: A Practical Guide for Board (ESG) 5/2024
- Board Nomination & Compensation Program (BNCP) 16/2023
- Director Leadership Certification Program (DLCP) 3/2021
- Director Certification Program (DCP) 223/2016

Other Training:

- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- The Cullinan: The Making of the Digital Board (Batch 3/2024), Digital Economy Promotion Agency (depa) and Thailand Management Association (TMA)
- Capital Market Leadership Program (CMA27), Capital Market Academy (CMA)
- The Executive Program in Energy Literacy for a Sustainable Future (Class 7), Thailand Energy Academy (TEA)
- Senior Executive Program (SEP-19), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Advanced Naval Studies Program (Class 40/2008), Institute of Advanced Naval Studies
- PTT Group EVP Leadership Development, PTT Public Company Limited
- PTT Executive Leadership, General Electric, GE, New York, USA
- Breakthrough Program for Senior Executive, IMD
- The National Defence Course (Class 2013), Thai National Defence College
- Director's Briefing – Corporate Strategy Beyond the Crisis, a Chairman/ Board Perspective, Bain & Company, Inc.

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2021 – 2024
Director, PTT Public Company Limited

2017 – 2021
Chief Executive Officer, PTT Exploration and Production Public Company Limited (PTTEP)

Other Companies

May 2024 – Present
Chairman, AI and Robotics Ventures Company Limited (ARV)

Other Organizations

- None -

Mr. Thongthit Chayakula
Independent Director and Member of the Audit Committee

Age: 48

Starting Date: April 1, 2024

Education:
- Ph.D. Remote Sensing, University College London, UK
- Master of Sci. Remote Sensing, University College London, UK
- Bachelor of Eng. Surveying Engineering, Chulalongkorn University, Thailand

Training of Thai Institute of Directors Association:
- Advanced Audit Committee Program (AACP) 54/2024
- Risk Management Program for Corporate Leaders (RCL) 24/2024
- Director Certification Program (DCP) 59/2005

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

2021 – Present
Director, National Telecom Public Company Limited

Other Companies - None -

Other Organizations

2023 – Present
Project Advisory Committee to study the feasibility of implementing the plan Increase efficiency Geographic information system, electrical system Provincial Electricity Authority

2022 – Present
Digital Infrastructure Committee, the Committee of the National Digital Economy and Society Commission

1997 – Present
Lecturer, Department of Surveying Engineering, Faculty of Engineering, Chulalongkorn University

Admiral Pogkrong Monthardpalin

Independent Director and Member of the Nomination and Remuneration Committee

Age: 60

Starting Date: April 1, 2024

Education:

- Master of Public Administration (Public Policy), Burapha University, Thailand
- Bachelor of Naval Cadet (5-year program), Royal Thai Naval Academy, Thailand

Training of Thai Institute of Directors Association:

- Director Certification Program (DCP) 370/2024

Other Training:

- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- Naval Command and Staff College Course, Naval Command and Staff College, Institute of Advanced Naval Studies
- Advanced Naval Studies Program, Institute of Advanced Naval Studies
- The Executive Program in Energy Literacy for a Sustainable Future (Class 16), Thailand Energy Academy (TEA)
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, Class 26, College of Politics and Governance, King Prajadhipok's Institute

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies - None -

Other Companies - None -

Other Organizations

2023 – September 2024
Deputy Chief of Defence Forces, Royal Thai Armed Forces Headquarters

2021 – 2022
Director of Naval Civil Affairs Department and Royal Thai Navy Spokesperson

2019 – 2021
Spokesperson of Thai Maritime Enforcement Command Center

Mr. Kongkrapan Intarajang
Director

Age: 57

Starting Date: May 21, 2024

Education:
- Doctor of Philosophy (Ph.D.) in Chemical Engineering, University of Houston, USA
- Bachelor of Engineering (Chemical Engineering) (Second Class Honors), Chulalongkorn University, Thailand

Training of Thai Institute of Directors Association:
- Role of the Chairman Program (RCP) 21/2009
- Director Certification Program (DCP) 119/2009

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- Breakthrough Program for Senior Executives, IMD Business School
- The National Defence Course (Class 60), Thai National Defence College
- The Executive Program in Energy Literacy for a Sustainable Future (Class 14), Thailand Energy Academy (TEA)
- Leadership Development Program (LDP 3), Class 4, PTT Leadership and Learning Institute
- Capital Market Leadership Program (CMA30), Capital Market Academy (CMA)
- Executive Development Training Program, the Royal Thai Police

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

May 2024 – Present
Director, Secretary to the Board, and Chief Executive Officer and President, PTT Public Company Limited

2019 – Present
Director, PTT Global Chemical Public Company Limited

2020 – 2024
Chairman of the Board of Directors, Global Green Chemicals Public Company Limited

2019 – 2024
Chief Executive Officer and President, PTT Global Chemical Public Company Limited

2019 – 2024
Director to the Risk Management Committee, PTT Global Chemical Public Company Limited

2019 – 2024
Director and Member of the Risk Management Committee, Global Power Synergy Public Company Limited

2019 – 2024
Senior Executive Vice President, Reporting to Chief Operating Officer, Downstream Petroleum Business, PTT Public Company Limited

2019 – 2020
Director, Global Green Chemicals Public Company Limited

2017 – 2019
Chief Operating Officer – Upstream Petrochemical Business, PTT Global Chemical Public Company Limited

Other Companies

2021 – 2024
Chairman of Supervisory Board, PTTGC International (Netherlands) B.V. for business and investment in allnex company

2021 – 2024
Chairman of the Board of Directors, PTTGC International (Netherlands) B.V.

2020 – 2024
Chairman of the Board of Directors, PTTGC International Private Limited

2020 – 2022
Chairman of the Board of Directors, GC International Corporation

2015 – 2022
Chairman of the Board of Directors, PTTGC America LLC

2015 – 2022
Chairman of the Board of Directors, PTTGC America Corporation

2019 – 2020
Director, GC International Corporation

2017 – 2020
Director, Thai Tank Terminal Limited

2008 – 2020
Director, PTTGC International Private Limited

2015 – 2019
Director, President & CEO, PTTGC America Corporation

2015 – 2019
Director, GC America Sustainability Corporation

2015 – 2019
Director, PTTGC International (Netherlands) B.V.

2015 – 2019
Director, Vencorex Holding

2008 – 2019
Director, Emery Oleochemicals (M) Sdn. Bhd.

2008 – 2019
Director, Emery Specialty Chemicals Sdn. Bhd.

Other Organizations

2024 – Present
Committee on the Solar PV for the Public

2024 – Present
Energy Sources Inspection Committee

2024 – Present
Working Committee on Coordination and Progress Monitoring under the Memorandum of Understanding between the Ministry of Energy of the Kingdom of Thailand and the Ministry of Energy of Saudi Arabia in the Field of Energy

2024 – Present
Committee of the 7th Anniversary of the Passing of His Majesty King Bhumibol Adulyadej the Great, "Sattamawarat" Ceremony and of the 72nd Birthday Celebration of His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua

2024 – Present
Chairman of the Council Board and Chairman of the Executive Committee of Thailand Carbon NeutralNetwork (TCNN) for the year 2024 – 2025

2024 – Present
Council Member, World Business Council for Sustainable Development (WBCSD)

2024 – Present
Founding Member, UN Global Compact Network Thailand (UNGCNT)

2024 – Present
Working Committee on the gathering of information, coordination, and monitoring its operations according to MoU between Thailand and Saudi Arabia

2024 – Present
Honorary Member, CONNEXT ED Foundation

2024 – Present
Chairman, Power of Innovation Foundation

2024 – Present
Chairman, Power for Sustainable Future Foundation

2024 – Present
Social Cooperation Promotion Committee, Princess Maha Chakri Award Foundation

2024 – Present
Member of the Steering Committee of Public Service Center, Ministry of Energy
2024 – Present
Member of the Policy Committee of State Enterprises and Private Sector Support for Sports Associations
2024 – Present
Co-Founder, Thailand Supply Chain Network (TSCN)
2023 – Present
Committee, Chulalongkorn University Alumni Association under the Royal Patronage of His Majesty the King
2020 – Present
Director, Association of Capital Market Academy Alumni
2020 – Present
Director, The Federation of Thai Industries
2020 – Present
Member of Vidyasirimedhi Institute Council, Vidyasirimedhi Institute of Science and Technology (VISTEC)
2019 – Present
Member of Trustee, The Petroleum Institute of Thailand (PTIT)
2019 – Present
Council of Trustee, Thailand Business Council of Sustainable Development (TBCSD)
2019 – Present
Deputy Executive Director, Thailand Energy Academy
2019 – Present
Director, Kamnoetvidya Science Academy (KVIS)
2017 – Present
Co-Chairman, France-Thailand Business Forum
2024 – 2024
Sub-Committee of 72nd Birthday Celebration of His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua
2022 – 2024
Advisor of Small and Medium Industrial Institute, The Federation of Thai Industries (SMI)
2021 – 2024
Director and Member of The Nomination Committee and Remunerating Committee, Thai Institute of Directors Association (IOD)
2020 – 2024
Vice President (Supporting), Thailand Swimming Association
2020 – 2022
Advisor of the Member Relations, The Federation of Thai Industries
2020 – 2021
Director, Power For Sustainable Future Foundation
2019 – 2020
Director, Power of Innovation Foundation
2019 – 2020
Director, Power of Learning Foundation
2017 – 2024
Board Member, National Energy Technology Center (ENTEC), The National Science and Technology Development Agency (NSTDA)

Mr. Wattanapong Kurovat
Director and Member of the Risk Management Committee

Age: 50

Starting Date: November 15, 2024

Education:
- Master of Business Administration, Western Michigan University, USA
- Bachelor of Political Science, Thammasat University, Thailand

Training of Thai Institute of Directors Association:
- Director Certification Program (DCP) 288/2020
- Director Accreditation Program (DAP) 168/2020

Other Training:
- The National Defence Course (Class 67), Thai National Defence College
- The Role of the Board in IT Governance (Year 2020)
- Digital Transformation for CEO (Class 1)
- The Executive Program in Energy Literacy for a Sustainable Future (Class 13), Thailand Energy Academy (TEA)
- The Civil Service Executive Development Program: Visionary and Moral Leadership (NBS.1), Class 86, Civil Service Training Institute, Office of the Civil Service Commission
- Chief of Staff Program (Class 53), Joint Staff College, National Defense Studies Institute

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

February – September 2024
Director and Member of the Enterprise Risk Management Committee, PTT Public Company Limited

May 2021 – January 2024
Director, Member of the Risk Management Committee, Member of Corporate Governance and Sustainability Committee, and Member of the Nomination and Remuneration Committee

April 2021
Director and Member of the Nomination and Remuneration Committee, IRPC Public Company Limited

2019 – March 2021
Director and Member of the Risk Management Committee, IRPC Public Company Limited

Other Companies - None -

Other Organizations

October 2024 – Present
Director General, Energy Policy and Planning Office, Ministry of Energy

January – September 2024
Director General, Department of Alternative Energy Development and Efficiency, Ministry of Energy

April 2019 – December 2023
Director General, Energy Policy and Planning Office, Ministry of Energy

2018 – 2019
Deputy Director General, Energy Policy and Planning Office, Ministry of Energy

2015 – 2018
Director, Power Policy Bureau, Energy Policy and Planning Office, Ministry of Energy

Mr. Montri Rawanchaikul
Director and Secretary to the Board

Age: 60

Starting Date: October 1, 2021

Education:
- Honorary Doctorate Degree in Applied Geophysics, Chiang Mai University, Thailand
- Master of Applied Science (Exploration Geophysics), University of New South Wales, Australia
- Bachelor of Science (Physics), Chiang Mai University, Thailand

Training of Thai Institute of Directors Association:
- Strategic Board Master Class (SBM) 12/2023
- Director Certification Program (DCP) 337/2023
- The Corporate Governance: Regulation and Disclosure Training

Other Training:
- Internal Lectures by PTTEP on Decarbonization
- Internal Lectures by PTTEP on Sustainability
- The Cullinan: The Making of the Digital Board (Batch 4/2024), Digital Economy Promotion Agency (depa) and Thailand Management Association (TMA)
- Capital Market Leadership Program (CMA31), Capital Market Academy (CMA)
- Leadership Development Program III (LDP III) by PTT Leadership and Learning Institute
- The Executive Program in Energy Literacy for a Sustainable Future (Class 11), Thailand Energy Academy (TEA)
- Leadership Development Program II (LDP II) by PTT Leadership and Learning Institute
- EP LEAD III Leadership Development Program by IMD

% of Shareholding:
Management 0.00131% (52,050 shares)

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

October 2021 – Present
Chief Executive Officer, PTTEP

October 2021 – September 2024
Senior Executive Vice President, PTT, Reporting to Chief Operating Officer, Upstream Petroleum and Gas Business Group working on a secondment as Chief Executive Officer, PTTEP

February – September 2021
President, PTTEP

February – September 2021
Senior Executive Vice President, PTT, Reporting to Chief Operating Officer, Upstream Petroleum and Gas Business Group working on a secondment as President, PTTEP

October 2020 – January 2021
President and acting as Executive Vice President, Production Asset Group, PTTEP

October 2020 – January 2021
Senior Executive Vice President, PTT, Reporting to Chief Operating Officer, Upstream Petroleum and Gas Business Group working on secondment as President and acting as Executive Vice President, Production Asset Group, PTTEP

January – September 2020
Executive Vice President, Production Asset Group, PTTEP

October 2017 – December 2019
Executive Vice President, Strategy and Business Development Group, PTTEP
November 2017 – September 2018
Executive Vice President, Strategy and Business Development Group and Acting Senior Vice President, New Business Unit, and additional assigned as Project Champion, Spend Smart, PTTEP

Other Companies
January 1998 – August 2004
Project Manager and Business Unit Manager, Fugro Jason Geosystems in the Netherlands
July 1989 – December 1990
Researcher Assistant Road and Traffic Authority Sydney and Wireline Engineer, Schlumberger in Australia

Other Organizations - None -

Mr. Pitipan Tepartimargorn
Ex-Director

Age: 68

Education:
- Master of Arts – Political Science (Public Administration), Thammasat University, Thailand
- Bachelor of Engineering – Electrical Engineering (Second Class Honors), King Mongkut's Institute of Technology Ladkrabang, Thailand

Training of Thai Institute of Directors Association:
- Anti-Corruption: Leadership Role of the Board
- Anti-Corruption for Executive Program (ACEP) 4/2012
- Director Certification Program (DCP) 138/2010

Other Training:
- Director's Briefing – Corporate Strategy Beyond the Crisis, a Chairman/Board Perspective, Bain & Company, Inc.
- Strategic Human Resource Management, Harvard University, USA
- NIDA – Wharton Executive Leadership Program, The Wharton School, University of Pennsylvania, USA
- Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Advance Political and Electoral Development Program (Class 3), Office of the Election Commission of Thailand
- PTT Executive Leadership Program, General Electrics, Crotonville, USA
- Capital Market Leadership Program (CMA19), Capital Market Academy (CMA)

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:
Other Listed Companies
May – July 2019
Chairman of the Labour Relations Committee, Thai Airways International Public Company Limited
April – November 2019
Member of the Corporate Plan Steering and Monitoring Committee, Thai Airways International Public Company Limited
October 2018 – November 2019
Chairman of the Nomination and Remuneration Committee, Thai Airways International Public Company Limited
August 2018 – April 2019
Member of the U-Tapao Aircraft Repair Center Project Governance and Thai Airways Business Development Project at U-Tapao Airport Sub-Committee, Thai Airways International Public Company Limited

May 2018 – April 2019
Member of the Risk Management Committee, Thai Airways International Public Company Limited
March – August 2018
Member of the Recruitment of THAI's President Committee, Thai Airways International Public Company Limited
February 2018 – November 2019
Member of the Nomination and Remuneration Committee, Thai Airways International Public Company Limited
January 2018 – April 2019
Member of the Human Resources Committee, Thai Airways International Public Company Limited
December 2017 – November 2019
Director, Thai Airways International Public Company Limited

Other Companies

April – October 2016
Chairman, PTT Energy Resources Company Limited

Other Organizations

September 2019 – Present
Senior Advisor of the Governing Board, Kamnoetvidya Science Academy (KVIS)
February 2018 – Present
Chairman of the Executive Committee, Vidyasirimedhi Institute of Science and Technology (VISTEC)
July 2015 – Present
Chairman of the Personnel Management Committee, VISTEC
May 2015 – Present
Council Member, VISTEC
December 2017 – September 2019
Vice Chairman of the Governing Board, Kamnoetvidya Science Academy, KVIS
October 2014 – May 2019
Director, the Civil Service Sub-Commission on Development of Human Resource Management (HRM), Office of the Civil Service Commission (OCSC)

Mrs. Angkarat Priebjrivat
Ex-Director

Age: 69

Education:

- Ph.D. (Accounting), New York University, USA
- Master of Accounting (Accounting), Thammasat University, Thailand
- Bachelor of Business Administration (Accounting) (Second Class Honors), Thammasat University, Thailand

Training of Thai Institute of Directors Association:

- National Director Conference 2022 (NDC)
- National Director Conference 2021 (NDC)
- DCP Series 4/2019: "How to Develop a Winning Digital Strategy"
- Audit Committee Forum 2018: Learn, Unlearn, and Relearn – Audit Committee in the Age of Disruption
- Driving Company Success with IT Governance (ITG) 6/2017
- The Role of Chairman (RCP) 2008
- Audit Committee Program (ACP) 2007
- Director Certification Program (DCP) 2006
- Director Accreditation Program (DAP) 2005
- Monitoring the Internal Audit Function Program (MIA)
- Monitoring the System of Internal Control and Risk Management Program (MIR)
- Anti-Corruption for Executive Program

Other Training:

- The Importance of the Audit Committee to the Thai Capital Market
- PTT Group Audit Committee Forum 2023
- Company Directors and Senior Executives and ESG Risk Management
- Engaging Board in ESG: The Path to Effective Sustainability
- Hot Issue for Director: Climate Governance
- Sustainability Trends in Business Across Industries
- Cyber Security Issues & Defenses for Financial Sector, TISCO Financial Group Public Company Limited
- Artificial Intelligence & Machine Learning, TISCO Learning Center Company Limited
- Cyber Resilience Leadership: SMART Goal, Bank of Thailand, the Securities and Exchange Commission of Thailand (SEC), and Office of the Insurance Commission (OIC)
- Cyber Armor: Capital Market Board Awareness 2022, Cyber Threat Lessons Learned for Board of Directors, SEC
- PTT Group AC Forum 2022, "Risk in Environmental, Social, and Governance (ESG) and Reporting by EY Corporate Services Limited" and "Fundraising and Digital Asset Accounting by EY Office Limited", PTT Public Company Limited
- Management and Staff Roles for Developing Anti-Corruption Compliance System, Private Sector Collective Action against Corruption
- Cyber Armor: Capital Market Board Awareness No. 2, The Securities and Exchange Commission of Thailand, SEC
- Top Risk 2022 and Audit Risk-based Plan, IA Academy
- Technology Audit and Audit Innovation, IA Academy
- Director's Briefing – Corporate Strategy Beyond the Crisis, a Chairman/Board Perspective, Bain & Company, Inc.
- IT Security Awareness for Top Management, ACIS Professional Center Company Limited
- Corporate Sustainability Development, SBDI Company Limited
- PTT Group AC Forum 2020 "It's time to Reform a Next New Normal," PTT Public Company Limited
- Understanding Thailand Data Protection Law and its Unintended Consequence, ACIS Professional Center Company Limited (ACIS)
- Role of the Boardroom: Transforming Corporate Compliance into Corruptless Society, a collaborative project by the Thai private sector against corruption
- Understanding Cryptocurrency, Blockchain, and Digital Asset and the Opportunities in Thailand, KQ Consulting Company Limited
- Capital Market Leadership Program (CMA4), Capital Market Academy (CMA)
- Certificate in International Financial Reporting Standard (IFRS), the Institute of Chartered Accountants in England and Wales (ICAEW)

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

April 2022 – Present
Chairman of the Corporate Governance Committee,
Chairman of the Risk Oversight Committee,
and Non-Executive Director,
TISCO Financial Group Public Company Limited

April 2021 – April 2022
Audit Committee,
TISCO Financial Group Public Company Limited

2008 – April 2022
Independent Director,
TISCO Financial Group Public Company Limited

2008 – April 2021
Chairman of Audit Committee,
TISCO Financial Group Public Company Limited

Other Companies

April 2021 – Present
Chairman of the Risk Oversight Committee and Non-Executive Director, TISCO Bank Public Company Limited
April 2021 – April 2022
Audit Committee and Independent Director, TISCO Bank Public Company Limited
March – August 2021
Independent Director, Bioscience Animal Health (Thailand) Company Limited
2018 – 2020
Chairman of Risk Management Committee, Member of Audit Committee, Independent Director, TOT Public Company Limited
2016 – April 2023
Director, Member of Audit Committee, TSFC Securities Public Company Limited
2013 – April 2022
Independent Director and Audit Committee, TISCO Bank Public Company Limited
2014 – February 2021
Chairman of Risk Management Committee, COL Public Company Limited
2013 – April 2021
Chairman of Audit Committee, Independent Director, TISCO Bank Public Company Limited
2008 – February 2021
Chairman of Audit Committee, Independent Director, COL Public Company Limited

Other Organizations

2002 – Present
Member of Government Accounting Standards Committee, the Comptroller General's Department, Ministry of Finance
1992 – Present
Consultant for Information Disclosure and Accounting Standards, The Stock Exchange of Thailand (SET)
December 2020 – September 2023
Chairman of Subcommittee on Finance and Accounting of the Energy Conservation Fund
2012 – January 2023
Member of Audit Committee, Thai Public Broadcasting Service (Thai PBS)
June – December 2020
The working group to resolve accounting issues of The Energy Conservation Fund fiscal years 2014 – 2018, The Energy Conservation Fund
2018 – 2020
Member of Risk Management Committee, The Government Pension Fund (GPF)
2018 – 2020
Member of Technical Advisory Committee for Financial Reporting Standards and Member of Advisory Committee for Fund Raising and Listing Department, The Securities and Exchange Commission Board (SEC)
2018 – 2019
Member of Finance and Accounting Subcommittee, State Railway of Thailand
2014 – 2018
Director, Member of Audit Committee, Tourism Authority of Thailand

Mr. Auttapol Rerkpiboon
Ex-Director

Age: 59

Education:
- Master of Economics, National Institute of Development Administration, Thailand
- Bachelor of Engineering (Civil Engineering), Chulalongkorn University, Thailand
- Diploma of Petroleum Management, College of Petroleum Studies, Oxford University, UK (British Council Scholarship)

Training of Thai Institute of Directors Association:
- Director Certification Program (DCP) 173/2013
- Company Secretary Program (CSP) 14/2005

Other Training:
- Director's Briefing – Corporate Strategy Beyond the Crisis, a Chairman/Board Perspective, Bain & Company, Inc.
- The National Defence Course (Class 58), Thai National Defence College
- Advanced Certificate Course in Politics and Governance in Democratic System for Executives (Class 14), King Prajadhipok's Institute
- The Executive Program in Energy Literacy for a Sustainable Future (Class 12), Thailand Energy Academy (TEA)
- Capital Market Leadership Program (CMA20), Capital Market Academy (CMA)
- Executive Program on Rule of Law and Development: RoLD (Class 2), Thailand Institute of Justice: TIJ (Public Organization)
- Executive Development Program (EDP), Class 1, Thai Listed Companies Association (TLCA)
- Rule of Law for Democracy (Class 8), College of the Constitutional Court
- NIDA – Wharton Executive Leadership Program 2009, The Wharton School of the University of Pennsylvania, USA
- PTT Executive Leadership, General Electric, GE, New York, USA

% of Shareholding:
Spouse 0.00001% (500 shares)

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

August 2024 – Present
Independent Director, Kasikornbank Public Company Limited

May 2024 – Present
Independent Director, CP Axtra Public Company Limited

May 2020 – May 2024
President and Chief Executive Officer, PTT Public Company Limited

May 2020 – May 2024
Director, Secretary to the Board, PTT Public Company Limited

December 2015 – May 2024
Chairman, PTT Oil and Retail Business Public Company Limited

April 2018 – July 2020
Director, Chairman of the Risk Management Committee/ Member of the Nomination and Remuneration Committee, Thai Oil Public Company Limited

October 2017 – May 2020
Chief Operating Officer, Downstream Petroleum Business Group, (October 1, 2017 – September 30, 2018, Acting Senior Executive Vice President, Downstream Business Group Alignment), PTT Public Company Limited

October 2015 – October 2018
Director, Director to the Corporate Governance Committee, Director to the Risk Management Committee, PTT Global Chemical Public Company Limited
October 2015 – September 2017
Senior Executive Vice President – Oil Business Unit, PTT Public Company Limited

Other Companies

June 2021 – February 2022
Director, ARUN PLUS Company Limited

Other Organizations

2023 – Present
Expert Member of Government Pension Fund Board of Directors
2023 – Present
Expert committee of National Science and Technology Development Board
2023 – Present
President, Chulalongkorn University Alumni Association under the Royal Patronage
2023 – Present
Committee member, Chulalongkorn University Council
November 2022 – May 2024
Honorary Advisor, the S.E.A. Write Award Organizing Committee
November 2022 – May 2024
Chairman Council Board, Thailand Carbon Neutral Network
October 2022 – May 2024
Advisory Board, Committee of Lottery Tickets Red Cross Fair 2022, the National Council on Social Welfare of Thailand
October 2022 – May 2024
Director, Steering Committee Friends in need of ("PA") 2022
September 2022 – May 2024
Member of the Raising Funds Committee for Building and Construction Maintenance, Suan Luang Rama IX Foundation
June 2022 – May 2024
Committee Member, the General Prem Tinsulanonda Historical Park
May 2022 – May 2024
Advisor, IEEE Power & Energy Society
May 2022 – May 2024
Director, Steering Committee According to Royal Initiative Projects, the Vetiver Grass Project
April 2022 – May 2024
Advisory Board, Sirinart Rajini Mangrove Ecosystem Learning Center
April 2022 – May 2024
Honorary Advisor, the Economic Reporters Association
November 2021 – May 2024
Promoting Social Cooperation Committee, Princess Maha Chakri Award Foundation
March 2021 – May 2024
Director, Thai Foundation
October 2020 – May 2024
Committee Member, Suan Luang Rama IX Foundation

October 2020 – May 2024
Advisory Board, the Institute of Energy for Industry
August 2020 – May 2024
Chairman, Power for Sustainable Future Foundation
August 2020 – May 2024
Expert Committee of Vidyasirimedhi Institute Council, Vidyasirimedhi Institute of Science and Technology (VISTEC)
June 2020 – May 2024
Committee Member, Ruamchit Normklao Foundation for Thai Youth under the patronage of H.R.H. the Queen
June 2020 – May 2024
Chairman, Power of Innovation Foundation
May 2020 – May 2024
Member of Trustees, Petroleum Institute of Thailand (PTIT)
May 2020 – May 2024
Vice Chairman, Thailand Energy Academy
May 2020 – May 2024
Committee member, OUR Khung BangKachao
May 2020 – May 2024
President, PTT Group Employee Association
May 2020 – May 2024
Advisory Board, PTT Natural Gas Business Saving Co-Operative Limited
May 2020 – May 2024
Committee Member, Green Globe Institute
March 2020 – May 2024
Expert Committee of NIDA Council, the National Institute of Development Administration (NIDA)
2019 – May 2024
Honorary Advisor, the National Institute of Development Administration (NIDA) Alumni Association under the Royal Patronage
July 2018 – July 2024
Committee Member, Payment Systems Committee (PSC), Bank of Thailand
2018 – May 2024
Honorary advisor, Thai-Laos Business Council
November 2016 – May 2024
Vice President, Swimming Association Thailand
November – December 2022
Advisory Board, Fund Raising Committee for Contribution to a Charity Fund Started by the King, Thai Red Cross Society 2022, Chulalongkorn University
October 10 – 23, 2022
Chairman, Steering Committee King Chulalongkorn Day 2022, Chulalongkorn University Alumni Association Under The Royal Patronage of His Majesty The King
November 2021 – December 2021
Advisory Committee of Fund Raising Committee 2021, Thai Red Cross Society, Chulalongkorn University
2018 – 2020
President, the Marketing Association of Thailand

Mr. Veerapat Kiatfuengfoo
Ex-Director

Age: 52

Education:
- Ph.D. Development Studies, The University of Melbourne, Australia
- Master of Economic Development, Vanderbilt University, USA
- Bachelor of Business Administration, Kasetsart University, Thailand

Training of Thai Institute of Directors Association:
- Director Certification Program (DCP) 336/2023

Other Training:
- The Executive Program in Energy Literacy for a Sustainable Future (Class 18), Thailand Energy Academy (TEA)
- The Civil Service Executive Program, Class 13, Office of the Civil Service Commission
- Executive Development Program, Class 13, Ministry of Finance
- Executive Development Program, Class 10, Ministry of Education
- Executive Energy Management Program, Class 10, Ministry of Energy

% of Shareholding: - None -

Family Relationship among Director and Executives: - None -

Working Experiences in the Five Preceding Years:

Other Listed Companies

October 2024 – Present
Director and Member of the Enterprise Risk Management Committee, PTT Public Company Limited

February 2023 – January 2024
Director and Member of the Risk Management Committee, Thai Oil Public Company Limited

Other Companies - None -

Other Organizations

2024 – Present
Deputy Permanent Secretary, the Office of the Permanent Secretary, Ministry of Energy

2024 – 2024
Director, Thailand Automotive Institute

2024 – 2024
Director General, Energy Policy and Planning Office, Ministry of Energy

2023 – 2023
Deputy Permanent Secretary, the Office of the Permanent Secretary, Ministry of Energy

2023 – 2023
Advisor to the Energy Working Group, Thai Chamber of Commerce

2021 – 2022
Deputy Director General of Energy Policy and Planning Office, Ministry of Energy

2018 – 2021
Executive Director, Power Policy Division, Energy Policy and Planning Office, Ministry of Energy

Criminal offense record during the past 10 years

- Being adjudged of convicting a crime or being on trial for convicting a crime
  - No -
- Being adjudged bankrupt or a receiver is appointed
  - No -
- Being part of the management in the company or partnership which is adjudged bankrupt or be put under receivership
  - No -

Remark: The name and number(s) of the authorized directors who may sign to bind the Company from October 29, 2024 are Mr. Wuttikorn Stithit and Mr. Ekniti Nitithanprapas. Two of these directors can jointly sign and affix the Company's seal. Mr. Montri Rawanchaikul, the Chief Executive Officer, can sign on his own without the need for another director.

2. Management

As of January 1, 2025, PTTEP management team had 19 personnel as defined by the Capital Market Supervisory Board. Details are as follows:

Mr. Montri Rawanchaikul
Chief Executive Officer

Please see part 1 for details

Ms. Natruedee Khositaphai
Executive Vice President, Operations Support Group

Age: 59

Starting Date: September 2023 – Present

Education:
- Master of Business Administration, Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Bachelor of Engineering (Petroleum Engineering), Chulalongkorn University, Thailand

% of Shareholding:
Management 0.0000271% (107,457 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
January – February 2025
Acting Senior Vice President, Digital Technology Center of Excellence Division, PTTEP
January – August 2023
Executive Vice President, Technology and Carbon Solutions Group, PTTEP
January 2020 – December 2022
Executive Vice President, Strategy and Business Development Group, PTTEP
June – December 2019
Executive Vice President, Corporate Affairs and Assurance Group, PTTEP
October 2018 – May 2019
Acting Executive Vice President, Corporate Affairs and Assurance Group, PTTEP
October – December 2018
Acting Senior Vice President, Corporate Communications and Public Affairs Division, PTTEP
November 2017 – September 2018
Senior Vice President, International Asset, PTTEP
July – November 2017
Acting Senior Vice President, International Asset, PTTEP
May 2016 – June 2017
Vice President, assigned as Project Manager, SAVE to be SAFE Project, PTTEP

Mr. Chayong Borisuitsawat
Executive Vice President, Domestic Production Asset Group

Age: 57

Starting Date: December 2024 – Present

Education:
- Master of Management (Management and Strategy), College of Management Mahidol University, Thailand
- Bachelor of Engineering (Petroleum Engineering), Chulalongkorn University, Thailand

% of Shareholding:
Management 0.0000164% (65,096 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

September 2023 – November 2024
Executive Vice President, Strategy, Business Development, and Human Resources Group, PTTEP

January – August 2023
Executive Vice President, Strategy and Sustainable Growth Group, PTTEP

December 2021 – December 2022
Executive Vice President, Human Resources, Corporate Affairs, and Assurance Group, PTTEP

January 2020 – November 2021
Executive Vice President, Engineering and Development Group, PTTEP

November 2018 – December 2019
Executive Vice President, Business and Organization Transformation Group, PTTEP

October 2018
Executive Vice President, Operations Support Group, PTTEP

November 2017 – September 2018
Acting Executive Vice President, Operations Support Group, PTTEP

November 2017 – July 2018
Project Champion, SPEND SMART Project, PTTEP

July 2016 – October 2017
Project Champion, SAVE to be SAFE, PTTEP

Mr. Piya Sukhumpanumet
Executive Vice President, Geosciences, Subsurface, and Exploration Group

Age: 59

Starting Date: January 2025 – Present

Education:
- Master of Business Administration, Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Bachelor of Geology, Chulalongkorn University, Thailand

% of Shareholding:
Management 0.0000226% (89,916 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
October – December 2024
Executive Vice President, International Production Asset Group, and Acting Executive Vice President Geosciences, Subsurface, and Exploration Group, PTTEP
April 2022 – October 2024
Executive Vice President, International Production Asset Group, PTTEP
December 2021 – March 2022
Executive Vice President, Geosciences, Subsurface and Exploration Group, PTTEP
June – November 2021
Executive Vice President, Human Resources, Corporate Affairs, and Assurance Group, PTTEP
October 2020 – May 2021
Acting Executive Vice President, Human Resources, Corporate Affairs, and Assurance Group, PTTEP
September 2016 – September 2020
Senior Vice President, Myanmar Asset, seconded as General Manager, PTTEP International Limited (Yangon Branch), Myanmar
July – August 2016
Senior Vice President, Technology and Knowledge Management Division, PTTEP

Mr. Nirandorn Rojanasomsith

Executive Vice President, Engineering, Development, and Maintenance Group

Age: 59

Starting Date: January 2023 – Present

Education:

- Master of Science (Mechanical Engineering), Manhattan College, USA
- Master of Science (Computer), Brooklyn College, USA
- Master of Business Administration (Executive), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Bachelor of Engineering (Mechanical Engineering), Kasetsart University, Thailand

% of Shareholding:

Management 0.0000341% (135,202 shares)
Spouse 0.0000098% (38,839 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

April – December 2022
Executive Vice President, Domestic Production Asset Group, PTTEP

August 2021 – March 2022
Executive Vice President, Production Asset Group, PTTEP

February – July 2021
Acting Executive Vice President, Production Asset Group, PTTEP

February 2021
Acting Senior Vice President, Thai Offshore Asset, PTTEP

August 2019 – January 2021
Senior Vice President, Thai Offshore Asset, Production Asset, PTTEP

November 2017 – July 2019
Senior Vice President, Australia Asset and seconded as General Manager, PTTEP Australasia Pty Ltd, Australia

Ms. Kanita Sartwattayu

Executive Vice President, Strategy, Business Development, and Human Resources Group

Age: 54

Starting Date: December 2024 – Present

Education:

- Master of Science (Engineering Management), University of Missouri-Rolla, Rolla, USA
- Bachelor of Engineering (Chemical Engineering), Chulalongkorn University, Thailand

% of Shareholding:

Management 0.0000127% (50,279 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Year:

January 2023 – November 2024
Executive Vice President, Domestic Production Asset Group, PTTEP

June – December 2022
Executive Vice President, Engineering and Development Group, PTTEP

December 2021 – May 2022
Acting Executive Vice President, Engineering and Development Group, PTTEP

October 2019 – November 2021
Senior Vice President, Development Project Division, PTTEP

June – September 2019
Senior Vice President assigned as Project Head of Asset Transition Project and Acting Senior Vice President, Development Project Division, PTTEP

October 2018 – May 2019
Acting Vice President, M3 Development Project, PTTEP

October 2018 – January 2019
Senior Vice President, Development Project Division, PTTEP

July 2017 – September 2018
Senior Vice President, Business Development 1 Division, PTTEP

Mr. Nopasit Chaiwanakupt

Executive Vice President, Technology, Carbon Solutions, and Sustainable Growth Group

Age: 55

Starting Date: March 2024 – Present

Education:

- Master of Business Administration (Executive), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Master of Science (Chemical Engineering), Oregon State University, USA
- Bachelor of Engineering (Chemical Engineering), Chulalongkorn University, Thailand

% of Shareholding: - None -

Family Relationship among Directors and Executive - None -

Working Experiences in the Five Preceding Year:

September 2023 – February 2024
Acting Executive Vice President, Technology, Carbon Solutions, and Sustainable Growth Group, PTTEP

January – August 2023
Senior Vice President, Carbon and Energy Solutions Division and Acting Vice President, Strategy and Business Management Department, PTTEP

January – March 2023
Acting Vice President, CCS Department, PTTEP

October 2021 – December 2022
Senior Vice President, New Business Division, PTTEP

February 2020 – September 2021
Senior Vice President assigned as Project Head, Malaysia Asset Transition, PTTEP

May 2019 – January 2020
Project Head of Malaysia Asset Transition, PTTEP

November 2018 – July 2019
Senior Vice President, Thai Offshore Asset, PTTEP

July 2017 – October 2018
Senior Vice President, Business Development 3 Division, PTTEP

Mrs. Chanamas Sasnanand

Executive Vice President, Finance and Accounting Group

Seconded from PTT Public Company Limited, Executive Vice President, attached to Chief Financial Officer

(The person is directly responsible for supervising accounting functions)

Age: 55

Starting Date: October 2024 – Present

Education:

- Master of Business Administration, University of South Carolina, USA
- Bachelor of Business Administration, Chulalongkorn University, Thailand

% of Shareholding:

Management 0.0000114% (45,411 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

December 2023 – September 2024
Executive Vice President, Finance and Accounting, Thai Oil Public Company Limited

January 2021 – November 2023
Executive Vice President, Group Corporate Finance and Strategy, PTT Public Company Limited

January 2019 – December 2020
Senior Vice President, Finance Division, PTTEP

January – December 2018
Senior Vice President, Internal Audit Division (included acting), PTTEP

Mr. Titi Thongjen
Acting Executive Vice President, International Production Asset Group

Age: 53

Starting Date: January 2025 – Present

Education:
- Master of Business Administration, Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Master of Engineering (Civil Engineering), Bradley University, USA
- Bachelor of Engineering (Civil Engineering), King Mongkut's University of Technology Thonburi, Thailand

% of Shareholding:
Management 0.0000005% (2,000 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
March 2023 – December 2024
Senior Vice President, Myanmar Asset, seconded as General Manager, PTTEP International Limited, (Yangon Branch), Myanmar
September 2022 – February 2023
Acting Senior Vice President, Myanmar Asset, seconded as General Manager, PTTEP International Limited, (Yangon Branch) Myanmar
June 2019 – August 2022
Vice President, M3 Gas to Power Development Project, PTTEP
July 2013 – May 2019
Vice President, Indonesia Asset, seconded as General Manager, PTTEP South Manda Limited, Indonesia

Mr. Sermsak Satchawannakul
Senior Vice President, Finance Division

Age: 56

Starting Date: October 2024 – Present

Education:
- Master of Business Administration, Thammasat University, Thailand
- Bachelor of Accounting, Thammasat University, Thailand

% of Shareholding:
Management 0.0000114% (45,215 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
October 2020 – September 2024
Senior Vice President, Accounting Division, PTTEP
January 2019 – September 2020
Vice President, Financial Accounting Department, PTTEP
January 2019
Acting Vice President, Office Facility Management Department, PTTEP
July 2015 – December 2018
Vice President, Myanmar Business Support Department, seconded as Myanmar Business Support Manager, PTTEP International Limited (Yangon Branch), Myanmar

Mr. Sakchai Sarawek
Senior Vice President, Accounting Division

(The person is directly responsible for supervising accounting functions)

Age: 55

Starting Date: October 2024 – Present

Education:

- Master of Science (Accounting Information System), Chulalongkorn University, Thailand
- Bachelor of Accounting, Thammasat University, Thailand

Continuing Professional Development (CPD) 2024:

- PwC Thailand's 2024 Symposium Beyond Boundaries: Shaping Tomorrow's Innovations Corporate Reporting Forum (CPD [Accounting] 6 hours)
- PwC Thailand's 2024 Symposium Beyond Boundaries: Shaping Tomorrow's Innovations Maximising Shareholder Value (CPD [Accounting] 6 hours)
  (An Accountant with criteria specified by the Department of Business Development)

% of Shareholding: - None -

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

July 2020 – September 2024
Vice President, Managerial Accounting Department, PTTEP

July 2018 – June 2020
Vice President attached to International Asset seconded as Senior Manager, Business Support at CPOC, Malaysia

July 2016 – June 2018
Vice President, Accounting Policy and Solutions Department, PTTEP

November 2012 – June 2016
Vice President, Australia Asset, seconded as Finance and Accounting Manager, PTTEP Australasia Pty Ltd, Australia

Mrs. Maneeya Srisukhumbowornchai
Senior Vice President, Tax and Insurance Division

Age: 50

Starting Date: June 2024 – Present

Education:
- Master of Business Administration, Thammasat University, Thailand
- Bachelor of Accountancy, Chulalongkorn University, Thailand

% of Shareholding: - None -

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
May 2023 – May 2024
Senior Vice President, Internal Audit Division, PTTEP
January 2023 – April 2024
Senior Vice President, Corporate Secretary and Assurance Division, PTTEP, assigned as Company Secretary
September 2020 – December 2022
Senior Vice President, Corporate Secretary Division, PTTEP, assigned as Company Secretary
September 2019 – August 2020
Acting Senior Vice President, Corporate Secretary Division, PTTEP, assigned as Corporate Secretary
October 2018 – June 2019
Acting Vice President, Accounting Policy and Solutions Department, PTTEP
May 2015 – August 2019
Vice President, Tax Department, PTTEP

Mr. Chayanin Yiamsombut
Vice President, Insurance Department

Age: 47

Starting Date: April 2023 – Present

Education:
- Master of Business Administration (Finance), DePaul University, USA
- Bachelor of Science (Economics), Chulalongkorn University, Thailand

% of Shareholding:
Management 0.0000056% (22,145 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
October 2022 – March 2023
Acting Vice President, Insurance Department, PTTEP
June 2014 – September 2022
Senior Analyst, Insurance, PTTEP

Mr. Thanat Thamrongsaksuvit

Vice President, attached to Finance Division, assigned as Managing Director, PTTEP Treasury Center

Age: 47

Starting Date: October 2023 – Present

Education:

- Master of Science (Finance and Banking), The University of Sydney, Australia
- Bachelor of Business Administration (Finance and Banking), Assumption University, Thailand

% of Shareholding: - None -

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

October 2020 – September 2023
Manager, Investor Relations Section, PTTEP

February 2018 – September 2020
Manager, Financial Risk Management Section, PTTEP

Ms. Nuchanong Sangkeaw

Vice President, Managerial and International Asset Accounting Department

Age: 47

Starting Date: October 2024 – Present

Education:

- Master in Professional Accounting, The University of Texas at Austin, USA
- Master of Arts (Economic Law), Chulalongkorn University, Thailand
- Bachelor of Accounting, Thammasat University, Thailand

% of Shareholding:

Management 0.0000012% (4,605 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

August 2020 – September 2024
Vice President, Capital Market and Financial Planning Department, PTTEP

January – July 2020
Acting Vice President, Capital Market and Financial Planning Department, PTTEP

July – December 2019
Acting Vice President, Capital and Investor Relations Department, PTTEP

November 2018 – June 2019
Manager, Investor Relations Section, PTTEP

Mrs. Yada Vudhivorn
Vice President, Tax Department

Age: 46

Starting Date: April 2020 – Present

Education:
- Master of Laws, University of London, UK
- Master of Laws, Northwestern University, USA
- Bachelor of Law, Thammasat University, Thailand

% of Shareholding: - None -

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
September 2019 – March 2020
Acting Vice President, Tax Department, PTTEP
August 2015 – August 2019
Manager, Tax Planning Section, PTTEP

Ms. Sukporndee Assamongkol
Vice President, Operations and Domestic Asset Accounting Department

Age: 44

Starting Date: August 2024 – Present

Education:
- Master of Accounting, Chulalongkorn University, Thailand
- Bachelor of Accounting, Chulalongkorn University, Thailand

% of Shareholding:
Management 0.0000012% (4,618 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
July – August 2024
Vice President, Financial Accounting Department, PTTEP
December 2023 – June 2024
Acting Vice President, Financial Accounting Department, PTTEP
April 2022 – November 2023
Manager, Accounting Solutions Section, PTTEP
August 2019 – March 2022
Manager, Payment Section, PTTEP

Ms. Natiya Leelasiri
Vice President, Accounting Policy and Solutions Department

Age: 54

Starting date: January 2025 – Present

Education:
- Master of Business Administration, Thammasat University, Thailand
- Bachelor of Accounting, Thammasat University, Thailand

% of Shareholding:
Management 0.0000082% (32,576 Shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
January 2020 – December 2024
Vice President, Myanmar Business Support Department, seconded as Myanmar Business Support Manager, PTTEP International Limited (Yangon Branch), Myanmar
August – December 2019
Manager, Thai Offshore Asset Accounting Section, PTTEP
December 2016 – July 2019
Manager, Reporting and Analysis Section, PTTEP

Ms. Chutima Uthaiwatthanathorn
Vice President, Capital Market and Financial Planning Department

Seconded from PTT Public Company Limited, Vice President

Age: 40

Starting Date: October 2024 – Present

Education:
- Master of Finance, The University of Warwick, UK
- Bachelor of Bachelor of Accounting, Chulalongkorn University, Thailand

% of Shareholding: - None -

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:
January – September 2024
Vice President, PTT Global LNG Company Limited
March – December 2023
Manager, Investor Relations Department, PTT Public Company Limited
April 2021 – February 2023
Manager, PTT International Trading Pte Ltd
June 2018 – April 2021
Manager, Strategic Financial Investment Management Department, PTT Public Company Limited

PTTEP management team had five personnel, as defined by the Capital Market Supervisory Board, who retired or rotated during 2024. Details are as follows.

Mr. Sumrid Sumneing

Executive Vice President, Finance and Accounting Group

Seconded from PTT Public Company Limited, Executive Vice President, attached to Chief Financial Officer

Age: 60

Starting Date: January 2019 – September 2024

Education:

- Master of Business Administration, Kasetsart University, Thailand
- Bachelor of Accounting, Thammasat University, Thailand

Training:

- Capital Market Academy 29/2019
- Financial & Fiscal Management Program for Senior Executive by the Comptroller General's Department 5/2018
- Executive Development Program (EDP III), Thai Listed Companies Association (TLCA)
- Director Certification Program (Class 180/2013). the Institute of Directors Association (IOD)
- Leadership Development Program – Center of Creative Leadership (CCL)
- Finance Executive Program (FINEX21), the Thai Institute of Banking and Finance Association

% of Shareholding:

Management 0.0000033% (13,000 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

June 2016 – December 2018
Executive Vice President, Group Corporate Finance and Strategy, PTT Public Company Limited

December 2014 – December 2015
Vice President, Financial Strategy and Policy, PTT Public Company Limited

Mr. Suksant Ongvises

Executive Vice President, Lang Lebah Project, seconded to PTTEP Sarawak Oil Limited as Lang Lebah Project Director

Age: 60

Starting Date: September 2023 – December 2024

Education:

- Bachelor of Engineering (Chemical), The University of Newcastle, Australia

% of Shareholding:

Management 0.0000027% (10,681 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

January 2020 – August 2023
Executive Vice President, Operations Support Group, PTTEP

June – December 2019
Executive Vice President, Engineering, Development and Operations Group, PTTEP

October 2018 – May 2019
Acting Executive Vice President, Engineering, Development and Operations Group, PTTEP

April – September 2018
Acting Vice President, M3 Development Project, PTTEP

March 2017 – October 2018
Senior Vice President, Engineering and Construction Division, PTTEP

July 2016 – February 2017
Acting Senior Vice President, Engineering and Construction Division, PTTEP

Mr. Rangsan Bhengbhun

Executive Vice President, directly report to Chief Executive Officer

Age: 60

Starting Date: October – December 2024

Education:

- Bachelor of Geology, Chulalongkorn University, Thailand

% of Shareholding:

Management 0.0000166% (65,917 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

January – October 2024
Executive Vice President, Geosciences, Subsurface, and Exploration Group, PTTEP

March 2020 – December 2023
Senior Vice President, Subsurface Technical Solutions Division, PTTEP

January 2019 – February 2020
Senior Vice President, Geosciences, Reservoir Engineering and Corporate, PTTEP

July – December 2018
Acting Senior Vice President, Geosciences, Reservoir Engineering and Corporate, PTTEP

July 2016 – June 2018
Vice President, Geology Department, PTTEP

Ms. Panporn Sasananan

Senior Vice President, Finance Division

Seconded from PTT Public Company Limited, Executive Vice President, attached to Chief Financial Officer

Age: 57

Starting Date: December 2023 – September 2024

Education:

- Master of Science (Finance, Business Administration), University of Colorado, USA
- Bachelor of Accounting, Thammasat University, Thailand

% of Shareholding: - None -

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

January 2021 – November 2023
Vice President, Group Financial Planning, PTT Public Company Limited

January 2019 – December 2020
Vice President, Investor Relations, PTT Public Company Limited

December 2016 – December 2018
Vice President, PTT Public Company Limited, seconded as Vice President, Finance, IRPC Public Company Limited

January – November 2016
Strategic Financial Investment Management Division Manager, PTT Public Company Limited

Ms. Pratamaporn Deesrinthum

Vice President, attached to Senior Vice President, Accounting Division, assigned as Project Manager, ERP Project-SAP S/4 HANA

Age: 53

Starting Date: January 2025 – Present

Education:

- Master of Business Administration, Thammasat University, Thailand
- Bachelor of Accounting, Chulalongkorn University, Thailand

% of Shareholding:

Management 0.0000124% (49,249 shares)

Family Relationship among Directors and Executive: - None -

Working Experiences in the Five Preceding Years:

Apr. 2020 – Dec. 2024
Vice President, Accounting Policy and Solutions Department, PTTEP

Apr. 2018 – Mar. 2020
Vice President, Managerial Accounting Department, PTTEP

Jan. – Apr. 2018
Acting Vice President, Managerial Accounting Department, PTTEP

3. Company Secretary

Ms. Yaninee Wajeepratubjit
Senior Vice President, Corporate Secretary and Assurance Division, assigned as Company Secretary

Age: 55

Starting Date: May 2023 – Present

Education:

- Master of Business Administration, Chulalongkorn University, Thailand
- Bachelor of Accounting (Accounting), University of the Thai Chamber of Commerce, Thailand

Training:

- Media Training for Spokesperson by Hill & Knowlton Strategies
- Basic Compliance & Ethics Academy by Society of Corporate Compliance and Ethics (SCCE)
- Director Certificate Program (DCP) 342/2023 by the Thai Institute of Directors Association (IOD)
- Company Secretary Program (CSP) 136/2023 by the Thai Institute of Directors Association (IOD)
- Risk in Environmental, Social, and Governance (ESG) and Reporting, EY
- PDPA and Roles of Internal Auditors, PwC
- ESG and the Role of Internal Audit, PwC
- Performance Audit, KPMG
- Management Audit, Deloitte
- International Asset Audit, EY
- The Divestment and Post Merger Integration, EY
- EP-LEAD III Leadership Development Program, IMD

Work Experience in the Past Five Years:

January 2021 – April 2023
Senior Vice President, Internal Audit Division, PTTEP

November 2019 – December 2020
Specialist, attached to President and CEO, in charge of internal audit assignments, PTTEP

January – October 2019
Acting Senior Vice President, Internal Audit Division, PTTEP

July – December 2018
Acting Senior Vice President, Enterprise Risk Management and Internal Control Division, PTTEP

% of Shareholding:
0.00063% (25,200 shares)

Family Relationship among Directors and Executive: - None -

Attachment 2: Directors of Subsidiaries and Associated Companies[1]

1. List of PTTEP's Subsidiaries: As of December 31, 2024, there were 83 subsidiaries.

Name (the list only includes directors designated by PTTEP Group)	1. APICO	2. APICO KH	3. APICO KL	4. APT	5. ARV	6. ATI	7. ATL	8. Bedrock	9. BIND	10. B-MED X	11. Cariva	12. CEEAL	13. COVE	14. CPOC	15. DGH	16. DGT	17. EnCo	18. EP-Tech	19. FSG	20. FST
1. Mr. Korn Saranyasoontorn																				
2. Mr. Grinchai Hattagam																				
3. Mr. Krit Limbanyen																				
4. Mrs. Krissana Juisiri																				
5. Mr. Kritsada Kleechaya																				
6. Ms. Kanita Sartwattayu																				
7. Mr. Komson Tachapanich																				
8. Mr. Khomsan Lertwiriyaprapa																				
9. Mr. Jaturong Jerdsakulboon																●				
10. Mr. Chayong Borisuitsawat														●						
11. Mrs. Yada Vudhivorn																				
12. Mr. Titi Thongjen							●									●				
13. Mr. Narongchai Limpiyapirom										●										
14. Mr. Narongpol Suthapintu												●	●							
15. Ms. Natiya Leelasiri																				
16. Mr. Nathawut Sattayakhunnasakul			●																	

Remark: ● = Director

[1] Notification of the Securities and Exchange Commission No. Kor Jor. 17/2551, Re: Determination of Definitions in Notifications Relating to Issuance and Offer for Sale of Securities.

Name (the list only includes directors designated by PTTEP Group)	1. APICO	2. APICO KH	3. APICO KL	4. APT	5. ARV	6. ATI	7. ATL	8. Bedrock	9. BIND	10. B-MED X	11. Cariva	12. CEEAL	13. COVE	14. CPOC	15. DGH	16. DGT	17. EnCo	18. EP-Tech	19. FSG	20. FST
17. Mr. Dittapon Soothi-O-Soth																		●		
18. Mr. Ditsaphon Mikusol				●											●	●				
19. Mr. Thanasit Vichaipairojwong																	●			
20. Mr. Thanat Thamrongsaksuvit																				
21. Mr. Thana Slanvetpan						●		●	●	●	●									
22. Mr. Thisan Dhienhirun																				
23. Mr. Nopasit Chaiwanakupt					●												●	●		
24. Mrs. Natruedee Khositaphai					●															
25. Mr. Nirandorn Rojanasomsith				●											●					
26. Mr. Preecha Peomwattanachai																				
27. Mr. Pongtai Wilaireungsuwan																				
28. Ms. Pattamaporn Thaweekul																				
29. Mr. Piya Sukhumpanumet																				
30. Mr. Phongsthorn Thavisin					●															
31. Mr. Ponlasak Apiwattanalunggarn																				
32. Mrs. Patchara Romyanan																				
33. Mr. Pichet Sangjan																				
34. Mr. Padsakorn Suwanruji																				
35. Mr. Pasakorn Amorndajalert														●						
36. Ms. Maylada Chayavadhanangkur																			●	●
37. Mr. Luck Tanasomwang																				
38. Ms. Worrarat Rattanawong			●																	
39. Mr. Vitoon Chaisomboonpan																				
40. Mr. Sarayut Niamrit																				

Remark: ● = Director

Name (the list only includes directors designated by PTTEP Group)	1. APICO	2. APICO KH	3. APICO KL	4. APT	5. ARV	6. ATI	7. ATL	8. Bedrock	9. BIND	10. B-MED X	11. Cariva	12. CEEAL	13. COVE	14. CPOC	15. DGH	16. DGT	17. EnCo	18. EP-Tech	19. FSG	20. FST
41. Mr. Sakchai Sarawek																				
42. Mr. Suppakarn Thanatit																				
43. Mr. Suphawich Thanudamrong																				
44. Mr. Soraphol Asavathevakiet																				
45. Mr. Sinthu Satawiriya											●									
46. Mr. Siri Siripiphat																			●	●
47. Mrs. Sujinda Phloi-Montri																				
48. Mrs. Suphanee Kochawat																				
49. Mr. Sermsak Satchawannakul																	●			
50. Mr. Anan Amornprabharwat																				
51. Mr. Awirut Sirimongkolkitti																				
52. Ms. Maria Teresa Ribeiro																				
53. Mr. Ryan Hartfield																				

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	21. FTEV	22. JV Marine	23. MGTC	24. Natuna	25. Nila	26. NKA	27. Orange	28. PANG	29. PGC	30. PGH	31. PKC	32. POC	33. PSC	34. PTTEP AAA	35. PTTEP AAO	36. PTTEP AB	37. PTTEP AG	38. PTTEP AI	39. PTTEP AP	40. PTTEP AT
1. Mr. Korn Saranyasoontorn																	●			
2. Mr. Grinchai Hattagam				●																
3. Mr. Krit Limbanyen			●																	
4. Mrs. Krissana Juisiri																				
5. Mr. Kritsada Kleechaya								●			●									
6. Ms. Kanita Sartwattayu																				
7. Mr. Komson Tachapanich													●				●	●		
8. Mr. Khomsan Lertwiriyaprapa																				
9. Mr. Jaturong Jerdsakulboon																				
10. Mr. Chayong Borisuitsawat		●					●													
11. Mrs. Yada Vudhivorn																				
12. Mr. Titi Thongjen																				
13. Mr. Narongchai Limpiyapirom																				
14. Mr. Narongpol Suthapintu																				
15. Ms. Natiya Leelasiri			●																	
16. Mr. Nathawut Sattayakhunnasakul																				
17. Mr. Dittapon Soothi-O-Soth																				
18. Mr. Ditsaphon Mikusol																				
19. Mr. Thanasit Vichaipairojwong																				
20. Mr. Thanat Thamrongsaksuvit																				
21. Mr. Thana Slanvetpan					●															
22. Mr. Thisan Dhienhirun																	●			
23. Mr. Nopasit Chaiwanakupt																				
24. Mrs. Natruedee Khositaphai																				
25. Mr. Nirandorn Rojanasomsith														●	●	●			●	●
26. Mr. Preecha Peomwattanachai																				

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	21. FTEV	22. JV Marine	23. MGTC	24. Natuna	25. Nila	26. NKA	27. Orange	28. PANG	29. PGC	30. PGH	31. PKC	32. POC	33. PSC	34. PTTEP AAA	35. PTTEP AAO	36. PTTEP AB	37. PTTEP AG	38. PTTEP AI	39. PTTEP AP	40. PTTEP AT
27. Mr. Pongtai Wilaireungsuwan																				
28. Ms. Pattamaporn Thaweekul																				
29. Mr. Piya Sukhumpanumet									●			●	●							
30. Mr. Phongsthorn Thavisin																				
31. Mr. Ponlasak Apiwattanalunggarn																				
32. Mrs. Patchara Romyanan																				
33. Mr. Pichet Sangjan																				
34. Mr. Padsakorn Suwanruji																				
35. Mr. Pasakorn Amorndajalert		●					●													
36. Ms. Maylada Chayavadhanangkur	●																			
37. Mr. Luck Tanasomwang																				
38. Ms. Worrarat Rattanawong																				
39. Mr. Vitoon Chaisomboonpan									●	●		●	●							
40. Mr. Sarayut Niamrit																				
41. Mr. Sakchai Sarawek																				
42. Mr. Suppakarn Thanatit																				
43. Mr. Suphawich Thanudamrong																				
44. Mr. Soraphol Asavathevakiet									●											
45. Mr. Sinthu Satawiriya					●															
46. Mr. Siri Siripiphat																				
47. Mrs. Sujinda Phloi-Montri																				
48. Mrs. Suphanee Kochawat																				
49. Mr. Sermsak Satchawannakul	●						●													
50. Mr. Anan Amornprabharwat																				
51. Mr. Awirut Sirimongkolkitti																				
52. Ms. Maria Teresa Ribeiro												●								
53. Mr. Ryan Hartfield						●								●	●	●			●	●

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	41. PTTEP BC	42. PTTEP BI	43. PTTEP CA	44. PTTEP ED	45. PTTEP EH	46. PTTEP HK	47. PTTEP HKO	48. PTTEP HL	49. PTTEP HV	50. PTTEP ID	51. PTTEP IH	52. PTTEP JD	53. PTTEP JV	54. PTTEP KV	55. PTTEP MENA	56. PTTEP MEP	57. PTTEP ML	58. PTTEP MZA1	59. PTTEP NC	60. PTTEP NH
1. Mr. Korn Saranyasoontorn																				
2. Mr. Grinchai Hattagam										●							●			
3. Mr. Krit Limbanyen																				
4. Mrs. Krissana Juisiri			●																●	
5. Mr. Kritsada Kleechaya								●	●					●						
6. Ms. Kanita Sartwattayu						●														
7. Mr. Komson Tachapanich																				
8. Mr. Khomsan Lertwiriyaprapa																				
9. Mr. Jaturong Jerdsakulboon																				
10. Mr. Chayong Borisuitsawat				●																
11. Mrs. Yada Vudhivorn	●										●									
12. Mr. Titi Thongjen																				
13. Mr. Narongchai Limpiyapirom																				
14. Mr. Narongpol Suthapintu																		●		
15. Ms. Natiya Leelasiri																				
16. Mr. Nathawut Sattayakhunnasakul																				
17. Mr. Dittapon Soothi-O-Soth																				
18. Mr. Ditsaphon Mikusol																				
19. Mr. Thanasit Vichaipairojwong																				
20. Mr. Thanat Thamrongsaksuvit																				
21. Mr. Thana Slanvetpan																				
22. Mr. Thisan Dhienhirun																				
23. Mr. Nopasit Chaiwanakupt																				
24. Mrs. Natruedee Khositaphai																				
25. Mr. Nirandorn Rojanasomsith					●															
26. Mr. Preecha Peomwattanachai												●	●							
27. Mr. Pongtai Wilaireungsuwan																				

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	41. PTTEP BC	42. PTTEP BI	43. PTTEP CA	44. PTTEP ED	45. PTTEP EH	46. PTTEP HK	47. PTTEP HKO	48. PTTEP HL	49. PTTEP HV	50. PTTEP ID	51. PTTEP IH	52. PTTEP JD	53. PTTEP JV	54. PTTEP KV	55. PTTEP MENA	56. PTTEP MEP	57. PTTEP ML	58. PTTEP MZA1	59. PTTEP NC	60. PTTEP NH
28. Ms. Pattamaporn Thaweekul																				
29. Mr. Piya Sukhumpanumet							●								●					●
30. Mr. Phongsthorn Thavisin																				
31. Mr. Ponlasak Apiwattanalunggarn				●																
32. Mrs. Patchara Romyanan															●					
33. Mr. Pichet Sangjan				●																
34. Mr. Padsakorn Suwanruji							●													
35. Mr. Pasakorn Amorndajalert																				
36. Ms. Maylada Chayavadhanangkur																				
37. Mr. Luck Tanasomwang												●	●							
38. Ms. Worrarat Rattanawong																				
39. Mr. Vitoon Chaisomboonpan																				
40. Mr. Sarayut Niamrit																				
41. Mr. Sakchai Sarawek					●	●														
42. Mr. Suppakarn Thanatit		●																		
43. Mr. Suphawich Thanudamrong																●				
44. Mr. Soraphol Asavathevakiet																				
45. Mr. Sinthu Satawiriya																				
46. Mr. Siri Siripiphat																				
47. Mrs. Sujinda Phloi-Montri																				
48. Mrs. Suphanee Kochawat																				
49. Mr. Sermsak Satchawannakul	●									●										
50. Mr. Anan Amornprabharwat																				
51. Mr. Awirut Sirimongkolkitti																●				
52. Ms. Maria Teresa Ribeiro																				
53. Mr. Ryan Hartfield																				

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	61. PTTEP NL	62. PTTEP SA	63. PTTEP SBO	64. PTTEP Services	65. PTTEP SH	66. PTTEP SKO	67. PTTEP SP	68. PTTEP SV	69. PTTEP SVPC	70. PTTEP TC	71. PTTEPH	72. PTTEPI	73. PTTEPO	74. PTTEPS	75. RESH	76. Rovula	77. S2	78. SHL	79. Skyller	80. TTI
1. Mr. Korn Saranyasoontorn																				
2. Mr. Grinchai Hattagam																				
3. Mr. Krit Limbanyen													●							
4. Mrs. Krissana Juisiri																				
5. Mr. Kritsada Kleechaya								●	●											
6. Ms. Kanita Sartwattayu																				
7. Mr. Komson Tachapanich																				
8. Mr. Khomsan Lertwiriyaprapa							●											●		
9. Mr. Jaturong Jerdsakulboon																				
10. Mr. Chayong Borisuitsawat																				
11. Mrs. Yada Vudhivorn																				
12. Mr. Titi Thongjen		●																		
13. Mr. Narongchai Limpiyapirom																				
14. Mr. Narongpol Suthapintu																				
15. Ms. Natiya Leelasiri																				
16. Mr. Nathawut Sattayakhunnasakul																				
17. Mr. Dittapon Soothi-O-Soth																				
18. Mr. Ditsaphon Mikusol																				
19. Mr. Thanasit Vichaipairojwong													●							
20. Mr. Thanat Thamrongsaksuvit										●										
21. Mr. Thana Slanvetpan																●	●		●	
22. Mr. Thisan Dhienhirun																				
23. Mr. Nopasit Chaiwanakupt																				
24. Mrs. Natruedee Khositaphai																				
25. Mr. Nirandorn Rojanasomsith	●																			
26. Mr. Preecha Peomwattanachai																				
27. Mr. Pongtai Wilaireungsuwan		●																		

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	61. PTTEP NL	62. PTTEP SA	63. PTTEP SBO	64. PTTEP Services	65. PTTEP SH	66. PTTEP SKO	67. PTTEP SP	68. PTTEP SV	69. PTTEP SVPC	70. PTTEP TC	71. PTTEPH	72. PTTEPI	73. PTTEPO	74. PTTEPS	75. RESH	76. Rovula	77. S2	78. SHL	79. Skyller	80. TTI
28. Ms. Pattamaporn Thaweekul				●																
29. Mr. Piya Sukhumpanumet			●			●														
30. Mr. Phongsthorn Thavisin																				
31. Mr. Ponlasak Apiwattanalunggarn																				
32. Mrs. Patchara Romyanan																				
33. Mr. Pichet Sangjan																				
34. Mr. Padsakorn Suwanruji			●			●														
35. Mr. Pasakorn Amorndajalert												●								
36. Ms. Maylada Chayavadhanangkur																				
37. Mr. Luck Tanasomwang																				
38. Ms. Worrarat Rattanawong																				
39. Mr. Vitoon Chaisomboonpan																				
40. Mr. Sarayut Niamrit														●						
41. Mr. Sakchai Sarawek					●						●									
42. Mr. Suppakarn Thanatit																				
43. Mr. Suphawich Thanudamrong																				
44. Mr. Soraphol Asavathevakiet																				
45. Mr. Sinthu Satawiriya																●	●		●	
46. Mr. Siri Siripiphat															●					
47. Mrs. Sujinda Phloi-Montri				●																
48. Mrs. Suphanee Kochawat					●															
49. Mr. Sermsak Satchawannakul										●										
50. Mr. Anan Amornprabharwat							●					●		●				●		
51. Mr. Awirut Sirimongkolkitti																				
52. Ms. Maria Teresa Ribeiro																				
53. Mr. Ryan Hartfield																				●

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	81. Varuna	82. XPV	83. ZeaQuest
1. Mr. Korn Saranyasoontorn			
2. Mr. Grinchai Hattagam			
3. Mr. Krit Limbanyen			
4. Mrs. Krissana Juisiri			
5. Mr. Kritsada Kleechaya			
6. Ms. Kanita Sartwattayu			
7. Mr. Komson Tachapanich			
8. Mr. Khomsan Lertwiriyaprapa			
9. Mr. Jaturong Jerdsakulboon			
10. Mr. Chayong Borisuitsawat			
11. Mrs. Yada Vudhivorn			
12. Mr. Titi Thongjen			
13. Mr. Narongchai Limpiyapirom			
14. Mr. Narongpol Suthapintu			
15. Ms. Natiya Leelasiri			
16. Mr. Nathawut Sattayakhunnasakul			
17. Mr. Dittapon Soothi-O-Soth			
18. Mr. Ditsaphon Mikusol			
19. Mr. Thanasit Vichaipairojwong			
20. Mr. Thanat Thamrongsaksuvit			
21. Mr. Thana Slanvetpan	●		●
22. Mr. Thisan Dhienhirun			
23. Mr. Nopasit Chaiwanakupt		●	
24. Mrs. Natruedee Khositaphai		●	
25. Mr. Nirandorn Rojanasomsith			
26. Mr. Preecha Peomwattanachai			

Remark: ● = Director

Name (the list only includes directors designated by the PTTEP Group)	81. Varuna	82. XPV	83. ZeaQuest
27. Mr. Pongtai Wilaireungsuwan			
28. Ms. Pattamaporn Thaweekul			
29. Mr. Piya Sukhumpanumet			
30. Mr. Phongsthorn Thavisin			
31. Mr. Ponlasak Apiwattanalunggarn			
32. Mrs. Patchara Romyanan			
33. Mr. Pichet Sangjan			
34. Mr. Padsakorn Suwanruji			
35. Mr. Pasakorn Amorndajalert			
36. Ms. Maylada Chayavadhanangkur			
37. Mr. Luck Tanasomwang			
38. Ms. Worrarat Rattanawong			
39. Mr. Vitoon Chaisomboonpan			
40. Mr. Sarayut Niamrit			
41. Mr. Sakchai Sarawek			
42. Mr. Suppakarn Thanatit			
43. Mr. Suphawich Thanudamrong			
44. Mr. Soraphol Asavathevakiet			
45. Mr. Sinthu Satawiriya			●
46. Mr. Siri Siripiphat			
47. Mrs. Sujinda Phloi-Montri			
48. Mrs. Suphanee Kochawat			
49. Mr. Sermsak Satchawannakul		●	
50. Mr. Anan Amornprabharwat			
51. Mr. Awirut Sirimongkolkitti			
52. Ms. Maria Teresa Ribeiro			
53. Mr. Ryan Hartfield			

Remark: ● = Director

2. List of PTTEP's Associated Companies: As of December 31, 2024, there were 30 associated companies.

Name (the list only includes directors designated by the PTTEP Group)	1. Aerosky	2. AGP	3. B8/32 Partners	4. E2FSO	5. GISCO	6. HDL	7. MOZ LNG1 Financing	8. MOZ LNG1 Holding	9. MZ LNG 1	10. OLNG	11. PDO	12. POHOL	13. PTT Digital	14. SAWEL	15. SBWEL	16. SkyVIV	17. SH1	18. SPSE	19. SWEL
1. Mr. Krit Limbanyen																			
2. Mr. Komson Tachapanich								●											
3. Ms. Nattha Sunpitaksaree									✦										
4. Mr. Narongpol Suthapintu									●										
5. Mrs. Natruedee Khositaphai													●						
6. Ms. Nuchanong Sangkeaw							●												
7. Ms. Bussaban Cheencharoen																		●	
8. Ms. Panida Ouawongprayun						●													
9. Mr. Pasakorn Amorndajalert			●	●															
10. Mr. Vitoon Chaisomboonpan		●			●					●	●	●							
11. Mr. Soraphol Asavathevakiet		✦																	
12. Mr. Sinthu Satawiriya	●															●			
13. Mr. Siri Siripiphat														●	●		●		●
14. Mr. Sermsak Satchawannakul			●																
15. Ms. Maria Teresa Ribeiro										✦	✦	✦							

Remarks: ● = Director
✦ = Alternate Director

Eleven associated companies which do not have any directors from PTTEP are:

1) Asia Pacific Marine Services, PDO-S, Moz LNG1 Co-Financing, ZAP, and GARY which are governed by shareholders' meetings;
2) HV JOC, HL JOC, GBRS, GHBR, and LAL which are governed by the Management Committee;
3) QLNG director will be appointed on an annual rotational basis by OLNG shareholders.

Attachment 3:
Details of the Head of the Internal Audit Division and the Head of the Compliance Function

1. Details of the Head of the Internal Audit Division as of January 1, 2025 are as follows:

Mr. Chayagorn Leangruenrom
Senior Vice President, Internal Audit Division

Age: 56

Starting Date: June 1, 2024

Education:
- Master of Business Administration, Kasetsart University
- Bachelor of Engineering, King Mongkut's Institute of Technology Ladkrabang

Training:
- Leadership Development Programme 3 (LDP 3), Class 5, PTT Leadership and Learning Institute
- CAE (Chief Audit Executive) FORUM 2024: The Roles of CAE and Internal Auditors in Compliance with the Global Internal Audit Standards, the Stock Exchange of Thailand
- Sustainability Development and Impacts on the Company, Ernst & Young (EY), Thailand
- Enhancing Fraud Risk Management, PricewaterhouseCoopers (PwC), Thailand
- New Global Internal Audit Standards, KPMG, Thailand
- Carbon Credit Market, Opportunities and Business Strategies, Kasikorn Bank and Capital Market Academy
- Generative AI: Unlocking New Possibilities for Leaders, Capital Market Academy
- Principles for Diagnosing Disciplinary Punishment for Senior Executives, Class 2024/01, PTT Leadership and Learning Institute
- Anti-Corruption for Executive Programme (ACEP 7/2013), the Thai Institute of Directors (IOD)
- Corporate Governance for Executives Programme (CGE 19/2022), the Thai Institute of Directors (IOD)
- Subsidiary Governance Programme (SGP Online 1/2022), the Thai Institute of Directors (IOD)
- Leadership Development Programme 2, PTT-Harvard Business School, PTT Leadership and Learning Institute
- Public - Private Partnerships for Executives Programme (PEP), Class 8, Institute of Research and Development for Public Enterprises
- Corporate Governance for Directors and Senior Executives of Regulators, State Enterprises and Public Organisations (PDI), Class 24, King Prajadhipok's Institute
- Advanced Management Programme (AMP) 3 - Business & People Management, PTT Leadership and Learning Institute
- Capital Market Academy Leader Programme, Class 32, Capital Market Academy
- New Chief Audit Executive Training Programme for the Development of Internal Audit Practitioners for Government Agencies in the 2023 Fiscal Year, Class 2, the Comptroller General's Department

Work Experience in the Past Five Years:

June 2024 - Present
Senior Vice President, Internal Audit Division, PTTEP
2022 - May 2024
Executive Vice President, Office of Corporate Audit, PTT Public Company Limited
2020 - 2022
Executive Vice President, Corporate Governance, PTT Public Company Limited
2019 - 2020
Vice President, Natural Gas Marketing Department, PTT Public Company Limited

2. Details of Head of the Compliance Function as of January 1, 2025 are as follows:

Ms. Chalida Srikorakul
Vice President, Corporate Governance and Subsidiary Management Department

Age: 56

Starting Date: January 26, 2021

Education:

- Master of Arts, Linguistics, California State University, Fresno, USA
- Bachelor of Laws, Thammasat University

Training:

- Subsidiary Governance Programme, the Thai Institute of Directors (IOD)
- Ethical Leadership Programme, the Thai Institute of Directors (IOD)
- Tax Overview & Compliance, PTTEP
- Petroleum Fiscal System and E&P Economic, PTTEP
- International Tax, PTTEP
- Financial Modelling, PTTEP
- Finance for Non-Finance Management, PTTEP
- Corporate Governance, the Vision Mission Company Limited
- Overview on LNG Markets and Contracts, Herbert Smith Freehills
- Production Sharing Contract, UNI Strategic Private Limited Company
- Oil and Gas Contracts, UNI Strategic Private Limited Company
- LNG Fundamentals, PetroEdge
- Understanding of Gas Sale Agreement, PTTEP
- Petroleum Income Tax, International Consulting Network

Work Experience in the Past Five Years:

February 2024 - Present
Vice President, Corporate Governance and Subsidiary Management Department, PTTEP
January 2021 - January 2024
Vice President, Governance, Compliance, Internal Control, and Subsidiary Management Department, PTTEP
December 2015 - December 2020
Senior Officer, Subsidiary Secretariat and Governance Department, PTTEP

Attachment 4: Asset Revaluation

- None -

Attachment 5: Good Corporate Governance and Business Ethics

PTTEP Group values the importance of conducting business with good corporate governance. The Company, therefore, stipulates that the “Good Corporate Governance and Business Ethics” of PTTEP Group is to be treated as a Company’s regulation. The details are disclosed on PTTEP website. Click here for more information

Attachment 6:
Audit Committee Report

The details are disclosed in the “Corporate Governance Milestones” section, under the topic of “The Audit Committee Report.”

Financial Report

Report of the Board of Directors' Responsibilities for the Financial Statements

The financial statements of PTT Exploration and Production Public Company Limited and subsidiaries being consolidated have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Act B.E. 2543, being those Thai Accounting Standards issued under the Accounting Profession Act B.E. 2547 including interpretations and accounting treatment guidance announced by the Federation of Accounting Professions, as well as the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act B.E. 2535.

The Company's Board of Directors are responsible for the integrity and objectivity of the financial statements of PTT Exploration and Production Public Company Limited and subsidiaries in providing reasonable assurance that the financial statements truly and fairly present financial position, results of operation and cash flows. The books and records of the Company accurately reflect all transactions to safeguard the Company's assets and the control systems are in place to prevent fraud and irregularity. The financial statements have been prepared by adoption of the appropriate accounting policy which is applied on the consistency basis and in accordance with Thai Financial Reporting Standards. In addition, significant information has been adequately disclosed in the notes to financial statements, in which the independent auditor expresses an opinion on the financial statements of PTT Exploration and Production Public Company Limited and subsidiaries in the auditor's report.

(Mr. Krairit Euchukanonchai)
Chairman

(Mr. Montri Rawanchaikul)
Chief Executive Officer

Independent Auditor's Report

To the Shareholders of PTT Exploration and Production Public Company Limited

My opinion

In my opinion, the consolidated financial statements and the separate financial statements present fairly, in all material respects, the consolidated financial position of PTT Exploration and Production Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial position of the Company as at 31 December 2024, and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRS).

What I have audited

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2024;
- the consolidated and separate statements of income for the year then ended;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include material accounting policies and other explanatory information.

Basis for opinion

I conducted my audit in accordance with the State Audit Standards and Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated and separate financial statements section of my report. I am independent of the Group and the Company in accordance with the State Audit Standards as determined by the State Audit Commission and the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (TFAC Code) that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with the State Audit Standards and the TFAC Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Other matter

The State Audit Standards as described in the basis for opinion section and the auditor's responsibilities for the audit of the consolidated and separate financial statements section are relevant to the particular section of audit on the financial reporting by independent auditor.

Key audit matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the consolidated and separate financial statements of the current period. I determine one key audit matter: Impairment assessment of goodwill. The matter was addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on the matter.

Key audit matter	How my audit addressed the key audit matter
Impairment assessment of goodwill	
As at 31 December 2024, the Group has recognised goodwill net of an allowance for impairment of US Dollar 1,353.20 million representing 4.76% of its total consolidated assets. In 2024, the Group does not recognise an impairment loss for the goodwill as disclosed in Note 20. Management tests impairment of goodwill annually or whenever there is an indicator of impairment. The impairment test is performed at the cash generating unit (CGU) level. Determining the CGU's recoverable amount (the higher of value in use or fair value less costs of disposal), which includes goodwill, requires significant management judgement in identifying both the relevant CGUs and valuation assumptions. These assumptions include global oil price trends, estimated petroleum reserves, exploration, development and production plans, cost profiles,	I carried out the following procedures to assess management's impairment testing of goodwill: • Evaluated the appropriateness of CGUs that the Group identified and the internal impairment assessment process of the Group. • Held discussions with management to understand the basis of the assumptions used to estimate the discounted cash flow to calculate the recoverable amount and assessed whether the impairment testing process and assumptions used in each CGU had been applied consistently across the Group. • Challenged management's significant assumptions for estimating the discounted cash flow, specifically global oil price trends, petroleum reserve estimates, exploration, development and production plans, cost profiles, growth rate and discount rate. The procedures included comparing key assumptions with reliable external sources and the approved business plan.

Key audit matter	How my audit addressed the key audit matter
growth rate and discount rate applied to the discounted cash flow forecasts. I focused on the impairment assessment of goodwill from the acquisition of exploration and production businesses in each region as noted below due to their significant values. Also, determining the recoverable amount of each CGU depends on a number of assumptions and management judgement in determining the appropriate level of those assumptions, which were impacted from an uncertainty of current economic conditions. • Net goodwill of US Dollar 445.03 million from acquiring the exploration and production business in Thailand; • Net goodwill of US Dollar 454.10 million from acquiring the exploration and production business in other Southeast Asia countries; and • Net goodwill of US Dollar 250.79 million from acquiring the exploration and production business in Africa.	• Assessed the reasonableness of the business plan by comparing the plan for 2024 with actual results. • Tested reasonableness of the discount rate by considering publicly available information on other companies in the industry, obtained independently by the auditor's expert, to assess whether the discount rate that management used was within an acceptable range compared to comparable companies in the industry. • Assessed the factors which were sensitive to assumptions and tested the sensitivity analysis of key assumptions in management's model to assess the potential impact of various possible outcomes from changing in those assumptions. Based on the results of the procedures performed, I found that management's key assumptions were reasonable and within the acceptable range. They were consistent with supporting evidence.

Other information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to the audit committee.

Responsibilities of management and audit committee for the consolidated and separate financial statements

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee is responsible for overseeing the Group's and the Company's financial reporting process.

Auditor's responsibilities for the audit of the consolidated and separate financial statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the State Audit Standards and TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with the State Audit Standards and TSAs, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the audit committee with a statement that I have complied with the State Audit Standards and relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers ABAS Ltd.

Amornrat Pearmpoonvatanasuk
Certified Public Accountant (Thailand) No. 4599
Bangkok
13 February 2025

Financial Statements

Statement of Financial Position

PTT Exploration and Production Public Company Limited

As at 31 December 2024

		Consolidated financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
	Notes	2024	2023	2024	2023
Assets					
Current assets					
Cash and cash equivalents	11	3,938,163	4,018,959	133,849,584	137,541,856
Short-term investments	12	291,023	200,000	9,891,242	6,844,650
Trade and other current receivables	13	1,273,117	1,818,678	43,270,420	62,241,058
Short-term loans to related parties	16	25,292	7,545	859,630	258,203
Inventories	14	669,624	611,110	22,759,065	20,914,183
Current tax assets		79,064	54,152	2,687,207	1,853,270
Derivative assets	10	25,114	19,265	853,558	659,316
Other current assets		201,678	131,135	6,854,537	4,487,848
Assets held-for-sale	15	32,543	-	1,106,071	-
Total current assets		6,535,618	6,860,844	222,131,314	234,800,384
Non-current assets					
Investments in associates	17	151,679	134,141	5,155,253	4,590,730
Investments in joint ventures	17	207,186	151,276	7,041,783	5,177,146
Long-term loans to related parties	16	557,480	438	18,947,522	15,000
Property, plant and equipment	18	14,431,173	12,864,663	490,484,138	440,270,605
Right-of-use assets	19	891,709	838,921	30,307,231	28,710,592
Goodwill	20	1,353,200	1,353,200	45,992,339	46,310,918
Intangible assets		162,516	134,327	5,523,524	4,597,101
Exploration and evaluation assets	21	2,659,296	2,756,341	90,383,689	94,330,965
Deferred tax assets	22	576,404	533,957	19,590,713	18,273,750
Rights to receive reimbursement from decommissioning funds		385,702	348,655	13,109,179	11,932,093
Derivative assets	10	46,949	10,837	1,595,701	370,892
Other non-current financial assets		203,876	162,860	6,929,308	5,573,617
Other non-current assets	23	238,587	229,877	8,109,054	7,867,133
Total non-current assets		21,865,757	19,519,493	743,169,434	668,020,542
Total assets		28,401,375	26,380,337	965,300,748	902,820,926

(Montri Rawanchaikul)
Chief Executive Officer

(Sakchai Sarawek)
Senior Vice President, Accounting Division

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Financial Position

PTT Exploration and Production Public Company Limited

As at 31 December 2024

	Notes	Consolidated financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Liabilities and equity					
Current liabilities					
Trade and other current payables	24	1,797,389	1,443,807	61,089,321	49,411,782
Current portion of lease liabilities	25	389,966	280,860	13,254,100	9,611,929
Current corporate income tax payable		625,320	494,710	21,253,248	16,930,593
Other current provisions		154,060	104,015	5,236,143	3,559,722
Derivative liabilities	10	525	42,320	17,850	1,448,333
Other current liabilities		136,174	222,889	4,628,252	7,628,005
Liabilities held-for-sale	15	673	-	22,879	-
Total current liabilities		3,104,107	2,588,601	105,501,793	88,590,364
Non-current liabilities					
Debentures	25	2,795,370	2,785,242	95,008,548	95,320,026
Lease liabilities	25	575,845	587,524	19,571,729	20,106,978
Deferred tax liabilities	22	1,468,493	1,526,388	49,910,884	52,237,956
Non-current provision for employee benefits	28	233,336	206,726	7,930,561	7,074,852
Non-current provision for decommissioning costs	26	4,267,152	3,851,781	145,031,231	131,820,463
Non-current provision for remuneration for production bonus and renewal of petroleum production	27	133,051	158,997	4,522,121	5,441,395
Derivative liabilities	10	296	802	10,042	27,442
Other non-current liabilities		57,025	80,607	1,938,136	2,758,640
Total non-current liabilities		9,530,568	9,198,067	323,923,252	314,787,752
Total liabilities		12,634,675	11,786,668	429,425,045	403,378,116

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Financial Position

PTT Exploration and Production Public Company Limited

As at 31 December 2024

	Note	Consolidated financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Liabilities and equity (continued)					
Equity					
Share capital					
Authorised share capital					
Ordinary shares, 3,969,985,400 shares					
at par value of Baht 1 each	29			3,969,985	3,969,985
Issued and paid-up share capital					
Ordinary shares, 3,969,985,400 shares					
paid-up at Baht 1 each		150,684	150,684	3,969,985	3,969,985
Share premium		3,439,037	3,439,037	105,417,620	105,417,620
Retained earnings					
Appropriated					
Legal reserve		15,048	15,048	396,999	396,999
Reserve for expansion		431,231	431,231	16,900,000	16,900,000
Unappropriated		11,677,291	10,531,354	389,773,609	349,691,132
Other components of equity		45,145	22,917	19,136,602	22,950,765
Equity attributable to owners of the parent company		15,758,436	14,590,271	535,594,815	499,326,501
Non-controlling interests		8,264	3,398	280,888	116,309
Total equity		15,766,700	14,593,669	535,875,703	499,442,810
Total liabilities and equity		28,401,375	26,380,337	965,300,748	902,820,926

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Financial Position

PTT Exploration and Production Public Company Limited

As at 31 December 2024

	Notes	Separate financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Assets					
Current assets					
Cash and cash equivalents	11	767,600	954,109	26,089,062	32,652,711
Short-term investments	12	-	200,000	-	6,844,650
Trade and other current receivables	13	662,565	850,042	22,519,134	29,091,210
Short-term loans to a related party	16	35,037	-	1,190,824	-
Inventories	14	125,210	95,547	4,255,602	3,269,938
Current tax assets		21,354	24,420	725,771	835,727
Derivative assets	6	6,464	-	219,712	-
Other current assets		87,299	76,139	2,967,100	2,605,720
Total current assets		1,705,529	2,200,257	57,967,205	75,299,956
Non-current assets					
Investments in associates	17	25,577	25,577	869,321	875,343
Investments in subsidiaries	17	3,320,879	3,210,564	112,869,455	109,875,958
Long-term loans to a related party	16	6,982,835	6,982,835	237,331,368	238,975,311
Property, plant and equipment	18	1,512,366	1,470,815	51,402,018	50,336,057
Right-of-use assets	19	116,299	53,506	3,952,758	1,831,162
Intangible assets		95,550	79,704	3,247,537	2,727,726
Deferred tax assets	22	259,806	270,138	8,830,240	9,244,985
Rights to receive reimbursement from decommissioning funds		14,845	7,939	504,563	271,710
Derivative assets	10	17,355	8,491	589,844	290,606
Other non-current financial assets		44	222	1,500	7,594
Other non-current assets	23	14,640	26,458	497,594	905,464
Total non-current assets		12,360,196	12,136,249	420,096,198	415,341,916
Total assets		14,065,725	14,336,506	478,063,403	490,641,872

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Financial Position

PTT Exploration and Production Public Company Limited

As at 31 December 2024

	Notes	Separate financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Liabilities and equity					
Current liabilities					
Trade and other current payables	24	349,746	309,611	11,887,098	10,595,877
Current portion of lease liabilities	25	54,145	34,169	1,840,275	1,169,388
Short-term loans from a related party	16	-	493,854	-	16,901,299
Current corporate income tax payable		328,968	243,560	11,180,909	8,335,397
Other current provisions		36,084	22,056	1,226,428	754,831
Derivative liabilities	10	279	20,677	9,492	707,645
Other current liabilities		37,015	40,520	1,258,051	1,386,734
Total current liabilities		806,237	1,164,447	27,402,253	39,851,171
Non-current liabilities					
Debentures	25	511,724	508,121	17,392,378	17,389,568
Lease liabilities	25	74,536	32,291	2,533,301	1,105,085
Deferred tax liabilities	22	1,111	514	37,768	17,605
Non-current provision for employee benefits	28	126,625	120,247	4,303,726	4,115,255
Non-current provision for decommissioning costs	26	974,883	925,972	33,134,150	31,689,767
Non-current provision for remuneration for renewal of petroleum production	27	15,608	18,390	530,478	629,347
Other non-current liabilities		10,786	10,243	366,591	350,546
Total non-current liabilities		1,715,273	1,615,778	58,298,392	55,297,173
Total liabilities		2,521,510	2,780,225	85,700,645	95,148,344

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Financial Position

PTT Exploration and Production Public Company Limited

As at 31 December 2024

	Note	Separate financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Liabilities and equity (continued)					
Equity					
Share capital					
Authorised share capital					
Ordinary shares, 3,969,985,400 shares					
at par value of Baht 1 each	29			3,969,985	3,969,985
Issued and paid-up share capital					
Ordinary shares, 3,969,985,400 shares					
paid-up at Baht 1 each		150,684	150,684	3,969,985	3,969,985
Share premium		3,439,037	3,439,037	105,417,620	105,417,620
Retained earnings					
Appropriated					
Legal reserve		15,048	15,048	396,999	396,999
Reserve for expansion		431,231	431,231	16,900,000	16,900,000
Unappropriated		7,480,054	7,500,990	250,976,606	252,272,599
Other components of equity		28,161	19,291	14,701,548	16,536,325
Total equity		11,544,215	11,556,281	392,362,758	395,493,528
Total liabilities and equity		14,065,725	14,336,506	478,063,403	490,641,872

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Income

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Notes	Consolidated financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Revenues					
Revenue from sales		8,698,463	8,511,079	307,226,589	296,242,285
Revenue from pipeline transportation		143,838	128,067	5,083,477	4,451,314
Other income					
Gain on foreign exchange rate		6,490	48,129	183,008	1,625,597
Gain on remeasuring of financial instruments		11,089	-	401,895	-
Gain on disposal of participating interests		-	73,239	-	2,561,078
Interest income		238,340	152,274	8,434,795	5,303,998
Other income		174,592	144,545	6,085,298	5,031,970
Total revenues		9,272,812	9,057,333	327,415,062	315,216,242
Expenses					
Operating expenses		1,401,808	1,224,841	49,338,334	42,663,573
Exploration expenses		124,794	94,044	4,382,788	3,308,662
Administrative expenses		516,071	486,938	18,114,712	16,979,153
Petroleum royalties		396,387	450,155	14,012,562	15,632,043
Depreciation, depletion and amortisation		2,688,941	2,334,711	95,039,437	81,321,703
Other expenses					
Loss on remeasuring of financial instruments		-	55,588	-	1,880,828
Impairment loss on goodwill	20	-	120,000	-	4,255,168
Finance costs		334,466	294,457	11,812,802	10,243,440
Total expenses		5,462,467	5,060,734	192,700,635	176,284,570
Share of profit of associates and joint ventures		37,752	42,556	1,316,903	1,476,513
Profit before income taxes		3,848,097	4,039,155	136,031,330	140,408,185
Income taxes	33	(1,621,179)	(1,831,388)	(57,214,371)	(63,703,666)
Profit for the year		2,226,918	2,207,767	78,816,959	76,704,519
Profit (loss) attributable to:					
Owners of the parent		2,227,123	2,207,826	78,824,240	76,706,392
Non-controlling interests		(205)	(59)	(7,281)	(1,873)
		2,226,918	2,207,767	78,816,959	76,704,519

		Unit: US Dollar		Unit: Baht	
		2024	2023	2024	2023
Earnings per share					
Basic earnings per share	34	0.56	0.54	19.86	18.89

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Comprehensive Income

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Consolidated financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Profit for the year	2,226,918	2,207,767	78,816,959	76,704,519
Other comprehensive income (expense)				
Items that will be reclassified subsequently to profit or loss				
Currency translation differences	(233)	50,326	(2,348,756)	518,392
Changes in hedging reserves	42,604	(37,766)	1,441,755	(1,309,436)
Income taxes relating to changes in hedging reserves	(8,100)	11,249	(273,884)	391,358
Share of other comprehensive income (expense) of associates and joint ventures	(12,156)	1,033	(524,561)	32,683
Total items that will be reclassified subsequently to profit or loss	22,115	24,842	(1,705,446)	(367,003)
Items that will not be reclassified subsequently to profit or loss				
Currency translation differences	-	-	(2,124,615)	(5,356,587)
Gain (loss) on remeasuring of financial assets	(9)	88	(609)	3,005
Share of other comprehensive expense of associates	(45)	-	(1,626)	-
Income taxes relating to share of other comprehensive expense of associates	9	-	325	-
Loss from changes in actuarial assumptions of provision for employee benefits	(3,337)	(12,338)	(108,076)	(433,784)
Income taxes resulting from changes in actuarial assumptions of provision for employee benefits	2,668	2,701	89,044	95,749
Total items that will not be reclassified subsequently to profit or loss	(714)	(9,549)	(2,145,557)	(5,691,617)
Other comprehensive income (expense) for the year - net of tax	21,401	15,293	(3,851,003)	(6,058,620)
Total comprehensive income for the year	2,248,319	2,223,060	74,965,956	70,645,899
Total comprehensive income (expense) attributable to:				
Owners of the parent	2,248,189	2,223,158	74,972,907	70,651,003
Non-controlling interests	130	(98)	(6,951)	(5,104)
	2,248,319	2,223,060	74,965,956	70,645,899

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Income

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Notes	Separate financial statements			
		Unit: Thousand US Dollar		Unit: Thousand Baht	
		2024	2023	2024	2023
Revenues					
Revenue from sales		2,025,632	2,476,779	71,584,975	85,836,619
Other income					
Gain on foreign exchange rate		-	52,939	-	1,813,526
Gain on remeasuring of financial instruments		13,627	-	463,618	-
Interest income		491,009	454,544	17,341,524	15,816,284
Other income		232,522	206,787	8,182,991	7,196,663
Dividend income from related parties		137,224	74,256	4,766,732	2,581,264
Total revenues		2,900,014	3,265,305	102,339,840	113,244,356
Expenses					
Operating expenses		212,623	219,946	7,487,881	7,599,750
Exploration expenses		35	1,026	1,264	36,701
Administrative expenses		460,887	453,426	16,192,635	15,801,814
Petroleum royalties		251,231	307,436	8,873,971	10,657,228
Depreciation, depletion and amortisation		358,761	465,929	12,732,214	16,082,260
Other expenses					
Loss on foreign exchange rate		9,065	-	301,505	-
Loss on remeasuring of financial instruments		-	43,093	-	1,445,573
Finance costs		105,974	89,204	3,741,023	3,106,528
Total expenses		1,398,576	1,580,060	49,330,493	54,729,854
Profit before income taxes		1,501,438	1,685,245	53,009,347	58,514,502
Income taxes	33	(439,455)	(581,064)	(15,504,179)	(20,164,868)
Profit for the year		1,061,983	1,104,181	37,505,168	38,349,634

		Unit: US Dollar		Unit: Baht	
		2024	2023	2024	2023
Earnings per share					
Basic earnings per share	34	0.27	0.28	9.45	9.66

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Comprehensive Income

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Separate financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Profit for the year	1,061,983	1,104,181	37,505,168	38,349,634
Other comprehensive income (expense)				
Items that will be reclassified subsequently to profit or loss				
Changes in hedging reserves	14,534	(22,173)	481,419	(770,529)
Income taxes relating to changes in hedging reserves	(5,664)	6,814	(191,598)	237,326
Total items that will be reclassified subsequently to profit or loss	8,870	(15,359)	289,821	(533,203)
Items that will not be reclassified subsequently to profit or loss				
Currency translation differences	-	-	(2,124,615)	(5,356,587)
Gain on remeasuring of financial assets	-	3	17	78
Loss from changes in actuarial assumptions of provision for employee benefits	(5,790)	(5,148)	(193,137)	(182,532)
Income taxes resulting from changes in actuarial assumptions of provision for employee benefits	2,895	2,574	96,569	91,266
Total items that will not be reclassified subsequently to profit or loss	(2,895)	(2,571)	(2,221,166)	(5,447,775)
Other comprehensive income (expense) for the year - net of tax	5,975	(17,930)	(1,931,345)	(5,980,978)
Total comprehensive income for the year	1,067,958	1,086,251	35,573,823	32,368,656

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Changes in Equity

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

		Consolidated financial statements												
		Unit: Thousand US Dollar												
		Attributable to owners of the parent												
							Other components of equity							
							Other comprehensive income (expense)							
				Retained earnings						Share of other comprehensive income (expense) of associates and joint ventures	Total other components of equity	Total owners of the parent	Non-controlling interests	Total equity
	Note	Issued and paid-up share capital	Share premium	Legal reserve	Reserve for expansion	Unappropriated	Currency translation differences	Remeasuring of financial assets	Cash flow hedge reserve					
Balance as at 1 January 2023		150,684	3,439,037	15,048	431,231	9,481,343	(48,806)	(540)	49,324	(2,030)	(2,052)	13,515,291	-	13,515,291
Changes in equity for the year														
Foreign exchange difference from repayment of subordinated perpetual loan		-	-	-	-	(49,406)	-	-	-	-	-	(49,406)	-	(49,406)
Increase in share capital of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	3,496	3,496
Dividends payments		-	-	-	-	(1,098,772)	-	-	-	-	-	(1,098,772)	-	(1,098,772)
Profit (loss) for the year		-	-	-	-	2,207,826	-	-	-	-	-	2,207,826	(59)	2,207,767
Other comprehensive income (expense) for the year		-	-	-	-	(9,637)	50,365	88	(26,517)	1,033	24,969	15,332	(39)	15,293
Balance as at 31 December 2023		150,684	3,439,037	15,048	431,231	10,531,354	1,559	(452)	22,807	(997)	22,917	14,590,271	3,398	14,593,669
Balance as at 1 January 2024		150,684	3,439,037	15,048	431,231	10,531,354	1,559	(452)	22,807	(997)	22,917	14,590,271	3,398	14,593,669
Changes in equity for the year														
Increase in share capital of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	4,736	4,736
Dividends paid	31	-	-	-	-	(1,080,024)	-	-	-	-	-	(1,080,024)	-	(1,080,024)
Profit (loss) for the year		-	-	-	-	2,227,123	-	-	-	-	-	2,227,123	(205)	2,226,918
Other comprehensive income (expense) for the year		-	-	-	-	(1,162)	(568)	448	34,504	(12,156)	22,228	21,066	335	21,401
Balance as at 31 December 2024		150,684	3,439,037	15,048	431,231	11,677,291	991	(4)	57,311	(13,153)	45,145	15,758,436	8,264	15,766,700

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Changes in Equity

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

		Consolidated financial statements												
		Unit: Thousand Baht												
		Attributable to owners of the parent												
							Other components of equity							
							Other comprehensive income (expense)							
				Retained earnings						Share of other comprehensive				
	Note	Issued and paid-up share capital	Share premium	Legal reserve	Reserve for expansion	Unappropriated	Currency translation differences	Remeasuring of financial assets	Cash flow hedge reserve	income (expense) of associates and joint ventures	Total other components of equity	Total owners of the parent	Non-controlling interests	Total equity
Balance as at 1 January 2023		3,969,985	105,417,620	396,999	16,900,000	311,767,883	26,821,931	(19,337)	1,934,734	(69,209)	28,668,119	467,120,606	-	467,120,606
Changes in equity for the year														
Foreign exchange difference from repayment of subordinated perpetual loan		-	-	-	-	(1,724,751)	-	-	-	-	-	(1,724,751)	-	(1,724,751)
Increase in share capital of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	121,413	121,413
Dividends paid		-	-	-	-	(36,720,357)	-	-	-	-	-	(36,720,357)	-	(36,720,357)
Profit (loss) for the year		-	-	-	-	76,706,392	-	-	-	-	-	76,706,392	(1,873)	76,704,519
Other comprehensive income (expense) for the year		-	-	-	-	(338,035)	(4,834,964)	3,005	(918,078)	32,683	(5,717,354)	(6,055,389)	(3,231)	(6,058,620)
Balance as at 31 December 2023		3,969,985	105,417,620	396,999	16,900,000	349,691,132	21,986,967	(16,332)	1,016,656	(36,526)	22,950,765	499,326,501	116,309	499,442,810
Balance as at 1 January 2024		3,969,985	105,417,620	396,999	16,900,000	349,691,132	21,986,967	(16,332)	1,016,656	(36,526)	22,950,765	499,326,501	116,309	499,442,810
Changes in equity for the year														
Increase in share capital of subsidiaries		-	-	-	-	-	-	-	-	-	-	-	171,530	171,530
Dividends paid	31	-	-	-	-	(38,704,593)	-	-	-	-	-	(38,704,593)	-	(38,704,593)
Profit (loss) for the year		-	-	-	-	78,824,240	-	-	-	-	-	78,824,240	(7,281)	78,816,959
Other comprehensive income (expense) for the year		-	-	-	-	(37,170)	(4,473,701)	16,228	1,167,871	(524,561)	(3,814,163)	(3,851,333)	330	(3,851,003)
Balance as at 31 December 2024		3,969,985	105,417,620	396,999	16,900,000	389,773,609	17,513,266	(104)	2,184,527	(561,087)	19,136,602	535,594,815	280,888	535,875,703

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Changes in Equity

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

		Separate financial statements								
										Unit: Thousand US Dollar
							Other components of equity			
							Other comprehensive income (expense)			
				Retained earnings						
	Note	Issued and paid-up share capital	Share premium	Legal reserve	Reserve for expansion	Unappropriated	Remeasuring of financial assets	Cash flow hedge reserve	Total other components of equity	Total equity
Balance as at 1 January 2023		150,684	3,439,037	15,048	431,231	7,498,155	(7)	34,654	34,647	11,568,802
Changes in equity for the year										
Dividends paid		-	-	-	-	(1,098,772)	-	-	-	(1,098,772)
Profit for the year		-	-	-	-	1,104,181	-	-	-	1,104,181
Other comprehensive income (expense) for the year		-	-	-	-	(2,574)	3	(15,359)	(15,356)	(17,930)
Balance as at 31 December 2023		150,684	3,439,037	15,048	431,231	7,500,990	(4)	19,295	19,291	11,556,281
Balance as at 1 January 2024		150,684	3,439,037	15,048	431,231	7,500,990	(4)	19,295	19,291	11,556,281
Changes in equity for the year										
Dividends paid	31	-	-	-	-	(1,080,024)	-	-	-	(1,080,024)
Profit for the year		-	-	-	-	1,061,983	-	-	-	1,061,983
Other comprehensive income (expense) for the year		-	-	-	-	(2,895)	-	8,870	8,870	5,975
Balance as at 31 December 2024		150,684	3,439,037	15,048	431,231	7,480,054	(4)	28,165	28,161	11,544,215

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Changes in Equity

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Note	Separate financial statements									
		Unit: Thousand Baht									
				Retained earnings			Other components of equity				
							Other comprehensive income (expense)				
		Issued and paid-up share capital	Share premium	Legal reserve	Reserve for expansion	Unappropriated	Currency translation differences	Remeasuring of financial assets	Cash flow hedge reserve	Total other components of equity	Total equity
Balance as at 1 January 2023		3,969,985	105,417,620	396,999	16,900,000	250,734,588	21,155,795	(199)	1,270,441	22,426,037	399,845,229
Changes in equity for the year											
Dividends paid		-	-	-	-	(36,720,357)	-	-	-	-	(36,720,357)
Profit for the year		-	-	-	-	38,349,634	-	-	-	-	38,349,634
Other comprehensive income (expense) for the year		-	-	-	-	(91,266)	(5,356,587)	78	(533,203)	(5,889,712)	(5,980,978)
Balance as at 31 December 2023		3,969,985	105,417,620	396,999	16,900,000	252,272,599	15,799,208	(121)	737,238	16,536,325	395,493,528
Balance as at 1 January 2024		3,969,985	105,417,620	396,999	16,900,000	252,272,599	15,799,208	(121)	737,238	16,536,325	395,493,528
Changes in equity for the year											
Dividends paid	31	-	-	-	-	(38,704,593)	-	-	-	-	(38,704,593)
Profit for the year		-	-	-	-	37,505,168	-	-	-	-	37,505,168
Other comprehensive income (expense) for the year		-	-	-	-	(96,568)	(2,124,615)	17	289,821	(1,834,777)	(1,931,345)
Balance as at 31 December 2024		3,969,985	105,417,620	396,999	16,900,000	250,976,606	13,674,593	(104)	1,027,059	14,701,548	392,362,758

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Cash Flows

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Consolidated financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Cash flows from operating activities				
Profit before income taxes	3,848,097	4,039,155	136,031,330	140,408,185
Adjustments for:				
Share of profit of associates and joint ventures	(37,752)	(42,556)	(1,316,903)	(1,476,513)
Depreciation, depletion and amortisation	2,688,941	2,334,711	95,039,437	81,321,703
Impairment loss on goodwill	-	120,000	-	4,255,168
Write-off of exploration expenses	96,113	66,233	3,362,434	2,341,859
Other amortised expenses	9,986	9,299	351,822	323,453
Write-off of assets	1,684	72,783	61,268	2,496,809
Income recognised from deferred income	-	(233)	-	(8,121)
Gain on remeasuring of financial instruments	(8,508)	(14,871)	(291,448)	(505,353)
Loss (gain) on foreign exchange rates	21,075	(2,932)	742,858	(101,968)
Interest income	(238,340)	(152,274)	(8,434,795)	(5,303,998)
Finance costs	327,607	287,957	11,571,527	10,027,416
Other Income	(3,670)	(80,901)	(129,353)	(2,828,561)
Other expenses	25,045	16,351	867,674	569,588
Cash flows before changes in working capital	6,730,278	6,652,722	237,855,851	231,519,667
Changes in working capital				
Trade and other current receivables	549,061	(87,656)	19,353,230	(3,048,436)
Inventories	(54,587)	(51,576)	(1,924,067)	(1,793,675)
Other current financial assets	-	2,028	-	70,534
Other current assets	(68,770)	1,425	(2,424,008)	49,544
Rights to receive reimbursement from decommissioning funds	(37,133)	(31,431)	(1,308,842)	(1,093,072)
Other non-current financial assets	-	5,364	-	186,559
Other non-current assets	(10,919)	5,376	(384,855)	186,967
Trade and other current payables	107,777	(125,498)	3,798,917	(4,364,505)
Other current liabilities	40,054	451	1,411,820	15,699
Provisions	(108,069)	(340,919)	(3,809,215)	(11,856,289)
Other non-current liabilities	528	(12,728)	18,612	(442,660)
Net cash provided by operating activities	7,148,220	6,017,558	252,587,443	209,430,333
Interest received from bank deposits	193,698	130,966	6,827,438	4,554,654
Cash paid for income taxes	(1,620,349)	(1,786,615)	(57,113,858)	(62,133,830)
Net cash flows provided by operating activities	5,721,569	4,361,909	202,301,023	151,851,157

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Cash Flows

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Consolidated financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Cash flows from investing activities				
Cash paid for short-term investments	(341,311)	(400,389)	(12,030,478)	(13,924,486)
Cash received from short-term investments	250,288	200,390	8,822,107	6,969,047
Cash paid for other non-current financial assets	(6,245)	(2,818)	(220,117)	(97,995)
Cash received from other non-current financial assets	1,949	-	68,693	-
Net cash received from financial derivative contracts	901	-	31,754	-
Cash paid for short-term loans to related parties	(301)	(9,093)	(10,603)	(316,230)
Cash received from short-term loans to related parties	5,086	3,000	179,259	104,332
Cash paid for long-term loans	(596,194)	(15,222)	(21,014,569)	(529,402)
Cash received from long-term loans to a related party	10,275	-	362,161	-
Dividends received from related parties	57,616	52,820	2,030,837	1,836,947
Net cash received from disposal of participating interests	-	208,284	-	7,243,583
Cash paid for contingent considerations from business acquisition	-	(717)	-	(24,925)
Cash paid for investments in an associate and joint ventures	(105,535)	(16,323)	(3,719,873)	(567,682)
Cash received from lease receivables	-	50	-	1,739
Interest received from short-term investments	7,992	959	281,703	33,373
Interest received from long-term loans to related parties	448	243	15,775	8,461
Net cash paid for acquisition of assets	(531,310)	-	(18,727,553)	-
Increase in property, plant and equipment	(2,853,998)	(2,206,914)	(100,597,384)	(76,750,746)
Increase in intangible assets	(53,450)	(26,414)	(1,883,998)	(918,636)
Increase in exploration and evaluation assets	(112,258)	(158,560)	(3,956,857)	(5,514,324)
Net cash flows used in investing activities	(4,266,047)	(2,370,704)	(150,369,143)	(82,446,944)
Cash flows from financing activities				
Cash paid for repayment of debentures	-	(71,460)	-	(2,485,186)
Cash received from issuance of debentures	-	44,550	-	1,549,328
Cash paid for finance cost from issuance of debentures	-	(1,058)	-	(36,800)
Cash paid for lease liabilities	(317,712)	(261,489)	(11,198,663)	(9,093,897)
Interest paid	(131,498)	(136,604)	(4,635,025)	(4,750,748)
Cash received from issuance of subsidiaries' share capital	4,736	3,496	171,530	121,413
Dividends paid	(1,080,024)	(1,098,772)	(38,704,593)	(36,720,357)
Net cash flows used in financing activities	(1,524,498)	(1,521,337)	(54,366,751)	(51,416,247)

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Cash Flows

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Consolidated financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Net (decrease) increase in cash and cash equivalents	(68,976)	469,868	(2,434,871)	17,987,966
Cash and cash equivalents at the beginning of the year	4,018,959	3,539,220	137,541,856	122,323,890
Adjustment for the impact of exchange rate changes	(11,820)	9,871	(1,257,401)	(2,770,000)
Cash and cash equivalents at the end of the year	3,938,163	4,018,959	133,849,584	137,541,856
Significant non-cash transactions				
Outstanding payable from purchases of assets	661,568	629,260	23,318,854	21,884,031
Increase in right-of-use assets	400,657	170,686	14,122,310	5,936,021

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Cash Flows

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Separate financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Cash flows from operating activities				
Profit before income taxes	1,501,438	1,685,245	53,009,347	58,514,502
Adjustments for:				
Depreciation, depletion and amortisation	358,761	465,929	12,732,214	16,082,260
Write-off of exploration expenses	-	993	4	35,595
Other amortised expenses	2,313	2,278	81,592	79,239
Write-off of assets	661	71,721	23,511	2,470,643
Income recognised from deferred income	-	(233)	(11)	(8,088)
Gain on remeasuring of financial instruments	(10,871)	(37,359)	(394,528)	(1,300,808)
Dividend income from related parties	(137,224)	(74,256)	(4,766,732)	(2,581,264)
Loss (gain) on foreign exchange rates	78,923	(1,823)	2,781,858	(63,418)
Interest income	(491,009)	(454,544)	(17,341,524)	(15,816,284)
Finance costs	105,612	88,848	3,732,287	3,096,820
Other expenses	9,911	10,673	350,036	372,067
Cash flows before changes in working capital	1,418,515	1,757,472	50,208,054	60,881,264
Changes in working capital				
Trade and other current receivables	187,376	29,897	6,604,607	1,039,734
Inventories	(24,963)	7,736	(879,871)	269,047
Other current assets	(10,932)	(40,701)	(385,315)	(1,415,490)
Rights to receive reimbursement from decommissioning funds	(6,991)	(7,891)	(246,417)	(274,445)
Other non-current assets	9,631	(4,197)	339,457	(145,959)
Trade and other current payables	(14,820)	(98,025)	(522,376)	(3,409,071)
Other current liabilities	31	(14,225)	1,087	(494,696)
Provisions	(39,889)	(105,907)	(1,406,013)	(3,683,156)
Other non-current liabilities	(9,661)	(8,828)	(340,514)	(307,000)
Net cash provided by operating activities	1,508,297	1,515,331	53,372,699	52,460,228
Interest received from bank deposits	73,407	55,076	2,587,440	1,915,401
Cash paid for income taxes	(342,929)	(587,477)	(12,087,538)	(20,430,943)
Net cash flows provided by operating activities	1,238,775	982,930	43,872,601	33,944,686

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Statement of Cash Flows

PTT Exploration and Production Public Company Limited

For the year ended 31 December 2024

	Separate financial statements			
	Unit: Thousand US Dollar		Unit: Thousand Baht	
	2024	2023	2024	2023
Cash flows from investing activities				
Cash paid for short-term investments	(20,288)	(324,837)	(715,095)	(11,296,981)
Cash received from short-term investments	220,288	124,837	7,764,671	4,341,500
Cash received from other non-current financial assets	175	-	6,179	-
Increase in short-term loans to a related party	(39,632)	-	(1,396,938)	-
Dividends received from related parties	137,224	74,256	4,766,732	2,581,264
Cash paid for investment in subsidiaries	(110,315)	(12,314)	(3,888,351)	(428,261)
Cash received from lease receivables	-	50	-	1,739
Interest received from short-term investment	7,992	-	281,703	-
Interest received from loans to a related party	393,820	334,845	13,881,321	11,645,048
Increase in property, plant and equipment	(251,926)	(231,107)	(8,879,856)	(8,037,293)
Increase in intangible assets	(29,603)	(16,324)	(1,043,428)	(567,684)
Net cash flows provided by (used in) investing activities	307,735	(50,594)	10,776,938	(1,760,668)
Cash flows from financing activities				
Decrease in short-term loans from a related party	(560,312)	(10,956)	(19,749,804)	(381,015)
Cash paid for lease liabilities	(31,066)	(14,933)	(1,095,010)	(519,307)
Interest paid	(56,789)	(44,339)	(2,001,691)	(1,542,006)
Dividends paid	(1,080,024)	(1,098,772)	(38,704,593)	(36,720,357)
Net cash flows used in financing activities	(1,728,191)	(1,169,000)	(61,551,098)	(39,162,685)
Net decrease in cash and cash equivalents	(181,681)	(236,664)	(6,901,559)	(6,978,667)
Cash and cash equivalents at the beginning of the year	954,109	1,189,891	32,652,711	41,125,443
Adjustment for the impact of exchange rate changes	(4,828)	882	337,910	(1,494,065)
Cash and cash equivalents at the end of the year	767,600	954,109	26,089,062	32,652,711
Significant non-cash transactions				
Outstanding payable from purchases of assets	152,562	95,483	5,377,491	3,320,641
Increase in right-of-use assets	94,477	45,341	3,330,117	1,576,858

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

Notes to the Consolidated and Separate Financial Statements

PTT Exploration and Production Public Company Limited
For the year ended 31 December 2024

1 General information

PTT Exploration and Production Public Company Limited (the Company) is registered as a company in Thailand and listed on the Stock Exchange of Thailand. The address of its registered office is 555/1 Energy Complex Building A,19th - 36th Floor, Vibhavadi-Rangsit Road, Chatuchak, Bangkok 10900.

For reporting purposes, the Company and its subsidiaries are together referred to as the Group.

The principal business operations of the Group are exploration and production of petroleum in Thailand and overseas, and related business associated with the Group's strategy.

These consolidated and separate financial statements were authorised for issue by the Board of Directors on 13 February 2025.

2 Significant events during the current period

On 17 June 2024, PTTEP Energy Development Company Limited (PTTEP ED), a subsidiary of the Group, complied with the Production Sharing Contract (PSC) requirement to maintain production level of 800 million standard cubic feet per day continuously for 90 days. On 9 August 2024, PTTEP ED received letter of guarantee from Department of Mineral Fuels.

On 20 December 2024, PTTEP SG Holding Pte. Ltd. (PTTEP SH), a subsidiary of the Group, has entered into a Sale and Purchase Agreement (SPA) to acquire 34% share capital in E&E Algeria Touat B.V. from ENGIE International Corporation B.V. (ENGIE). The purchasing price will be adjusted as specified in the SPA. The completion of the transaction is subject to customary conditions precedent as prescribed in the SPA, including applicable government approval.

3 Basis of preparation

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards (TFRS) and the financial reporting requirements issued under the Securities and Exchange Act.

The Company's management has determined US Dollar as the functional currency of the Company and presents the consolidated and separate financial statements in US Dollar. However, the Stock Exchange of Thailand and the Department of Business Development require the Company to present its consolidated and separate financial statements in Thai Baht, so the Company also presents its financial statements in Thai Baht by translating from US Dollar.

Where the Group has entered into joint interest operations in the Concession or the Production Sharing Contract with other parties to participate in exploration and production of petroleum businesses, the Group records its share of expenses, assets and liabilities incurred in accordance with the Statements of Expenditures prepared by the operators of the Concession or the Production Sharing Contract. The Statements of Expenditures have been audited by other independent auditors and the joint venture committee on a regular basis.

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting policies.

The preparation of financial statements in conformity with TFRS requires the Group's management to use certain critical accounting estimates and to exercise its judgement in applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas that are more likely to be materially adjusted due to changes in estimates and assumptions are disclosed in Note 8.

An English version of the consolidated and separate financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

4 Amended financial reporting standards

4.1 Amended financial reporting standards that are effective for the accounting period beginning on or after 1 January 2024 and related to the Group.

a) Amendment to Thai Accounting Standard (TAS) 1 – Presentation of financial statements revised the disclosure from "significant accounting policies" to "material accounting policies". The amendment also provides guidelines on identifying when the accounting policy information is material which is the information that impacts the economic decisions made by financial statements users.

b) Amendment to TAS 8 – Accounting policies, changes in accounting estimates and errors revised the definition of accounting estimates to be more distinctive being monetary amounts in financial statements that are subject to measurement uncertainty as the entity shall apply prospectively to the transactions for the changes in accounting estimates.

c) Amendment to TAS 12 – Income taxes

c.1) The entity is required to recognise deferred tax related to assets and liabilities arising from a single transaction that, on initial recognition, gives rise to equal amounts of taxable and deductible temporary differences. Example transactions are leases and decommissioning obligations.

c.2) The entity gets a temporary relief not required to recognise and disclose deferred taxes arising from the Pillar Two income taxes published by the Organization for Economic Co-operation and Development (OECD). The entity must disclose the fact that it has applied those exceptions. In addition, the amendments require to disclose the information as follows:

- Disclose the current tax expense related to the Pillar Two separately.
- During the period that the Pillar Two legislation being enacted or substantially enacted but has not becoming effective, the entities shall disclose:
  - Qualitative information such as an entity's exposure to Pillar Two legislation, and
  - Quantitative information which can be reasonably estimated related to Pillar Two income taxes at the end of reporting period such as the profits of entities in scope of the Pillar Two legislation and average effective tax rate of those profits.

Commencing from 1 January 2024, the Group has adopted these amended financial reporting standards. The adoption of the amended financial reporting standards did not have significant impacts to the Group.

4.2 New and amended financial reporting standard that is effective for the accounting period beginning on or after 1 January 2025 and related to the Group.

The following amended TFRS was not mandatory for the current reporting period and the Group has not early adopted it.

a) Amendments to TAS 1 – Presentation of Financial Statements clarified that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the entity's expectations or events after the reporting period (for example, the receipt of a waiver or a breach of covenant).

Covenants of loan arrangements will not affect classification of a liability as current or non-current at the end of reporting period if the entity must only comply with the covenants after the reporting period. However, if the entity must comply with a covenant either before or at the end of reporting period, this will affect the classification as current or non-current even if the covenant is only tested for compliance after the reporting period.

The amendments require disclosures if an entity classifies a liability as non-current and that liability is subject to covenants with which the entity must comply within 12 months of the reporting period. The disclosures include:

- the carrying amount of the liability;
- information about the covenants; and
- facts and circumstances, if any, that indicate that the entity might have difficulty complying with the covenants.

The amendments also clarify what TAS 1 means when it refers to the 'settlement' of a liability. Terms of a liability that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instrument can only be ignored for the purpose of classifying the liability as current or non-current if the entity classifies the option as an equity instrument.

The amendments must be applied retrospectively in accordance with the normal requirements in TAS 8, Accounting Policies, Changes in Accounting Estimates and Errors.

b) Amendments to Thai Financial Reporting Standard (TFRS) 16 – Leases added to the requirements for sale and leaseback transactions which explain how an entity accounts for a sale and leaseback after the date of the transaction.

The amendments specify that, in measuring the lease liability subsequent to the sale and leaseback, the seller-lessee determines 'lease payments' and 'revised lease payments' in a way that does not result in the seller-lessee recognising any amount of the gain or loss that relates to the right of use that it retains. This could particularly impact sale and leaseback transactions where the lease payments include variable payments that do not depend on an index or a rate.

c) Amendments to TAS 7 – Statement of cash flows and TFRS 7 – Financial instruments: Disclosures require specific disclosures about Supplier Finance Arrangements (SFAs). The amendments respond to investors that said that they urgently needed more information about SFAs to be able to assess how these arrangements affect an entity's liabilities, cash flows and liquidity risk.

To meet investors' needs, the new disclosures will provide information about:

(1) The terms and conditions of SFAs.

(2) The carrying amount of financial liabilities that are part of SFAs, and the line items in which those liabilities are presented.

(3) The carrying amount of the financial liabilities in (2), for which the suppliers have already received payment from the finance providers.

(4) The range of payment due dates for both the financial liabilities that are part of SFAs, and comparable trade payables that are not part of such arrangements.

(5) Non-cash changes in the carrying amounts of financial liabilities in (2).

(6) Access to SFAs facilities and concentration of liquidity risk with the finance providers.

The Group's management has assessed and found that the amended financial reporting standards do not have significant impacts to the Group.

5 Accounting policies

The principal accounting policies applied in the preparation of these consolidated and separate financial statements are set out below.

5.1 Principles of consolidation accounting

a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method less impairment (if any).

List of subsidiaries has been presented in Note 17.

b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting.

In the separate financial statements, investments in associates are accounted for using cost method less impairment (if any).

List of associates has been presented in Note 17.

c) Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

Joint operations

Joint operations consist of: (a) companies or projects that the Group considers to have joint control because the shareholder agreement requires that strategic and operational decisions in various economic activities be approved by all shareholders or their representatives, and (b) companies or projects in which the Group participate in joint operations but does not have joint control; these are recorded by the Group in the same manner as joint operations.

A joint operation is a joint arrangement whereby the Group has rights to the assets, and obligations for the liabilities relating to the arrangement. The Group recognises its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the Group's financial statement line items.

Joint ventures

The Group has joint control over these companies because shareholder agreements assigned the structure of the business operation and strategic, operating and financing decisions which required unanimous consent from all parties.

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Investments in joint ventures are accounted for using the equity method in the consolidated financial statements.

In the separate financial statements, investments in joint ventures are accounted for using cost less impairment (if any).

List of joint ventures and joint operations have been presented in Note 17.

d) Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group's subsequently recognises shares of its associates and joint ventures' profits or losses and other comprehensive income in the profit or loss and other comprehensive income, respectively. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

e) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint ventures is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in associates and joint ventures is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

f) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

5.2 Business combination

The Group applies the acquisition method to account for business combinations with an exception on business combination under common control. The consideration transferred for the acquisition of a subsidiary comprises.

- Fair value of the assets transferred,
- Liabilities incurred to the former owners of the acquiree,
- Equity interests issued by the Group.

Identifiable assets and liabilities acquired and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

The excess of the consideration transferred, the amount of any non-controlling interest recognised and the acquisition-date fair value of any previous equity interest in the acquiree (for business combination achieved in stages) over the fair value of the identifiable net assets acquired is recorded as goodwill. In the case of a bargain purchase, the difference is recognised directly in profit or loss.

Acquisition-related cost are recognised as expenses in consolidated financial statements.

Subsequent changes to the fair value of the contingent consideration that is an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured.

5.3 Foreign currency translation

a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The financial statements are presented in US Dollar, which is the Company's functional currency and the Company's and Group's presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When a gain or loss on a non-monetary item is recognised in other comprehensive income (expense), any exchange component of that gain or loss is recognised in other comprehensive income (expense). Conversely, when a gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss is recognised in profit or loss.

c) Group companies

The operational results and financial position of the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a different functional currency from the Group's presentation currency are translated into the presentation currency by applying the method below.

To comply with the financial reporting requirements of the Stock Exchange of Thailand and the Department of Business Development, the Group presents the financial statements by translating from US Dollar to Thai Baht as follows:

- Assets and liabilities are translated at the closing rate at the date of respective statement of financial position;
- Income and expenses for statement of income and statement of comprehensive income are translated at average exchange rates during the period; and
- All resulting exchange differences from such translations are recognised in other comprehensive income (expense).

5.4 Trade receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business.

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components with the objective to collect the contractual cash flows, they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost.

The impairment of trade receivables is disclosed in Note 5.5 (f).

5.5 Financial asset

a) Classification

The Group classifies its debt instrument financial assets into the following measurement categories depending on i) business model for managing the asset and ii) the cash flow characteristics of the asset whether they represent solely payments of principal and interest (SPPI).

- Those to be measured subsequently at fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVPL); and
- Those to be measured at amortised cost.

For investments in equity instruments, the Group has an irrevocable election at the time of initial recognition to account for the equity investment at a) fair value through profit or loss or b) at fair value through other comprehensive income except those that are held for trading, they are measured at FVPL.

b) Recognition and derecognition

Regular way purchases, acquires and sales of financial assets are recognised on the trade date, which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

c) Measurement

At initial recognition, the Group measures a financial asset at its fair value plus or minus, in the case of a financial asset not at FVPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether the cash flows are solely payment of principal and interest.

d) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the financial assets. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost - Financial assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in interest income using the effective interest rate method. Any gain or loss arising on derecognition and foreign exchange gains and losses are recognised in profit or loss and presented in other gains (losses) and gain (loss) on foreign exchange rates, respectively. Impairment losses are presented as a separate line item in the statement of income.

- FVOCI - Financial assets that are held for i) collection of contractual cash flows and ii) for selling the financial assets are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income (OCI), except for the recognition of impairment gains or losses, interest income using the effective interest method, and foreign exchange gains and losses which are recognised in profit or loss. When the financial assets is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income is included in interest income. Gian (loss) on foreign exchange rate is presented in other income (expense) Impairment expenses are presented separately in the statement of income.

- FVPL - Financial assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented in gains (loss) on remeasuring of financial instruments from in the period in which it arises.

The Group reclassifies debt instruments only when its business model for managing those assets changes.

e) Equity instruments

The Group measures all equity investments at fair value. Where the Group has elected to present fair value gains and losses on equity instruments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in gain on remeasuring financial instruments in the incurring period.

Impairment losses and reversal of impairment losses on equity investments are reported together with changes in fair value.

f) Impairment

The Group applies the TFRS 9 simplified approach in recognising the impairment of trade and other current receivables, which applies lifetime expected credit loss, from initial recognition, for trade and other current receivables.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected loss rates are based on the payment profiles and the corresponding historical credit losses experienced. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

For long-term loans to related parties and other financial assets carried at amortised cost and FVOCI, the Group applies TFRS 9 general approach in measuring the impairment of those financial assets. Under the general approach, the 12-month or the lifetime expected credit loss is applied depending on whether there has been a significant increase in credit risk since the initial recognition.

The credit risk assessment is performed at the end of each reporting period whether there is any significant increase in credit risk profile from the initial recognition by comparing i) expected risk of default as of the reporting date and ii) estimated risk of default on the date of initial recognition.

The Group assesses expected credit loss by taking into consideration forward-looking information and past experiences. The expected credit loss is a probability-weighted estimate of credit losses (probability-weighted present value of estimated cash shortfall). The cash shortfall is the difference between all contractual cash flows that are due to the Group and all cash flows expected to receive, discounted at the original effective interest rate.

When measuring expected credit losses, the Group reflects the following:

- Probability-weighted estimated uncollectible amounts;
- Time value of money; and
- Supportable and reasonable information as of the reporting date about past experience, current conditions and forecasts of future situations.

Impairment and reversal of impairment losses are recognised in profit or loss and included in administrative expenses.

5.6 Property, plant and equipment

Property, plant and equipment are presented at cost, after deducting accumulated depreciation and the provision for the impairment of assets.

Land is not depreciated. Depreciation on other assets is calculated as follows:

a) Exploration and production assets

The Group follows the Successful Efforts Method in accounting for its assets used for exploration and production activities as follows:

Cost of exploration and production assets

- Costs of exploration and production assets comprise total acquisition costs of petroleum rights or the acquisition costs of the portion of properties, decommissioning costs as well as support equipment and facilities.

- Exploratory drilling costs are capitalised as exploration and evaluation assets and will be classified as exploration and production assets of the projects if their exploratory wells have identified proved reserves that have been found to be commercially producible. However, if the exploratory wells have not identified proved reserves or have identified proved reserves but have not been found to be commercially producible, such drilling costs will be expensed in the statements of income.

- Exploration costs, comprising geological and geophysical costs as well as area reservation fees during the exploration stage, are charged to expenses in the statement of income when incurred.

- Development costs, whether relating to the successful or unsuccessful development of wells, are capitalised as exploration and production assets.

Depreciation and depletion

- The capitalised acquisition costs of petroleum rights are depreciated using the unit of production method based on proved reserves. Depreciation of exploratory wells, development costs as well as decommissioning costs, except unsuccessful projects, are calculated using the unit of production method based on proved reserves or proved developed reserves. The Group recognises changes in reserve estimates prospectively.

- Proved reserves and proved developed reserves are calculated by the engineers of the Company and are based on the information received from the joint operators.

- Depreciation for support equipment and facilities is calculated using the straight-line method with an estimated useful life of assets which is between 2 - 20 years.

- Depreciation for signature bonus, remuneration for production bonus and the renewal of petroleum production is calculated using the straight-line method with an estimated useful life which is between 10 - 26 years in accordance with the agreement.

b) Pipelines and others

Costs of properties comprises of other direct costs necessary to bring the asset to working condition suitable for its intended use.

Depreciation of pipelines and others is determined using the straight-line method with an estimated useful life of assets which is between 5 - 30 years.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Subsequent costs are included in the asset's carrying amount, only when it is probable that future economic benefits associated with the item will flow to the Group. The carrying amount of the replaced part is derecognised.

Repair and maintenance costs are recognised as expenses when incurred.

Gains and losses on disposal of property, plant and equipment are determined by comparing proceeds from disposal with the carrying amount and are recognised in the statement of income when incurred.

5.7 Rights to receive reimbursement from decommissioning funds

Rights to receive reimbursement from decommissioning funds is recognised at present value when the Group contribute cash into the fund in accordance to terms and it is certainly probable that it can reimburse the cost of decommissioning from the funds. When funds reimburse cash to the Group after the completion of the decommissioning activities, cash will be adjusted against the right to receive reimbursement from decommissioning funds. The differences between the amount received and the remaining carrying amount of the decommissioning fund is recognised profit or loss.

The Group will not offset the rights to receive reimbursement from decommissioning fund with provisions for decommissioning costs if the Group is still obligated to the decommissioning liabilities. The Group does not have control, joint control or significant influence over the funds.

5.8 Goodwill

Goodwill arises from the business combination which represents the excess of the fair value of the consideration transferred over the fair value of the net identifiable assets, liabilities and contingent liabilities of the acquired subsidiaries, joint operations, associates or joint ventures undertaking at the date of the acquisition.

Goodwill on acquisitions of subsidiaries and joint operations is separately reported in the statements of financial position, while goodwill on acquisitions of associates and joint ventures is included in investment in associates and joint ventures.

Goodwill is not amortised but is annually tested for impairment. Goodwill is allocated to cash-generating unit of group of cash-generating units that are expected to gain benefit from the business combination that caused goodwill. Goodwill is presented at cost less accumulated impairment losses.

Impairment losses on goodwill are not reversed. The carrying amount of goodwill is included in the gains and losses on the disposal of business when it is divested.

5.9 Exploration and evaluation assets

Exploration and evaluation expenditures are capitalised at cost as exploration and evaluation assets. If the projects have identified the proved reserves that have been found to be commercially producible, the capitalised exploration and evaluation expenditures under these projects will be transferred to oil and gas properties of the projects with proved reserves. Subsequent accounting of such costs is described in the accounting policy for property, plant and equipment in Note 5.6 - Property, Plant and Equipment. The capitalised exploration and evaluation expenditure is written off as expenses in the statements of income in the period in which the projects have not identified proved reserves or have identified proved reserves, but have not been found to be commercially producible.

5.10 Impairment of assets

The Group's assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may exceed the recoverable amount. Intangible assets that have an indefinite useful life or are not ready to be used are tested for impairment annually.

An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount which is the higher of an asset's fair value less costs to sell and its value in use, and is recorded in the statement of income. For the purposes of assessing impairment, assets are grouped at the lowest levels in which they are separately identifiable.

Estimates of future cash flows used in the evaluation for impairment of assets which relate to petroleum production are made with consideration of the risk assessment on field and reservoir performance which includes the estimate of proved and unproved reserves.

Allowance for impairment of assets, except when relating to goodwill, is reversed as applicable to the extent that the events or circumstances that triggered the original allowance for impairment change. For this circumstance, the increased carrying amount of the assets from the reversal could not exceed the carrying amount (net of amortisation or depreciation), if the Group did not recognise the impairment loss for assets in the prior period.

5.11 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

Current tax

The current income tax is calculated on the basis of the tax laws enacted or substantially enacted at the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax

Deferred income tax will be recognised when there are temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is not recognised for temporary differences arise from:

- Initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss is not recognised
- Investments in subsidiaries, associates and joint arrangements where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not be reversed in the foreseeable future.

Deferred income tax is measured using tax rates of the period in which temporary difference is expected to be reversed, based on tax rates and tax laws that have been enacted or substantially enacted by the end of the reporting period.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax assets and liabilities balances relate to the same or different taxable entities which intend either to settle current tax liabilities and assets on a net basis.

5.12 Leases

Leases - where the Group is lessee

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. In the event that the Group cannot allocate the lease and non-lease components, the Group elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Assets and liabilities arising from a lease are initially measured at a present value basis. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payment that are based on an index or a rate
- Amounts expected to be payable by the lessee under residual value guarantees
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Lease payments under the extension options period are also included in the measurement of the liability, if the Group is reasonably certain about exercising its extension options.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Right-of-use assets are measured at cost comprising the following:

- The amount of the initial measurement of lease liability
- Any lease payments made at or before the commencement date less any lease incentives received
- Any initial direct costs; and
- Restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise computer and IT equipment.

5.13 Financial liabilities

a) Classification

Financial instruments issued by the Group are classified as either financial liabilities or equity securities by considering contractual obligations.

- Where the Group has an unconditional contractual obligation to deliver cash or another financial asset to another entity, it is considered a financial liability unless there is a predetermined or possible settlement for a fixed amount of cash in exchange of a fixed number of the Group's own equity instruments.
- Where the Group has no contractual obligation or has an unconditional right to avoid delivering cash or another financial asset in settlement of the obligation, it is considered an equity instrument.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

b) Measurement

Financial liabilities are initially recognised at fair value and are subsequently measured at amortised cost.

c) Derecognition and modification

Financial liabilities are derecognised when the obligation specified in the contract is discharged, cancelled, or expired.

Where the terms of a financial liability are renegotiated/modified, the Group assesses whether the renegotiation / modification results in the derecognition of that financial liability. Where the modification results in an extinguishment, the new financial liability is recognised based on fair value of its obligation. The remaining carrying amount of financial liability is derecognised. The difference as well as proceed paid is recognised as other gains/(losses) in profit or loss.

Where the modification does not result in the derecognition of the financial liability, the carrying amount of the financial liability is recalculated as the present value of the renegotiated / modified contractual cash flows discounted at its original effective interest rate. The difference is recognised in other gains/(losses) in profit or loss.

5.14 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, are added to the cost of those assets less investment income earned from these specific borrowings. The capitalisation of borrowing costs is ceased when substantially all of the activities necessary to prepare the qualifying assets for its intended use or sale are complete.

Other borrowing costs are recognised as expenses in the period in which they are incurred.

5.15 Employee benefits

The Group has recognised employee benefits based on the types of benefits which are post-employment benefits and other long-term benefits.

a) Post-employment benefits

The Group has recognised both defined contribution and defined benefit plans as follows:

Defined contribution plan

The Group's employees have become members of the following provident funds: "Employee of PTTEP Registered Provident Fund", "Sinsataporn Registered Provident Fund" and "TISCO Master Pooled Fund Registered Provident Fund".

The provident funds are funded by payments from employees and from the Group which are held in a separate trustee-administered fund. The Group contributes to the funds at a rate of 3% - 15% of the employees' salaries which are charged to the statements of income in the period the contributions are made.

Employee retirement benefits

The Group's obligation in respect of the retirement benefit plans is calculated by estimating the amount of future benefits that employees will earn in return for their services to the Group in current and future periods. Such benefits are discounted to the present value. The employee benefits obligation is calculated by an independent actuary using the projected unit credit method. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income (loss) in the period in which they arise.

Past-service costs are recognised immediately in the statements of income.

b) Other long-term benefits

The Group's other long-term benefits are benefits based on employees' length of service. The Group calculates the amount of these benefits according to the employees' service period.

The expected obligation of these benefits is calculated by independent actuarial experts and accrued over the period of employment based on the same accounting practice used for the employee retirement benefits. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions will be recognised in the statements of income in the period in which they arise.

The Group recognises the obligation in respect of employee benefits in the statements of financial position under "Non-current provision for employee benefits" as disclosed in Note 28.

5.16 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The increase in the provision due to passage of time is recognised as interest expense.

5.17 Revenue recognition

Revenue are recorded net of value added tax. They are recognised in accordance with the provision of goods or services, provided that collectability of the consideration is probable.

Multiple element arrangements involving delivery or provision of multiple products or services are separated into individual distinct performance obligations. Total transaction price of the bundled contract is allocated to each performance obligation based on their relative standalone selling prices or estimated standalone selling prices. Each performance obligation is recognised as revenue on fulfilment of the obligation to the customer.

The Group has the revenue recognition in each category as follows:

Revenue from contracts with customers

Revenue from contracts with customers is recognised when the Group complete performance obligations at a point in time by transferring petroleum product to a customer and the control over the product is transferred to a customer whom the product is physically possessed. The revenue is measured at the fair value of the consideration which the Group expects to be entitled in exchange for petroleum product, provided that collectability of the consideration is probable. Inter-company sales revenue is excluded in the consolidated financial statements.

Deferred income under agreements (Take-or-Pay)

Under the Gas Sales Agreements, the Group has obligations to supply minimum quantities of gas to a customer in each contract year. If in any contract year, the customer has not taken the minimum quantities of gas according to the Gas Sales Agreements, the customer shall pay for quantities of gas not taken (Take-or-Pay). If the customer is unable to take the minimum contracted quantities in a given year, the volume of gas that the customer has paid for but has not taken in that year (Make-up) can be taken free of charge in subsequent years. Payments received in advance under these agreements are recognised as deferred income. This deferred income is recognised in the statements of income when the gas is subsequently taken.

Interest income

Interest income is recognised based on time proportion basis considering on an effective interest rate of one point of time until the end of term and considering on an outstanding balance of the principal recognised in deferred income account of the Group.

Dividend income

Dividend income is recognised when the right to receive payment is established.

Other income

Other income is recognised on an accrual basis.

5.18 Dividend distribution

Dividend distributed to the Company's shareholders is recognised as a liability when interim dividends are approved by the Board of Directors' meeting, and when the annual dividends are approved by the shareholders' meeting.

5.19 Earnings per share

Basic earnings per share are calculated by dividing the income for the year attributable to ordinary shareholders less interest expense for subordinated capital debentures by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share are calculated by dividing the income for the year attributable to shareholders less interest expense for subordinated capital debentures by the weighted average number of ordinary shares outstanding during the year, adjusted with dilutive potential ordinary shares. The Company assumes that all dilutive potential ordinary shares are converted into ordinary shares.

5.20 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker is a person responsible for allocating resources and assessing performance of the operating segments that makes strategic decisions.

In considering the segment reporting, the chief operating decision-maker considers product types as well as geographical areas classified by business segments which are identified by different business activities that are subject to risks and returns that are different from those of other business segments.

5.21 Derivatives and hedging activities

a) Embedded derivative and derivatives that do not qualify for hedge accounting

Embedded derivative that is separately accounted for and derivatives that do not qualify for hedge accounting is initially recognised at fair value. Changes in the fair value are included in other income or other expenses.

Fair value of derivatives is classified as a current or non-current following its remaining maturity.

b) Hedge accounting

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The Group designates certain derivatives as either 1) hedges of the fair value of recognised assets or liabilities or 2) hedges of a particular risk associated with the cash flows of highly probable forecast transactions (cash flow hedges).

At inception of the hedge relationship, the Group documents i) the economic relationship between hedging instruments and hedged items including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items and ii) its risk management objective and strategy for undertaking its hedge transactions.

The full fair value of a hedging derivative is classified as a current or non-current asset or liability following the maturity of related hedged item.

The fair values of derivative financial instruments designated in cash flow hedge relationships and movements in the hedging reserve in shareholders' equity are disclosed in Note 7.

Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in the cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss.

The Group applies hedge accounting on cross currency and interest rate swap and forward foreign exchange contracts in hedge relationships that were being used to hedge the underlying assets or liabilities and highly probable forecast transactions. The Group only designates the spot component of cross currency and interest rate swap and forward foreign exchange contracts as hedging instrument. Gains or losses relating to the effective portion of the change in the spot component and intrinsic value are recognised in the cash flow hedge reserve within equity and recognised the changes in foreign currency basis spreads of cross currency and interest rate swap and forward foreign exchange contracts that relate to hedged items as the costs of hedging reserve within other comprehensive income of equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss.

The gain or loss relating to the effective portion of cross currency and interest rate swap and forward foreign exchange contracts is recognised in profit or loss within gain or loss on remeasuring of financial instruments at the same time as recognising gain or loss on foreign exchange rate of the hedged items.

The gain or loss relating to the effective portion of cross currency and interest rate swap hedging interest rate risk from debentures is recognised in profit or loss within finance costs at the same time as recognising interest expense on the hedged debentures.

6 Financial risk management

The Group exposes to various risks from its business operations as follows:

6.1 Financial risk

The Group exposes to a variety of financial risks which comprise market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential effects on the Group's financial performance to an acceptable level. The Group also uses derivative financial instruments to hedge certain exposures.

Financial risk management is centralised and carried out by the financial risk management function. The Group's financial risk management includes areas such as foreign exchange risk, interest rate risk, price risk, credit risk and liquidity risk. The framework parameters are approved by the Board of Directors and used as the key communication and control tools for financial risk management function of the Group's subsidiaries.

6.1.1 Market risk

a) Foreign exchange risk

The vast majority of the Group's domestic and overseas business (revenues and expenses) are in US Dollar and most companies in the Group have determined the US Dollar as the functional currency by considering from revenue and operating expenses used in the primary economic environment in which the entity operates. The Group's exposure to the foreign exchange risk arises from transactions which are denominated in currencies that are not the functional currency.

Exposure

The Group and the Company have significant exposure to financial statements from transactions denominated in Baht at the end of the reporting period as follows:

	Consolidated financial statements			
	31 December 2024		31 December 2023	
	Unit: Million US Dollar	Unit: Million Baht	Unit: Million US Dollar	Unit: Million Baht
Cash and cash equivalents	252	8,572	380	13,013
Trade and other current receivables	458	15,559	762	26,085
Cross currency and interest rate swaps				
- cashflow hedge derivative *	857	29,120	851	29,120
Other non-current financial assets	-	2	-	8
Other non-current assets	13	448	4	149
Trade and other current payables	(424)	(14,403)	(391)	(13,385)
Forward foreign exchange contracts - trading *	(1,370)	(46,571)	(1,549)	(53,024)
Other current liabilities	(10)	(330)	(53)	(1,812)
Lease liabilities	(51)	(1,739)	(37)	(1,270)
Debentures	(909)	(30,884)	(902)	(30,879)

	Separate financial statements			
	31 December 2024		31 December 2023	
	Unit: Million US Dollar	Unit: Million Baht	Unit: Million US Dollar	Unit: Million Baht
Cash and cash equivalents	47	1,605	37	1,268
Trade and other current receivables	171	5,796	337	11,538
Cross currency and interest rate swaps				
- cashflow hedge derivative *	512	17,400	508	17,400
Short-term loans to related parties	14	488	46	1,585
Other non-current financial assets	-	2	-	8
Other non-current assets	4	149	4	147
Trade and other current payables	(196)	(6,652)	(190)	(6,516)
Forward foreign exchange contracts - trading *	(801)	(27,216)	(930)	(31,833)
Other current liabilities	(1)	(45)	(3)	(101)
Lease liabilities	(34)	(1,165)	(23)	(797)
Debentures	(512)	(17,392)	(508)	(17,390)

* These are disclosed with notional amount.

Financial instruments used by the Group for risk management

The Group manages its foreign exchange risks on financial assets and financial liabilities those are not functional currency by balancing the structure and transactions, types of assets, liabilities and equity. In addition, the Group uses derivative instruments to manage and hedge the risks exposure of the foreign currency transaction while it also considers costs, effectiveness, and risks that may arise in each interval.

The Group uses cross currency and interest rate swaps, forward foreign exchange contracts and forward foreign exchange contracts with resettable options to hedge firm and anticipated foreign exchange commitments and to manage its foreign exchange risk arising from future commercial transactions. The Group does not usually hedge its net investments in foreign operations except in circumstances where there is a material exposure arising from a currency that is anticipated to be volatile and the hedging is cost effective. The Group manages its foreign exchange risks by swapping into the entity's functional currency.

Foreign currency borrowings are swapped into the entity's functional currency using cross currency and interest rate swaps, except where the foreign currency borrowings are repaid with cash flows generated in the same foreign currency. The purpose of these hedges is to mitigate the impact of movements in foreign exchange rates on assets and liabilities and the profit or loss of the Group.

The Group enters into cross currency and interest rate swaps, forward foreign exchange contracts and forward foreign exchange contract with resettable options to hedge its exposure to foreign exchange risk. Under the Group's policy, the critical terms of these contracts must align with the hedged items. The Group applies hedge accounting for cross currency and interest rate swaps and forward foreign exchange contracts with resettable options. As a result, gain or loss of non-hedge items are recognised in profit or loss.

The Group only designates the spot component of cross currency and interest rate swap and forward foreign exchange contracts with resettable options in hedge relationships. The spot component is determined with reference to relevant spot market exchange rates. The difference between the contracted forward rate and the spot market exchange rate is defined as the forward points. It is discounted, where material.

The changes in the forward element of the cross currency and interest rate swaps and forward foreign exchange contracts with resettable options that relate to hedged items are deferred in the costs of hedging reserve.

The Group and the Company entered into a cross currency and interest rate swaps with 94.24% of total Thai Baht borrowings and at 100% of total Pound Sterling loan to a related party which are not matched with the Company's and each subsidiary's functional currency.

Cross currency and interest rate swaps comprise of accrued interest income and expense which will be made twice a year. The due date of interest and principal of the cross currency and interest rate swaps are the same date as loan maturity date.

As at 31 December 2024, the Group and the Company entered into forward foreign exchange contracts and forward foreign exchange contracts with resettable options at 67.13% and 65.29%, respectively (as at 31 December 2023: 82.01% and 81.36%), of forecasted Thai Baht trade receivables which are not matched with the Company's and each subsidiary's functional currency.

The Group's exposure of hedging instrument to financial position and performance are as follows:

Consolidated financial statements									
31 December 2024									
	Hedging instrument		Carrying amount of hedging instrument						
Type of hedge	Derivative	Total contractual amount (Million US Dollar)	Unit: Million US Dollar	Unit: Million Baht	Hedge ratio	Maturity date	Contractual exchange rate	Swap rate received	Swap rate paid
Cash flow hedge	Cross currency and interest rate swap	349	16	534	1:1	6 June 2029	32.66	4.82%	4.99%
		182	2	56	1:1	5 November 2026	33.00	2.00% - 2.75%	2.46% - 2.60%
		148	3	92	1:1	5 April 2027	33.75	2.09%	2.88% - 3.26%
		30	1	37	1:1	5 April 2029	33.60	2.69%	3.68%
		171	12	406	1:1	5 April 2032	33.50	3.05%	4.05% - 4.16%
		479	11	395	1:1	30 June 2026	1.2700 - 1.2737	6.44% - 6.50%	SONIA+1.78%
		84	2	65	1:1	29 June 2032	1.2767	6.08%	SONIA+1.78%
	Forward foreign exchange contracts with resettable options	459	2	69	1:1	March - October 2025	33.39	-	-
		282	6	187	1:1	February - April 2025	33.20	-	-
		67	-	11	11	March - October 2025	33.33	-	-

Consolidated financial statements									
31 December 2023									
	Hedging instrument		Carrying amount of hedging instrument						
Type of hedge	Derivative	Total contractual amount (Million US Dollar)	Unit: Million US Dollar	Unit: Million Baht	Hedge ratio	Maturity date	Contractual exchange rate	Swap rate received	Swap rate paid
Cash flow hedge	Cross currency and interest rate swap	349	6	215	1:1	6 June 2029	32.66	4.82%	4.99%
		182	2	76	1:1	5 November 2026	33.00	2.00% - 2.75%	2.46% - 2.60%
		148	1	50	1:1	5 April 2027	33.75	2.09%	2.88% - 3.26%
		30	-	2	1:1	5 April 2029	33.60	2.69%	3.68%
		171	-	1	1:1	5 April 2032	33.50	3.05%	4.05% - 4.16%
	Forward foreign exchange contracts with resettable options	600	(14)	(478)	1:1	January - October 2024	35.87	-	-
		234	(9)	(296)	1:1	January - April 2024	35.70	-	-

							Separate financial statements		
							31 December 2024		
	Hedging instrument		Carrying amount of hedging instrument						
Type of hedge	Derivative	Total contractual amount (Million US Dollar)	Unit: Million US Dollar	Unit: Million Baht	Hedge ratio	Maturity date	Contractual exchange rate	Swap rate received	Swap rate paid
Cash flow hedge	Cross currency and interest rate swap	349	16	534	1:1	6 June 2029	32.66	4.82%	4.99%
		182	2	56	1:1	5 November 2026	33.00	2.00% - 2.75%	2.46% - 2.55%
	Forward foreign exchange contracts with resettable options	459	2	69	1:1	March - October 2025	33.39	-	-

							Separate financial statements		
							31 December 2023		
	Hedging instrument		Carrying amount of hedging instrument						
Type of hedge	Derivative	Total contractual amount (Million US Dollar)	Unit: Million US Dollar	Unit: Million Baht	Hedge ratio	Maturity date	Contractual exchange rate	Swap rate received	Swap rate paid
Cash flow hedge	Cross currency and interest rate swap	349	6	215	1:1	6 June 2029	32.66	4.82%	4.99%
		182	2	76	1:1	5 November 2026	33.00	2.00% - 2.75%	2.46% - 2.60%
	Forward foreign exchange contracts with resettable options	600	(14)	(478)	1:1	January - October 2024	35.87	-	-

Sensitivity analysis

As shown in the table above, the Group is primarily exposed to changes in US Dollar and Baht exchange rates. The sensitivity of profit or loss to changes in the exchange rates arises mainly from financial assets and financial liabilities denominated in foreign currency other than the entity's functional currency and the impact on profit before income tax. If the Group determines the exchange rate as at 31 December 2024 and 2023 to be changed by 10% and holding all other variables constant, the impact on profit before income tax of the Group will be as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Baht to US Dollar exchange rate				
- Increase 10%	23	(12)	769	(410)
- Decrease 10%	(23)	12	(769)	410

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Baht to US Dollar exchange rate				
- Increase 10%	22	(1)	741	(23)
- Decrease 10%	(22)	1	(741)	23

b) Interest rate risk

Interest rate risk is the risk of changes in market value of interest rate which affect to the cash flow from assets and liabilities at variable rates. Therefore, the borrowing at variable rates is the cause of the Group's interest rate risk. The Group's policy is to maintain an appropriate proportion of its borrowings at fixed rates and variable rates considering the Group's business operation. In doing so, the Group maintains its fixed interest rate borrowings not less than 80%. The Group also considers costs, market conditions, and acceptable risk before entering into the financial instrument to manage interest rate risk.

Following interest rate benchmark reform, there are cessations in several benchmark interest rates including LIBOR, which is applied by the Group as part of the variable rate calculation. The Group had managed the risk by transition to alternative benchmark rates for all loan agreements and financial instruments.

The exposure of the Group's borrowings to changes in interest rate of the borrowings at the end of the reporting period are as follows:

	Consolidated financial statements					
	31 December 2024			31 December 2023		
	Unit: Million US Dollar	Unit: Million Baht	% of total borrowings	Unit: Million US Dollar	Unit: Million Baht	% of total borrowings
Fixed rate borrowings	2,618	89,013	94	2,610	89,325	94
Fixed rate borrowings - adjusted at contract-specified intervals	177	5,996	6	175	5,995	6
	2,795	95,009	100	2,785	95,320	100

	Separate financial statements					
	31 December 2024			31 December 2023		
	Unit: Million US Dollar	Unit: Million Baht	% of total borrowings	Unit: Million US Dollar	Unit: Million Baht	% of total borrowings
Fixed rate borrowings	335	11,396	12	333	11,395	66
Fixed rate borrowings - adjusted at contract-specified intervals	177	5,996	35	175	5,995	34
	512	17,392	47	508	17,390	100

The percentage of total borrowings represented the proportion of borrowings that are currently at variable rates and fixed rates in relation to the total amount of borrowings. An analysis by maturities is provided in Note 25.

c) Price risk

Exposure

The Group's exposure to price risk arises from petroleum product prices because the Group's selling price of petroleum products is reference to the world's crude oil prices, which are fluctuated subject to various factors beyond its control.

Fluctuations in the world's crude oil prices directly affect the prices of the Group's crude oil and condensate, while the prices of natural gas, which is the main product of the Group, change in the same direction with the reference oil prices and other factors in the gas price formula. Natural gas prices have adjusted periods that reflect actual price delayed by every 3 to 21 months (lag time) depending on each contract. The natural gas price will move corresponding to lower volatility compared to the prices of crude oil and condensate.

The Group has managed the price risk by analysing the impact of the level of oil price changes to revenue, cash flow and net profit of the Group annually. The risk mitigation plan is reviewed by the Risk Management Committee and the Board of Directors in order to be used as the Group's operation framework.

As at 31 December 2024, the Group entered into oil price hedging derivatives for the year 2024 totalling 2.00 million barrels (as at 31 December 2023: the Group entered into oil price hedging derivatives for the year 2024 totalling 3.62 million barrel which is the part of total oil price hedging derivatives for the year 2024).

Sensitivity analysis

The changes in oil price, holding all other variables constant, will impact fair value of oil price hedging derivative as at 31 December 2024 and 2023 as follows:

	Consolidated financial statements	
	Unit: Million US Dollar	Unit: Million Baht
2024		
Price per barrel		
- Increase 1 US Dollar	(1)	(25)
- Decrease 1 US Dollar	1	25

	Consolidated financial statements	
	Unit: Million US Dollar	Unit: Million Baht
2023		
Price per barrel		
- Increase 1 US Dollar	(1)	(40)
- Decrease 1 US Dollar	1	40

6.1.2 Credit risk

a) Risk management

The Group's policy to manage its credit risk is to enter into transactions with the customers who have good credit profiles only. The majority of sales is made with PTT Public Company Limited, the parent company. In addition, the Group carefully assesses and regularly reviews the credit profiles of its customers.

The Group places deposits with the banks which are rated at investment grade level. The Group regularly assesses credit quality and stability of these banks by taking into account of their credit rating, investment portfolio and other financial ratios which demonstrate their performance and the ability to control their business risks, such as non-performing loan to total loan ratio. These factors are used to manage risks and to consider the amount of bank deposit limit in order to ensure that deposits are well-diversified and to avoid concentration risks with individual bank together with the consideration yields and acceptable risk in each time interval.

Before entering into financial derivative contracts, the Group has assessed the financial position and credit worthiness, including setting up credit exposure limit, of counterparty bank in the same way as when the Group assesses banks before placing deposit as described above. Currently all banks in which the Group has entered into financial derivative contracts are rated at investment grade level. In addition, the Group has adjusted, based on the timing and type of transactions, the outstanding balance of each financial derivative contract made with banks to reflect the risk-adjusted exposure and has diversified transactions to avoid concentration risks with individual bank together with the costs, consideration yields and risks arising in each interval.

b) Impairment of financial assets

The Group has following financial assets that are subject to the expected credit loss model as follows:

- Cash and cash equivalents
- Short-term investments
- Trade and other current receivables
- Other current assets
- Short-term loans to a related party
- Long-term loans to a related party
- Other non-current financial assets
- Other non-current assets

Management consider that impairment loss of financial assets mentioned above are immaterial.

6.1.3 Liquidity risk

Liquidity risk is the risk that suitable sources of funding for the Group's business activities may not be available. The Group's contractual maturity of liabilities and interest, including the derivative contracts are as follows:

a) Maturity of financial liabilities

The tables below analyse the maturity of financial liabilities grouping based on their contractual maturities. The amounts disclosed are the contractual undiscounted cash flows as at 31 December 2024 and 2023.

	Consolidated financial statements				
	Unit: Million US Dollar				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2024					
Trade and other current payables	1,759	-	-	1,759	1,759
Other current liabilities	67	-	-	67	67
Lease liabilities	417	528	89	1,034	966
Debentures - fixed interest rate					
Principal	-	1,232	1,585	2,817	2,795
Interest expense *	106	363	1,085	1,554	-
Forward foreign exchange contracts - net **	(3)	-	-	(3)	42

	Consolidated financial statements				
	Unit: Million US Dollar				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2023					
Trade and other current payables	1,425	-	-	1,425	1,425
Other current liabilities	166	-	-	166	166
Lease liabilities	300	477	141	918	868
Contingent considerations from business acquisition	1	-	-	1	1
Debentures - fixed interest rate					
Principal	-	865	1,946	2,811	2,785
Interest expense *	106	391	1,162	1,659	14
Cross currency and interest rate swap - net **	1	4	6	11	1
Forward foreign exchange contracts - net **	64	-	-	64	42

	Consolidated financial statements				
	Unit: Million Baht				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2024					
Trade and other current payables	59,787	-	-	59,787	59,787
Other current liabilities	2,262	-	-	2,262	2,262
Lease liabilities	14,166	17,950	3,017	35,133	32,826
Debentures - fixed interest rate					
Principal	-	41,894	53,858	95,752	95,008
Interest expense *	3,617	12,312	36,872	52,801	-
Forward foreign exchange contracts - net **	(94)	-	-	(94)	1,448

	Consolidated financial statements				
	Unit: Million Baht				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2023					
Trade and other current payables	48,767	-	-	48,767	48,767
Other current liabilities	5,693	-	-	5,693	5,693
Lease liabilities	10,283	16,308	4,826	31,417	29,719
Contingent considerations from business acquisition	26	-	-	26	26
Debentures - fixed interest rate					
Principal	-	29,612	66,590	96,202	95,320
Interest expense *	3,635	13,384	39,751	56,770	471
Cross currency and interest rate swap - net **	36	145	188	369	27
Forward foreign exchange contracts - net **	2,207	-	-	2,207	1,448

	Separate financial statements				
	Unit: Million US Dollar				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2024					
Trade and other current payables	344	-	-	344	344
Other current liabilities	6			6	6
Lease liabilities	58	77	1	136	129
Debentures - fixed interest rate					
Principal	-	512	-	512	512
Interest expense *	20	61	-	81	-
Forward foreign exchange contracts - net **	(2)	-	-	(2)	21

	Separate financial statements				
	Unit: Million US Dollar				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2023					
Trade and other current payables	303	-	-	303	303
Other current liabilities	13	-	-	13	13
Lease liabilities	36	33	1	70	66
Debentures - fixed interest rate					
Principal	-	175	333	508	508
Interest expense *	20	73	8	101	3
Forward foreign exchange contracts - net **	42	-	-	42	21

	Separate financial statements				
	Unit: Million Baht				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2024					
Trade and other current payables	11,684	-	-	11,684	11,684
Other current liabilities	193	-		193	193
Lease liabilities	1,987	2,601	39	4,627	4,374
Debentures - fixed interest rate					
Principal	-	17,400	-	17,400	17,393
Interest expense *	684	2,088	-	2,772	-
Forward foreign exchange contracts - net **	(80)	-	-	-	708

	Separate financial statements				
	Unit: Million Baht				
	Within 1 year	1 - 5 years	Over 5 years	Total	Total carrying amount
2023					
Trade and other current payables	10,369	-	-	10,369	10,369
Other current liabilities	442	-	-	442	442
Lease liabilities	1,226	1,115	38	2,379	2,274
Debentures - fixed interest rate					
Principal	-	6,000	11,400	17,400	17,390
Interest expense *	684	2,498	275	3,457	90
Forward foreign exchange contracts - net **	1,437	-	-	1,437	708

The major assumptions for the data presented in the table above are that all the interest expenses are calculated based on the nominal interest rate and there is no change in aggregate principal amounts of loans other than repayment at scheduled maturity.

- Thai Baht liabilities were equivalent to US Dollar at the closing rate at the date respective statement of financial position.

* Interest paid represents the interest payment due within year.

** Derivatives were presented at the net amount between cash inflow and cash outflow.

As at 31 December, the Company has commitments from the guarantees of debentures and loans of its subsidiaries as disclosed in Note 35.3. The maturity date of obligations follows the maturity of loan agreements, debentures and loans of subsidiaries.

b) Financing arrangements

The Group manages its liquidity risks by preparing cash flow forecasts and adjusting financial forecasts on a regular basis, entering into financing program, issuing short-term debt securities in order to access Thailand's capital market, as well as entering into credit facilities with financial institutions with the interest rate agreed in advance. However, The credit facilities has designed sub credit facilities to support ESG Tranche project.

As at 31 December 2024 and 2023, the outstanding principal amount and undrawn facilities are summarised below.

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	Credit limit	Undrawn amount	Credit limit	Undrawn amount
2024				
Committed credit facility	577	577	19,595	19,595
Uncommitted credit facility	281	281	9,544	9,544

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	Credit limit	Undrawn amount	Credit limit	Undrawn amount
2023				
Committed credit facility	575	575	19,689	19,689
Uncommitted credit facility	279	279	9,544	9,544

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	Credit limit	Undrawn amount	Credit limit	Undrawn amount
2024				
Committed credit facility	177	177	6,000	6,000
Uncommitted credit facility	270	270	9,190	9,190

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	Credit limit	Undrawn amount	Credit limit	Undrawn amount
2023				
Committed credit facility	175	175	6,000	6,000
Uncommitted credit facility	269	269	9,190	9,190

Thai Baht credit facility is translated to US Dollar using the closing rate at the date respective statement of financial position.

The Company's International Credit Rating is comparable with the Sovereign Rating of Thailand and the National Credit Rating is at the AAA. As a result, the Company can access to sources of funds for long-term loans at the interest rate approximate the market interest rate. For the years 2024 and 2023, the Company's credit ratings as assigned by prominent credit rating agencies are as follows:

	2024		2023	
	Foreign Currency	Domestic Currency	Foreign Currency	Domestic Currency
Rating Agency				
Moody's	Baa1	Baa1	Baa1	Baa1
Standard and Poor's	BBB+	BBB+	BBB+	BBB+
Fitch Ratings	BBB+	-	BBB+	-
TRIS Rating (National Rating)	-	AAA	-	AAA

6.2 Capital management

6.2.1 Risk management

Capital Risk Management

The Group manages capital to keep financial strength comparable with the leading companies in the same industry, alignment with the business strategy, economy, market positioning and finance cost as well as impact to the financial ratio and credit rating of the Company and providing the ultimate returns to shareholders and benefits to other stakeholders.

7 Derivatives and hedge accounting

Book value of derivatives as at 31 December 2024 and 2023 are disclosed in Note 10.

7.1 Classification of derivative financial instruments

Derivatives are only used for economic hedging purposes, not for speculative investments. The Group adopts hedge accounting for some derivatives which meet the condition of cash flow hedge instruments and determines the hedge ratio at 1:1 considering the relationship of the relevant transactions and risk factors between hedged items and hedging instruments. However, where derivatives do not meet the hedge accounting criteria, they are classified as 'held for trading' for accounting purposes and are accounted for at fair value through profit or loss.

The fair value of a hedging derivative is presented as current or non-current following the maturity of related hedged items.

7.2 Hedge effectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic effectiveness assessments, to ensure that an economic relationship exists between the hedged items and hedging instruments.

Foreign exchange risk

For cross currency and interest rate swap, the Group enters into hedging transaction where the critical terms of the hedging instrument match exactly with the terms of the hedged item. The Group therefore performs a qualitative assessment of effectiveness. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group uses the hypothetical derivative method to assess effectiveness.

In hedging of foreign currency on cross currency and interest rate swap, ineffectiveness may arise if there are changes in the credit risk of the derivative counterparty, a reduction in value of the hedged items, or a significant change in components of cross currency and interest rate swap.

7.3 Cash flow hedge reserve

Hedging reserve includes costs of hedging and cash flow hedge reserve. The cash flow hedge reserve is used to recognise the effective portion of gains or losses on changes in fair value of derivatives that are qualified for hedge accounting.

The Group has hedging reserve presented in other comprehensive income comprising financial instruments as follows:

	Consolidated financial statements					
	Unit: Million US Dollar			Unit: Million Baht		
	Cost of hedging reserve	Spot component of currency forwards	Total	Cost of hedging reserve	Spot component of currency forwards	Total
As at 1 January 2024	11	12	23	460	557	1,017
Changes in fair value of hedging instruments recognised in OCI	-	78	78	-	2,648	2,648
Costs of hedging deferred	(11)	-	(11)	(376)	-	(376)
Reclassified from OCI to profit or loss						
- Gain on foreign exchange rate	-	(25)	(25)	-	(830)	(830)
Deferred tax	-	(8)	(8)	(3)	(271)	(274)
As at 31 December 2024	-	57	57	81	2,104	2,185

	Consolidated financial statements					
	Unit: Million US Dollar			Unit: Million Baht		
	Cost of hedging reserve	Spot component of currency forwards	Total	Cost of hedging reserve	Spot component of currency forwards	Total
As at 1 January 2023	25	24	49	941	994	1,935
Changes in fair value of hedging instruments recognised in OCI	-	(22)	(22)	-	(810)	(810)
Costs of hedging deferred	(16)	-	(16)	(545)	-	(545)
Reclassified from OCI to profit or loss						
- Gain on foreign exchange rate	-	1	1	-	46	46
Deferred tax	2	9	11	64	327	391
As at 31 December 2023	11	12	23	460	557	1,017

	Separate financial statements					
	Unit: Million US Dollar			Unit: Million Baht		
	Cost of hedging reserve	Spot component of currency forwards	Total	Cost of hedging reserve	Spot component of currency forwards	Total
As at 1 January 2024	5	14	19	153	584	737
Changes in fair value of hedging instruments recognised in OCI	-	33	33	-	1,087	1,087
Costs of hedging deferred	(8)	-	(8)	(264)	-	(264)
Reclassified from OCI to profit or loss						
- Gain on foreign exchange rate	-	(10)	(10)	-	(341)	(341)
Deferred tax	(1)	(5)	(6)	(14)	(178)	(192)
As at 31 December 2024	(4)	32	28	(125)	1,152	1,027

	Separate financial statements					
	Unit: Million US Dollar			Unit: Million Baht		
	Cost of hedging reserve	Spot component of currency forwards	Total	Cost of hedging reserve	Spot component of currency forwards	Total
As at 1 January 2023	13	22	35	459	811	1,270
Changes in fair value of hedging instruments recognised in OCI	-	(16)	(16)	-	(518)	(518)
Costs of hedging deferred	(8)	-	(8)	(289)	-	(289)
Reclassified from OCI to profit or loss						
- Gain on foreign exchange rate	-	1	1	-	37	37
Deferred tax	-	7	7	(17)	254	237
As at 31 December 2023	5	14	19	153	584	737

7.4 Amounts recognised in profit or loss

In addition to the amounts reclassified from hedge reserve as disclosed in Note 7.3, the following amounts relating to derivatives were recognised in profit or loss:

	Consolidated financial statements	
	Unit: Million US Dollar	
For the years ended 31 December	2024	2023
Net gain (loss) on derivatives that do not qualify for hedge accounting, presented in gain (loss) on remeasuring of financial instruments	(20)	34

	Consolidated financial statements	
	Unit: Million Baht	
For the years ended 31 December	2024	2023
Net gain (loss) on derivatives that do not qualify for hedge accounting, presented in gain (loss) on remeasuring of financial instruments	(697)	1,133

	Separate financial statements	
	Unit: Million US Dollar	
For the years ended 31 December	2024	2023
Net gain (loss) on derivatives that do not qualify for hedge accounting, presented in gain (loss) on remeasuring of financial instruments	(14)	43

	Separate financial statements	
	Unit: Million Baht	
For the years ended 31 December	2024	2023
Net gain (loss) on derivatives that do not qualify for hedge accounting, presented in gain (loss) on remeasuring of financial instruments	(464)	1,446

8 Critical accounting estimates and judgements

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

8.1 Impairment of goodwill

In assessing the impairment of goodwill, the Group estimates using the discounted future cash flows which are based on management's key assumptions in relation to selling price using the future oil price, estimated future production volume based on a proved and probable reserves and gross margin rate. These assumptions are based on management's judgment and past experience as well as the future prediction that is believed to be reasonable in the present situation. Changes in the information or new noticeable information may lead to the change in the assumptions and the discount rate for the estimation of the discounted future cash flows. The assumption of selling price is determined from the short-term oil price based on forward oil price curve and long-term oil price based on demand and supply of oil in the world market.

8.2 Estimation of petroleum reserves

Petroleum reserves are key elements in the Group's investment decision-making process. They are also important elements in testing for impairment. Changes in proved reserves will also affect the present value of the net cash flows and depreciation calculated using the unit-of-production method.

Proved reserves are the quantities of petroleum that are demonstrated with reasonable certainty to be commercially producible in future years from known reservoirs under existing economic and operating conditions including government rules and regulations. The proved reserves have to be examined and assessed annually by the Group's geologists and reservoir engineers.

8.3 Estimation related to the fair values of net identifiable assets acquired from investment acquisition

The fair value determination of net identifiable assets acquired involves significant assumptions from independent valuer and management judgements to apply the fair valuation method, an estimation of future performance and the projected cash flows, including the application of discount rate applied to projected cash flows. Key assumptions are the estimation of future price, capital expenditures and operating expenses which are approved by management, capital structure, growth rate and the discount rate to be applied to the projected cash flows.

9 Segment and revenue information

	Consolidated financial statements							
	Unit: Million US Dollar							
	Exploration and production					Other businesses and Corporate	Elimination	Total
	Southeast Asia							
For the year ended 31 December 2024	Thailand	Other Southeast Asia	Middle East	Africa	Others			
Revenues - Third parties	340	1,115	598	-	65	58	-	2,176
- Related parties	5,059	1,087	560	318	-	-	(358)	6,666
Other income	59	14	7	27	1	1,783	(1,716)	175
Interest income	2	15	3	14	1	1,228	(1,025)	238
Total revenues	5,460	2,231	1,168	359	67	3,069	(3,099)	9,255
Operating expenses	876	680	84	52	18	92	(400)	1,402
Exploration expenses	11	33	18	-	63	-	-	125
Administrative expenses	102	78	15	7	5	601	(292)	516
Petroleum royalties	352	17	-	27	-	-	-	396
Depreciation, depletion and amortisation	1,694	600	268	64	16	48	(1)	2,689
(Gain) loss on foreign exchange rates	(6)	(4)	-	1	-	3	-	(6)
Gain on remeasuring financial instruments	-	-	-	-	-	(11)	-	(11)
Finance costs	170	34	7	3	-	1,142	(1,022)	334
Share of profit of associates and joint ventures	-	-	(15)	-	-	(23)	-	(38)
Income taxes	731	223	587	61	14	5	-	1,621
Total expenses	3,930	1,661	964	215	116	1,857	(1,715)	7,028
Profit (loss) for the year	1,530	570	204	144	(49)	1,212	(1,384)	2,227

For the year ended 31 December 2024	Consolidated financial statements							
	Unit: Million Baht							
	Exploration and production					Other businesses and Corporate	Elimination	Total
	Southeast Asia							
	Thailand	Other Southeast Asia	Middle East	Africa	Others			
Revenues - Third parties	12,043	39,392	21,097	-	2,279	2,038	-	76,849
- Related parties	178,639	38,366	19,791	11,288	-	-	(12,623)	235,461
Other income	2,069	467	237	948	32	62,952	(60,620)	6,085
Interest income	88	547	96	480	35	43,351	(36,162)	8,435
Total revenues	192,839	78,772	41,221	12,716	2,346	108,341	(109,405)	326,830
Operating expenses	30,857	23,961	2,946	1,836	644	3,195	(14,101)	49,338
Exploration expenses	367	1,172	626	3	2,215	-	-	4,383
Administrative expenses	3,591	2,756	531	244	157	21,105	(10,269)	18,115
Petroleum royalties	12,447	619	-	947	-	-	-	14,013
Depreciation, depletion and amortisation	59,915	21,199	9,430	2,278	561	1,702	(46)	95,039
(Gain) loss on foreign exchange rates	(143)	(168)	-	25	1	92	10	(183)
Gain on remeasuring financial instruments	-	-	-	-	-	(402)	-	(402)
Finance costs	6,013	1,191	234	117	11	40,295	(36,048)	11,813
Share of profit of associates and joint ventures	-	-	(524)	-	-	(793)	-	(1,317)
Income taxes	25,780	7,861	20,749	2,136	478	210	-	57,214
Total expenses	138,827	58,591	33,992	7,586	4,067	65,404	(60,454)	248,013
Profit (loss) for the year	54,012	20,181	7,229	5,130	(1,721)	42,937	(48,951)	78,817

	Consolidated financial statements						
	Unit: Million US Dollar						
	Exploration and production					Other businesses and Corporate	Total
	Southeast Asia						
As at 31 December 2024	Thailand	Other Southeast Asia	Middle East	Africa	Others		
Segment assets	8,599	6,013	3,969	4,205	287	4,969	28,042
Investments under equity method	-	-	5	-	-	354	359
Total assets							28,401
Total liabilities	5,741	1,871	783	759	62	3,419	12,635
Capital expenditures	2,968	371	1,012	154	23	106	4,634

	Consolidated financial statements						
	Unit: Million Baht						
	Exploration and production					Other businesses and Corporate	Total
	Southeast Asia						
As at 31 December 2024	Thailand	Other Southeast Asia	Middle East	Africa	Others		
Segment assets	292,284	204,389	134,890	142,910	9,755	168,876	953,104
Investments under equity method	-	-	163	-	-	12,034	12,197
Total assets							965,301
Total liabilities	195,113	63,600	26,620	25,781	2,122	116,189	429,425
Capital expenditures	104,634	13,064	35,673	5,416	811	3,722	163,320

Consolidated financial statements

Unit: Million US Dollar

For the year ended 31 December 2023	Exploration and production					Other businesses and Corporate	Elimination	Total
	Southeast Asia							
	Thailand	Other Southeast Asia	Middle East	Africa	Others			
Revenues - Third parties	302	1,221	607	-	38	19	-	2,187
- Related parties	4,890	1,033	557	279	-	37	(344)	6,452
Other income	83	3	1	24	-	1,451	(1,417)	145
Gain on disposal of participating interests	-	-	-	-	73	-	-	73
Interest income	2	11	4	11	-	1,093	(969)	152
Total revenues	5,277	2,268	1,169	314	111	2,600	(2,730)	9,009
Operating expenses	802	625	85	34	13	67	(401)	1,225
Exploration expenses	5	22	9	1	57	-	-	94
Administrative expenses	71	64	11	15	4	1,098	(776)	487
Petroleum royalties	397	29	-	24	-	-	-	450
Depreciation, depletion and amortisation	1,412	546	256	58	13	52	(2)	2,335
(Gain) loss on foreign exchange rates	(14)	(1)	-	1	-	(34)	-	(48)
Loss on remeasuring financial instruments	-	-	-	-	-	56	-	56
Finance costs	130	34	6	2	-	1,081	(959)	294
Share of profit of associates and joint ventures	-	-	(16)	-	-	(27)	-	(43)
Impairment loss on assets and goodwill	-	-	-	120	-	-	-	120
Income taxes	866	280	595	65	5	20	-	1,831
Total expenses	3,669	1,599	946	320	92	2,313	(2,138)	6,801
Profit (loss) for the year	1,608	669	223	(6)	19	287	(592)	2,208

	Consolidated financial statements							
	Unit: Million Baht							
	Exploration and production					Other businesses and Corporate	Elimination	Total
	Southeast Asia							
For the year ended 31 December 2023	Thailand	Other Southeast Asia	Middle East	Africa	Others			
Revenues - Third parties	10,542	42,632	21,082	-	1,331	654	-	76,241
- Related parties	170,115	35,945	19,373	9,717	-	1,273	(11,970)	224,453
Other income	2,862	113	23	852	1	50,718	(49,537)	5,032
Gain on disposal of participating interests	-	-	-	13	2,548	-	-	2,561
Interest income	55	377	155	384	15	38,061	(33,743)	5,304
Total revenues	183,574	79,067	40,633	10,966	3,895	90,706	(95,250)	313,591
Operating expenses	27,873	21,771	2,961	1,203	468	2,333	(13,945)	42,664
Exploration expenses	184	774	327	16	2,008	-	-	3,309
Administrative expenses	2,474	2,231	387	512	164	38,279	(27,068)	16,979
Petroleum royalties	13,777	1,003	-	852	-	-	-	15,632
Depreciation, depletion and amortisation	49,182	19,049	8,895	2,022	450	1,797	(73)	81,322
(Gain) loss on foreign exchange rates	(456)	(23)	1	25	(21)	(1,151)	(1)	(1,626)
Loss on remeasuring financial instruments	-	-	-	-	-	1,881	-	1,881
Finance costs	4,528	1,206	206	94	7	37,610	(33,408)	10,243
Share of profit of associates and joint ventures	-	-	(554)	-	-	(923)	-	(1,477)
Impairment loss on assets and goodwill	-	-	-	4,255	-	-	-	4,255
Income taxes	30,074	9,766	20,687	2,284	170	723	-	63,704
Total expenses	127,636	55,777	32,910	11,263	3,246	80,549	(74,495)	236,886
Profit (loss) for the year	55,938	23,290	7,723	(297)	649	10,157	(20,755)	76,705

	Consolidated financial statements						
	Unit: Million US Dollar						
	Exploration and production					Other businesses and Corporate	Total
	Southeast Asia						
As at 31 December 2023	Thailand	Other Southeast Asia	Middle East	Africa	Others		
Segment assets	7,743	6,252	3,057	4,011	324	4,708	26,095
Investments under equity method	-	-	16	-	-	269	285
Total assets							26,380
Total liabilities	5,159	1,820	562	711	54	3,481	11,787
Capital expenditures	2,440	588	143	139	20	60	3,390

	Consolidated financial statements						
	Unit: Million Baht						
	Exploration and production					Other businesses and Corporate	Total
	Southeast Asia						
As at 31 December 2023	Thailand	Other Southeast Asia	Middle East	Africa	Others		
Segment assets	264,982	213,987	104,618	137,270	11,097	161,099	893,053
Investments under equity method	-	-	560	-	-	9,208	9,768
Total assets							902,821
Total liabilities	176,560	62,268	19,214	24,327	1,890	119,119	403,378
Capital expenditures	84,859	20,456	4,985	4,840	685	2,082	117,907

For the year 2024 and comparative information for the year 2023, the Group has changed the basis of presentation of reportable operating segments in accordance with segment information reported to the chief operating decision-maker and quantitative thresholds according to financial reporting standards. The Group is organised into the following business segments:

- Exploration and production: The Group operates in oil and gas exploration and production both domestically and overseas including overseas gas transportation pipeline in overseas, either as an operator or as a joint venture partner with international oil and gas companies. Most domestic projects are located in the Gulf of Thailand. Overseas projects are located in Southeast Asia, Middle East, Africa and others.
- Other business and corporate consist of investments in other business associated with the Group's strategy, such as new business for energy transition, related business, and corporate. These do not constitute a separately reportable segment.

For the year ended 31 December 2024, the Group had one major customer from revenues under the exploration and production segment, representing 67% of total revenues from sales. (For the year ended 31 December 2023, the Group has one major customer from revenues under the exploration and production segment, representing 66% of total revenues from sales.) The mentioned revenue is presented in Note 16 (a) under the topic transactions with parent company.

10 Fair value

10.1 Fair value estimation

The following tables present financial assets and liabilities recognised by their fair value hierarchy.

	Consolidated financial statements							
	Unit: Million US Dollar							
	Level 1		Level 2		Level 3		Total	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Assets								
Financial derivative assets								
Derivatives assets used for hedging								
- Forward foreign exchange contracts	-	-	8	-	-	-	8	-
- Cross currency and interest rate swap	-	-	47	11	-	-	47	11
Derivatives assets measured at fair value through profit or loss								
- Oil price hedge	-	-	9	19	-	-	9	19
- Forward foreign exchange contracts	-	-	8	-	-	-	8	-
Other financial assets								
Financial assets measured at fair value through profit or loss								
- Investment in debt instruments	-	-	-	-	-	-	-	-
- Joint development agreements	-	-	-	-	2	2	2	2
Financial assets measured at fair value through other comprehensive								
- Investment in equity instruments	-	1	-	-	6	-	6	1
Other non-current assets								
Assets measured at fair value through profit or loss								
- Pension scheme investments from joint operation	81	69	-	-	-	-	81	69
Total assets	81	70	72	30	8	63	161	102

	Consolidated financial statements							
	Unit: Million US Dollar							
	Level 1		Level 2		Level 3		Total	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Liabilities								
Financial derivative liabilities								
Derivatives liabilities used for hedging								
- Forward foreign exchange contracts	-	-	-	23	-	-	-	23
- Cross currency and interest rate swap	-	-	-	1	-	-	-	1
Derivatives liabilities measured at fair value through profit or loss								
- Forward foreign exchange contracts	-	-	-	19	-	-	-	19
Other current liabilities								
Financial liabilities measured at fair value through profit or loss								
- Contingent considerations from business acquisition	-	-	-	-	-	1	-	1
Total liabilities	-	-	-	43	-	1	-	44

	Consolidated financial statements							
	Unit: Million Baht							
	Level 1		Level 2		Level 3		Total	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Assets								
Financial derivative assets								
Derivatives assets used for hedging								
- Forward foreign exchange contracts	-	-	274	-	-	-	274	-
- Cross currency and interest rate swap	-	-	1,596	371	-	-	1,596	371
Derivatives assets measured at fair value through profit or loss								
- Oil price hedge	-	-	301	659	-	-	301	659
- Forward foreign exchange contracts	-	-	278	-	-	-	278	-
Other financial assets								
Financial assets measured at fair value through profit or loss								
- Investment in debt instruments	-	6	-	-	-		-	6
- Joint development agreements	-	-	-	-	82	77	82	77
Financial assets measured at fair value through other comprehensive income								
- Investment in equity instruments	-	29	-	-	205	1	205	30
Other non-current assets								
Assets measured at fair value through profit or loss								
- Pension scheme investments from joint operation	2,741	2,372	-	-	-	-	2,741	2,372
Total assets	2,741	2,407	2,449	1,030	287	78	5,477	3,515

	Consolidated financial statements							
	Unit: Million Baht							
	Level 1		Level 2		Level 3		Total	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Liabilities								
Financial derivative liabilities								
Derivatives liabilities used for hedging								
- Forward foreign exchange contracts	-	-	7	774	-	-	7	774
- Cross currency and interest rate swap	-	-	10	27	-	-	10	27
Derivatives liabilities measured at fair value through profit or loss								
- Forward foreign exchange contracts	-	-	11	674	-	-	11	674
Other current liabilities								
Financial liabilities measured at fair value through profit or loss								
- Contingent considerations from business acquisition	-	-	-	-	-	26	-	26
Total liabilities	-	-	28	1,475	-	26	28	1,501

	Separate financial statements							
	Unit: Million US Dollar							
	Level 1		Level 2		Level 3		Total	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Assets								
Financial derivative assets								
Derivatives assets used for hedging								
- Forward foreign exchange contracts	-	-	2	-	-	-	2	-
- Cross currency and interest rate swap	-	-	17	8	-	-	17	8
Financial assets measured at fair value through profit or loss								
- Forward foreign exchange contracts	-	-	5	-	-	-	5	-
Other financial assets								
Financial assets measured at fair value through profit or loss								
- Investment in debt instruments	-	-	-	-	-	-	-	-
Financial assets measured at fair value through other comprehensive income								
- Investment in equity instruments	-	-	-	-	-	-	-	-
Total assets	-	-	24	8	-	-	24	8
Liabilities								
Financial derivative liabilities								
Derivatives liabilities used for hedging								
- Forward foreign exchange contracts	-	-	-	14	-	-	-	14
Derivatives liabilities measured at fair value through profit or loss								
- Forward foreign exchange contracts	-	-	-	7	-	-	-	7
Total liabilities	-	-	-	21	-	-	-	21

	Separate financial statements							
	Unit: Million US Dollar							
	Level 1		Level 2		Level 3		Total	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Assets								
Financial derivative assets								
Derivatives assets used for hedging								
- Forward foreign exchange contracts	-	-	75	-	-	-	75	-
- Cross currency and interest rate swap	-	-	590	291	-	-	590	291
Financial assets measured at fair value through profit or loss								
- Forward foreign exchange contracts	-	-	145	-	-	-	145	-
Other financial assets								
Financial assets measured at fair value through profit or loss								
- Investment in debt instruments	-	6	-	-	-	-	-	6
Financial assets measured at fair value through other comprehensive income								
- Investment in equity instruments	-	-	-	-	1	1	1	1
Total assets	-	6	810	291	1	1	811	298
Liabilities								
Financial derivative liabilities								
Derivatives liabilities used for hedging								
- Forward foreign exchange contracts	-	-	6	478	-	-	6	478
Derivatives liabilities measured at fair value through profit or loss								
- Forward foreign exchange contracts	-	-	3	230	-	-	3	230
Total liabilities	-	-	9	708	-	-	9	708

The valuation of financial assets and financial liabilities fair value is based on accounting policy disclosed in Note 5.5 Financial assets and Note 5.13 Financial liabilities.

Transfer between fair value hierarchy

The Group has no transaction transfer between Level 1, Level 2, and Level 3 of the fair value hierarchy during the year.

10.2 Fair value valuation techniques

Fair values are categorised into hierarchy based on inputs used as follows:

10.2.1 Valuation techniques used to derive level 1 fair values

The fair value of financial instruments is based on quoted prices of each asset or liability by reference of active markets.

10.2.2 Valuation techniques used to derive level 2 fair values

The fair value of financial instruments is determined using valuation techniques which significantly use observable data and, as little as possible, the Group specific estimates.

Valuation techniques used to derive level 2 fair values of financial derivatives are as follows:

- Oil price hedge comprises oil price swaps and options. The fair value of oil price swaps is assessed based on the price level calculated using the market price of future contracts. The fair value of oil price options is calculated using premium which requires various variable factors, such as the price level of swap, timing of exercise, and price volatility etc.
- The fair value of forward contracts, including forward foreign exchange contracts with resettable option, are calculated using forward foreign exchange rates that are quoted in an active market for the forward contract portion. The fair value of resettable option is assessed based on various variable factors, such as future forward foreign exchange rate, the market value of swap price, timing of exercise, and foreign exchange rate volatility etc.
- The fair value of cross currency and interest rate swaps including Memorandum of Understanding on Cross Currency Swap (MOU) in relation to interest rate adjustment with financial institutions, is calculated using forward interest rates derived from the yield curves in an observable interest market and forward foreign exchange rates that are quoted in an active market including assessing the possibilities of interest rate adjustment according to MOU.

10.2.3 Valuation techniques used to derive level 3 fair values

The fair value of financial instruments is measured using unobservable inputs in which the Group uses discounted cash flows method to derive level 3 fair value.

Changes in level 3 fair value of financial instruments for the years ended as at 31 December 2024 and 2023 are as follows:

	Consolidated financial statements		
	Unit: Million US Dollar		
	Financial assets measured at fair value through profit or loss	Financial assets measured at fair value through comprehensive income	Contingent considerations from business acquisition
Opening balance as at 1 January 2023	-	-	(1)
Increase	3	-	-
Changes recognised in profit or loss	(1)	-	-
Closing balance as at 31 December 2023	2	-	(1)
Increase/Decrease	(1)	6	1
Changes recognised in profit or loss	1	-	-
Closing balance as at 31 December 2024	2	6	-

	Consolidated financial statements		
	Unit: Million Baht		
	Financial assets measured at fair value through profit or loss	Financial assets measured at fair value through comprehensive income	Contingent considerations from business acquisition
Opening balance as at 1 January 2023	-	1	(50)
Increase	97	-	25
Changes recognised in profit or loss	(20)	-	(1)
Closing balance as at 31 December 2023	77	1	(26)
Increase/Decrease	(30)	211	27
Changes recognised in profit or loss	33	-	-
Currency translation differences	2	(7)	(1)
Closing balance as at 31 December 2024	82	205	-

	Separate financial statements Unit: Million US Dollar Financial assets measured at fair value through other comprehensive income
Opening balance as at 1 January 2023	-
Changes recognised in other comprehensive income	-
Closing balance as at 31 December 2023	-
Changes recognised in other comprehensive income	-
Closing balance as at 31 December 2024	-

	Separate financial statements Unit: Million Baht Financial assets measured at fair value through other comprehensive income
Opening balance as at 1 January 2023	1
Changes recognised in other comprehensive income	-
Closing balance as at 31 December 2023	1
Changes recognised in other comprehensive income	-
Closing balance as at 31 December 2024	1

The following table summarises the quantitative information about the significant unobservable inputs used in level 3 fair value measurements.

	Fair value					Inputs	
	Unit: Million US Dollar		Unit: Million Baht		Unobservable inputs		
	2024	2023	2024	2023		2024	2023
Financial assets measured at fair value through profit or loss	2	2	82	77	Risk-adjusted discount rate	20.00%	20.00%

The following table presents the relationship of unobservable inputs to fair value:

			Change in fair value	
			Increase in assumption	Decrease in assumption
	Unobservable input	Movement	2024	2024
Financial assets measured at fair value through profit or loss	Risk-adjusted discount rate	1.00%	Decrease by 6.65%	Increase by 7.58%

The Group's valuation processes

The fair values of financial assets measured at fair value through profit or loss are as follows:

- For investments in non-marketable financial assets, the fair values are based on the discounted present value of the future cash flows, estimated based on available performance indicators and an appropriate interest rate.

The fair values of equity instruments measured at fair value through other comprehensive income are as follows:

- For investment in startup companies, the fair values is based on the valuation made during the latest round of fundraising including considering other factors.
- For investment in unquoted equity, the fair value is based on business plan and market conditions,

Management considers that the book value of the financial assets approximates their fair value.

The following figures presented fair value and book value of financial assets and liabilities for each category, but not include transaction which has a book value similar to fair value.

The details of fair values of long-term loans receivables and long-term liabilities as at 31 December 2024 and 2023 calculated by using the discounted cash flow based on a discount rate of borrowing with similar terms are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar			
	Book value		Fair value	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Long-term loans to related parties	557	-	577	-
Unsecured and unsubordinated debentures	2,795	2,785	2,654	2,683

	Consolidated financial statements			
	Unit: Million Baht			
	Book value		Fair value	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Long-term loans to a related party	18,948	-	19,599	-
Unsecured and unsubordinated debentures	95,009	95,320	90,216	91,822

	Separate financial statements			
	Unit: Million US Dollar			
	Book value		Fair value	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Long-term loans to related parties	6,983	6,983	6,977	6,973
Unsecured and unsubordinated debentures	512	508	544	532

	Separate financial statements			
	Unit: Million Baht			
	Book value		Fair value	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Long-term loans to related parties	237,331	238,975	237,150	238,639
Unsecured and unsubordinated debentures	17,392	17,390	18,494	18,208

Book value of long-term loans to related parties and unsecured and unsubordinated debentures is measured at amortised cost.

The fair value of debentures in Thai Baht is calculated using the reference price in the secondary market of Thai Bond Market Association that are quoted in an active market and classified as level 2 fair value.

The fair value of debentures in US Dollar is calculated using the reference observable price in the secondary market of foreign bond that is quoted in an active market and classified as level 2 fair value.

The fair value of long-term loans to related parties is calculated by the discounted cash flow method using the reference discount rate in the market and classified as level 3 fair value.

The fair values of the following financial assets and liabilities approximate their book values.

Consolidated financial statements	Separate financial statements
Financial assets	**Financial assets**
• Cash and cash equivalents	• Cash and cash equivalents
• Short-term investments	• Short-term investments
• Trade and other current receivables	• Trade and other current receivables
• Other current assets	• Loans to related parties
• Loans to related parties	• Other current assets
• Other non-current financial assets	• Other non-current assets
• Other non-current assets	
Financial liabilities	**Financial liabilities**
• Trade and other current payables	• Trade and other current payables
• Lease liabilities	• Loans from related parties
• Other current liabilities	• Lease liabilities
	• Other current liabilities

Book value of the above financial assets and liabilities is measured at amortised cost.

11 Cash and cash equivalents

Cash and cash equivalents are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Cash and bank deposits	2,339	2,021	79,496	69,143
Cash equivalents				
Fixed deposits with banks	1,180	1,762	40,411	60,310
Treasury bills due not over than 3 months	-	35	-	1,199
Money market funds	419	201	14,243	6,890
Total cash and cash equivalents	3,938	4,019	133,850	137,542

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Cash and bank deposits	549	258	18,666	8,844
Cash equivalents				
Fixed deposits with banks	213	545	7,242	18,659
Money market funds	6	151	181	5,150
Total cash and cash equivalents	768	954	26,089	32,653

In 2023 and 2024, the Group entered into the Green Deposit and ESG-linked Investment Program with a financial institution. Under the Green Deposit Program, the financial institution will allocate the deposits received from the Group to projects that have a positive environmental impact, such as renewable energy, clean transportation, and the development of green buildings. Meanwhile, under the ESG-linked Investment Program, the Group will receive additional returns from the financial institution, contingent on achieving the agreed-upon ESG targets.

On 31 December 2024, the Group has cash and bank deposits under Green Deposit Program amounting to US Dollar 153.86 million (Bath 5,229.37 million) and bank deposit under ESG-linked Investment Program amounting to US Dollar 350.00 million (Baht 11,895.74 million) (2023: US Dollar 295.81 million (Baht 10,123.45 million)).

12 Short-term investments

Short-term investments are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Fixed deposits	261	200	8,866	6,845
Other investment	30	-	1,025	-
Total short-term investments	291	200	9,891	6,845

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Fixed deposits	-	200	-	6,845
Total short-term investments	-	200	-	6,845

On 31 December 2024, the Group has fixed deposits under ESG-linked Investment Program amounting to US Dollar 120.85 million (Baht 4,107.48 million) (2023: US Dollar 60.00 million (Baht 2,053.40 million)).

13 Trade and other current receivables

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Trade receivables (Note 16)	837	1,124	28,455	38,462
Other current receivables, net	436	695	14,815	23,779
Total trade and other current receivables, net	1,273	1,819	43,270	62,241

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Trade receivables (Note 16)	200	370	6,804	12,659
Other current receivables, net	463	480	15,715	16,432
Total trade and other current receivables, net	663	850	22,519	29,091

Aging of trade receivables can be analysed as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Not yet due	830	1,078	28,193	36,898
Over due				
- Up to 3 months	3	21	113	710
- Over 3 months but not over 6 months	-	-	-	5
- Over 6 months but not over 12 months	2	-	75	3
- Over 12 months	2	25	74	846
Total	837	1,124	28,455	38,462

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Not yet due	200	346	6,804	11,831
Over due				
- Up to 3 months	-	-	-	-
- Over 3 months but not over 6 months	-	-	-	-
- Over 6 months but not over 12 months	-	-	-	-
- Over 12 months	-	24	-	828
Total	200	370	6,804	12,659

Due to the short-term nature of the current receivables, their carrying amounts are considered to be the same as their fair values.

14 Inventories

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Inventory	72	58	2,457	1,986
Materials and supplies	604	564	20,519	19,317
	676	622	22,976	21,303
Less Allowance for slow moving and obsolete	(6)	(11)	(217)	(389)
Total	670	611	22,759	20,914

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Inventory	21	13	718	422
Materials and supplies	104	85	3,549	2,917
	125	98	4,267	3,339
Less Allowance for slow moving and obsolete	-	(2)	(11)	(69)
Total	125	96	4,256	3,270

15 Assets and liabilities held-for-sale

On 17 September 2024, PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP), a subsidiary of the Group, entered into a Sale and Purchase Agreement (SPA) to sell its entire 16.67% interest in Mexico 29 (2.4) to REPSOL EXPLORACIÓN MÉXICO, S.A. DE C.V. The sale and purchase shall be completed when the conditions specified in the SPA are met.

On 31 December 2024, the Group classified this investment as assets and liabilities held-for-sale at the lower of the carrying amount and the fair value less costs to sell and recognised the difference as an expense in the consolidated statement of income amounting to US Dollar 28.33 million (Baht 944.74 million).

16 Significant transactions with related parties

Individuals or entities that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the Company, including holding companies, subsidiaries and fellow subsidiaries are related parties of the Company. Individuals and associates owning, directly or indirectly, an interest in the voting power of the Company that gives them significant influence over the enterprise, key management personnel, directors and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

In considering each possible related party relationship, the Company's attention is directed to the substance of the relationship, and not merely the legal form.

PTT Public Company Limited, a company registered in Thailand, is the major shareholder of the Company and holds in proportion of 63.79% of the shareholding interest. The general public hold the remaining shares.

Other related parties are entities that are contractual by the Company's major shareholder.

The pricing policies for transactions between parent company, subsidiaries, associates, joint ventures, joint operations and related parties are as follows:

- Sales are set based on the sale agreements.
- Interest income is calculated using weighted average cost of debt plus profit markup.
- Other income is calculated based on rate in the agreement.
- Dividend income is approved by shareholders of subsidiaries, associates and joint ventures.
- The prices of purchases and services charged are in accordance with the conditions in the agreement.
- Rental expenses are set based on price in the agreement.
- Other expenses comprise management and service fees charged to the parent company, subsidiaries and related parties for rendering the management services in the normal course of business. The fees are based on the service costs plus profit markup, and gain and loss on oil price hedge is calculated based on rate in the agreement.

Significant transactions with related parties are summarised as follows:

a) Transactions with related parties

Transactions with related parties for the years ended 31 December are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Parent company				
Revenue from sales	5,788	5,580	204,020	194,090
Other income	11	12	384	406
Purchase and other expenses	5	4	185	148
Associates				
Interest income	-	-	15	13
Other income	-	1	17	22
Dividend income	3	3	104	103
Rental and service expenses	72	74	2,548	2,578
Purchase and other expenses	-	-	16	1
Joint ventures				
Dividend income	54	50	1,926	1,734
Other related parties				
Revenue from sales	878	873	30,958	30,363
Interest income	23	-	788	-
Other income	6	7	213	253
Purchase and other expenses	111	124	3,925	4,324

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Parent company				
Revenue from sales	1,772	2,264	62,446	78,432
Other income	1	2	40	52
Purchase and other expenses	5	4	165	134
Subsidiaries				
Other income	165	158	5,814	5,508
Interest income	414	394	14,596	13,702
Dividend income	134	71	4,661	2,479
Associates				
Other income	-	1	17	33
Dividend income	3	3	105	103
Rental and service expenses	63	67	2,234	2,339
Other related parties				
Revenue from sales	254	212	8,944	7,392
Other income	-	-	-	14
Purchase and other expenses	4	4	139	128

b) Account receivable - related party

Account receivable - related party is comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Parent company	541	768	18,376	26,269

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Parent company	163	329	5,548	11,275

c) Short-term loans to related parties

Short-term loans to related parties are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Joint venture	25	8	860	258

The Group has provided the unsecured loans in US Dollar, Pound Sterling and Thai Baht to the joint venture and the interest rates for the year ended 31 December 2024 were 1.20% - 8.10% per annum (2023: interest rate was 1.20% - 7.25% per annum).

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Subsidiary	35	-	1,191	-

The Company has provided the unsecured loan in US Dollar and Thai Baht to the subsidiary and the interest rate for the year ended 31 December 2024 was 0.70% - 4.75% per annum.

d) Long-term loans to related parties

Long-term loans to related parties are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Joint venture	557	-	18,948	15

The Group has provided the unsecured loan in Pound Sterling and Thai Baht to the joint venture and the interest rates for the year ended 31 December 2024 were 6.48% - 6.98% per annum (2023: interest rates were 6.85% - 8.10% per annum).

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Subsidiary	6,983	6,983	237,331	238,975

The Company has provided the unsecured loan in US Dollar to the subsidiary and the interest rate for the year ended 31 December 2024 was 5.83% per annum (2023: interest rate was 5.56% per annum). The borrower shall make the repayment notice within this loan term which is over than 1 year.

The movements of the long-term loans to related parties for the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Balance as at 1 January	-	-	15	15
Increase	574	-	20,231	-
Decrease	(10)	-	(359)	-
Foreign exchange differences	(7)	-	(222)	-
Currency translation differences	-	-	(702)	-
Long-term loans to related parties	557	-	18,963	15
Less Current portion	-	-	(15)	-
Balance as at 31 December	557	-	18,948	15

On 31 May 2024, PTTEP Treasury Center Company Limited (PTTEP TC), a subsidiary of the Group, has provided loan to Renewable Energy Seagreen Holdco Limited (RESH), a joint venture of the Group, according to the Group's shareholding portion with an amount of Pound Sterling 451.13 million or equivalent to US Dollar 573.97 million (Baht 20,231.17 million) with floating interest rate. The interest is settled twice a year and the principal is due in accordance with the agreement. The Group entered into the cross currency swap contracts with the financial institutions to swap the loan to from Pound Sterling to US Dollar amounting to US Dollar 574.09 million at the exchange rate of US Dollar 1.2726 per Pound Sterling and interest rate of 6.41% per annum.

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Balance as at 1 January	6,983	6,983	238,975	241,343
Currency translation differences	-	-	(1,644)	(2,368)
Balance as at 31 December	6,983	6,983	237,331	238,975

Loans to related parties

Loans to related parties measured at amortised cost are considered to have low credit risk. The expected credit loss in the following 12 months and lifetime expected credit losses of the loans from increasing in credit risk is insignificant.

e) Short-term loans from a related party

Short-term loans from a related party are comprised:

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Subsidiary	-	494	-	16,901

The Group has the unsecured loan from a subsidiary in US Dollar and Thai Baht and the interest rates for the year ended 31 December 2023 were 2.00% - 5.32% per annum

f) Director and executive management fees of the Group

Director and executive management fees of the Group for the years ended 31 December are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Short-term benefits	8	8	289	267
Post-employment and other long-term benefits	-	-	16	13
	8	8	305	280

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Short-term benefits	8	8	288	266
Post-employment and other long-term benefits	-	-	16	13
	8	8	304	279

17 Investments in subsidiaries, associates, joint ventures and joint operations

The amounts of investments recognised in the statement of financial position are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Investments in associates	152	134	5,155	4,591
Investments in joint ventures	207	151	7,042	5,177
Total	359	285	12,197	9,768

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Investments in subsidiaries	3,320	3,210	112,869	109,876
Investments in associates	26	26	869	875
Total	3,346	3,236	113,738	110,751

17.1 Investments in subsidiaries

Changes of investments in subsidiaries during the years are as follows:

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
For the years ended 31 December	2024	2023	2024	2023
Opening book value	3,210	3,198	109,876	110,539
Increase in investments	110	12	3,888	428
Currency translation differences	-	-	(895)	(1,091)
Closing book value	3,320	3,210	112,869	109,876

Direct investments

On 28 June 2024, PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH), a subsidiary of the Company, increased its authorised share capital by Baht 4,039.42 million by issuing 40.39 million new ordinary shares at a par value of Baht 100 each. The Company paid the share subscription according to its shareholding portion in an amount equivalent to US Dollar 110.31 million.

Indirect investments

On 27 August 2024, PTTEP EH established PTTEP Joint Venture Company Limited (PTTEP JV) with a registered capital of Baht 1 million. The registered capital comprises 0.01 million ordinary shares at a par value of Baht 100 each. PTTEP EH holds 100% interest in PTTEP JV. Its registered shares were fully paid with an amount equivalent to US Dollar 0.03 million. The Group classifies the investment in PTTEP JV as an investment in a subsidiary.

On 28 August 2024, PTTEP JV established PTTEP Joint Development Company Limited (PTTEP JD) with a registered capital of Baht 1 million. The registered capital comprises 0.01 million ordinary shares at a par value of Baht 100 each. PTTEP JV holds 100% interest in PTTEP JD. Its registered shares were fully paid with an amount equivalent to US Dollar 0.03 million. The Group classifies the investment in PTTEP JD as an investment in a subsidiary.

On 15 November 2024, PTTEP Business Center Company Limited (PTTEP BC), a subsidiary of the Group, established PTTEP SG Holding Pte. Ltd. (PTTEP SH) with a registered capital of US Dollar 0.05 million. The registered capital comprises 0.05 million ordinary shares at a par value of US Dollar 1 each. PTTEP BC holds 100% interest in PTTEP SH. Its registered shares were unpaid. The Group classifies the investment in PTTEP SH as an investment in a subsidiary.

Details of investments in subsidiaries of the Company are as follows:

List of subsidiaries	Country of incorporation	Type of business	Participating interest (%) (including direct holding)		Participating interest (%) (including indirect holding)		Separate financial statements (Cost method)			
							Unit: Million US Dollar		Unit: Million Baht	
			31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
PTTEP International Limited (PTTEPI)	Thailand	Petroleum	100	100	-	-	516	516	17,551	17,672
PTTEP Services Limited (PTTEP Services)	Thailand	Human resource support	25	25	75	75	-	-	3	3
PTTEP Siam Limited (PTTEP Siam)	Thailand	Petroleum	51	51	49	49	100	100	3,391	3,415
PTTEP Offshore Investment Company Limited (PTTEPO)	Cayman Islands	Petroleum	75	75	25	25	-	-	-	-
PTTEP HK Holding Limited (PTTEP HK)	Hong Kong	Petroleum	25	25	75	75	484	484	16,450	16,564
PTTEP Treasury Center Company Limited (PTTEP TC)	Thailand	Treasury center for the Group's business	25	25	75	75	-	-	2	3
PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH)	Thailand	Petroleum	100	100	-	-	2,220	2,110	75,472	72,219

Indirect subsidiaries of the Company for the consolidated financial statements are as follows:

List of subsidiaries	Country of incorporation	Type of business	Participating interest (%) (including indirect holding) 31 December 2024	31 December 2023
PTTEP Business Center Company Limited (PTTEP BC)	Thailand	Petroleum	100	100
PTTEP Energy Development Company Limited (PTTEP ED)	Thailand	Petroleum	100	100
EP-Tech Ventures Holding Company Limited (EP-Tech)	Thailand	Petroleum related technology	100	100
AI and Robotics Ventures Company Limited (ARV)	Thailand	Technology	100	100
PTTEP Southwest Vietnam Company Limited (PTTEP SV)	Cayman Islands	Petroleum	100	100
PTTEP Kim Long Vietnam Company Limited (PTTEP KV)	Cayman Islands	Petroleum	100	100
PTTEP Hoang-Long Company Limited (PTTEP HL)	Cayman Islands	Petroleum	100	100
PTTEP Hoan-Vu Company Limited (PTTEP HV)	Cayman Islands	Petroleum	100	100
PTTEP Algeria Company Limited (PTTEP AG)	Cayman Islands	Petroleum	100	100
PTTEP Holding Company Limited (PTTEPH)	Cayman Islands	Petroleum	100	100
PTTEP Indonesia Company Limited (PTTEP ID)	Cayman Islands	Petroleum	100	100
PTTEP Africa Investment Limited (PTTEP AI)	Cayman Islands	Petroleum	100	100
PTTEP South Asia Limited (PTTEP SA)	Cayman Islands	Petroleum	100	100
PTTEP Australia Perth Pty Ltd (PTTEP AP)	Commonwealth of Australia	Petroleum	100	100
PTTEP Australia Browse Basin Pty Ltd (PTTEP AB)	Commonwealth of Australia	Petroleum	100	100
PTTEP Australia Timor Sea Pty Ltd (PTTEP AT) [1]	Commonwealth of Australia	Petroleum	100	100
PTTEP Australasia (Operations) Pty Ltd (PTTEP AAO)	Commonwealth of Australia	Petroleum	100	100
PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA)	Commonwealth of Australia	Petroleum	100	100
PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS) [2]	Commonwealth of Australia	Petroleum	-	100
PTTEP International Holding Company Limited (PTTEP IH)	Cayman Islands	Petroleum	100	100
PTTEP Southwest Vietnam Pipeline Company Limited (PTTEP SVPC)	Cayman Islands	Gas pipeline transportation	100	100
PTTEP Netherland Holding Limited (PTTEP NL)	Cayman Islands	Petroleum	100	100

List of subsidiaries	Country of incorporation	Type of business	Participating interest (%) (including indirect holding) 31 December 2024	31 December 2023
JV Marine Limited (JV Marine)	Cayman Islands	Petroleum	100	100
PTTEP Malunda Limted (PTTEP ML)	Cayman Islands	Petroleum	100	100
PTTEP Netherlands Coöperatie U.A. (PTTEP NC)	Netherlands	Petroleum	100	100
PTTEP Canada Limited (PTTEP CA)	Canada	Petroleum	100	100
Cove Energy Limited (Cove)	United Kingdom of Great Britain and Northern Ireland	Petroleum	100	100
Cove Energy East Africa Limited (CEEAL) [3]	Republic of Cyprus	Petroleum	100	100
PTTEP Mozambique Area 1 Limited (PTTEP MZA1) [3]	Republic of Cyprus	Petroleum	100	100
PTTEP Netherlands Holding Coöperatie U.A. (PTTEP NH)	Netherlands	Petroleum	100	100
PTTEP Brazil Investment B.V. (PTTEP BI)	Netherlands	Petroleum	100	100
Sinphuhorm Holdings Limited (SHL)	Cayman Islands	Petroleum	100	100
PTTEP SP Limited (PTTEP SP)	United Kingdom of Great Britain and Northern Ireland	Petroleum	100	100
PTTEP HK Offshore Limited (PTTEP HKO)	Hong Kong	Petroleum	100	100
PTTEP MENA Limited (PTTEP MENA)	Hong Kong	Petroleum	100	100
PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP)	Mexico	Petroleum	100	100
PTTEP Sabah Oil Limited (PTTEP SBO)	Bahamas	Petroleum	100	100
PTTEP Sarawak Oil Limited (PTTEP SKO)	Bahamas	Petroleum	100	100
PTTEP Group Holding B.V. (PGH)	Netherlands	Petroleum	100	100
PTTEP (Kazakhstan) Corporation (PKC)	Cayman Islands	Petroleum	100	100
PTTEP (Angola) Corporation (PANG) [4]	Cayman Islands	Petroleum	100	100
PTTEP Gas Corporation (PGC)	Republic of Panama	Petroleum	100	100
Partex Services Corporation (PSC)	Republic of Panama	Human resource support	100	100
PTTEP Oman E&P Corporation (POC)	Republic of Panama	Petroleum	100	100
Asia Power and Transportation SG Holding PTE. LTD. (APT)	Singapore	Petroleum related business	100	100
Delta Gas Transportation SG Holding PTE. LTD. (DGH)	Singapore	Gas pipeline transportation	100	100
Delta Gas Transportation Limited (DGT)	Republic of the Union of Myanmar	Gas pipeline transportation	100	100

List of subsidiaries	Country of incorporation	Type of business	Participating interest (%) (including indirect holding) 31 December 2024	31 December 2023
Rovula (Thailand) Company Limited (Rovula)	Thailand	Technology	100	100
Skyller Solutions Company Limited (Skyller)	Thailand	Technology	100	100
Varuna (Thailand) Company Limited (Varuna) [5]	Thailand	Technology	81.82	90
Cariva (Thailand) Company Limited (Cariva) [6]	Thailand	Technology	85	100
FutureTech Energy Ventures Company Limited (FTEV)	Thailand	Renewable energy and related new business	100	100
FutureTech Solar (Thailand) Company Limited (FST)	Thailand	Solar power	100	100
Xplor Ventures Company Limited. (XPV)	Thailand	Technology and innovation	100	100
Bind Systems Company Limited (BIND)	Thailand	Technology	100	100
Bedrock Analytics Company Limited (Bedrock)	Thailand	Technology	100	100
S2 Robotics Company Limited (S2)	Thailand	Technology	85.13	85.13
FUTURETECH SG PTE. LTD. (FSG)	Singapore	Renewable energy and related new business	100	100
PTTEP Joint Ventures Company Limited (PTTEP JV)	Thailand	Petroleum	100	-
PTTEP Joint Development Company Limited (PTTEP JD)	Thailand	Petroleum	100	-
PTTEP SG Holding Pte. Ltd. (PTTEP SH)	Singapore	Petroleum	100	-

[1] On 1 April 2024, PTTEP Australia Timor Sea Pty Ltd (PTTEP AT), a subsidiary of the Group, received approval for company dissolution and the dissolution was completed on 1 January 2025 as disclosed in Note 36.

[2] On 2 March 2024, PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS), a subsidiary of the Group, received the approval for company dissolution from the registrar.

[3] As at 31 December 2024, Cove Energy East Africa Limited (CEEAL), a subsidiary of the Group, pledge all of its shares (0.21 million shares) in PTTEP Mozambique Area 1 Limited (PTTEP MZA1), a subsidiary of the Group, as collateral for a project finance loan agreement with a financial institution.

[4] On 24 April 2024, PTTEP (Angola) Corporation (PANG), a subsidiary of the Group, received approval for company dissolution and is in the process of dissolution.

[5] On 29 March 2024, Varuna (Thailand) Company Limited (Varuna), a subsidiary of the Group, increased its authorised share capital and additional investors participated. As a result, the Group's shareholding interest in Varuna decreased from 90% to 81.82%. Varuna is still a subsidiary of the Group.

[6] On 9 April 2024, Cariva (Thailand) Company Limited (Cariva), a subsidiary of the Group, increased its authorised share capital and additional investor participated. As a result, the Group's shareholding interest in Cariva decreased from 100% to 85%. Cariva is still a subsidiary of the Group.

17.2 Investments in associates

Changes of investments in associates during the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
For the years ended 31 December	2024	2023	2024	2023
Opening book value	134	116	4,591	3,987
Share of net profit after income taxes	8	10	274	350
Dividends received	(3)	(3)	(104)	(103)
Share of other comprehensive income (expenses)				
- Remeasurement of employee benefits	-	-	(1)	-
- Currency difference arising from translation of financial statements of associates	2	1	53	31
Increase in investments	11	10	394	372
Currency translation differences	-	-	(52)	(46)
Closing book value	152	134	5,155	4,591

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
For the years ended 31 December	2024	2023	2024	2023
Opening book value	26	26	875	884
Currency translation differences	-	-	(6)	(9)
Closing book value	26	26	869	875

On 27 March 2024, Hydrogen Duqm LLC (HDL), an associate of the Group, called for paid up shares. The Group paid the share subscription according to the Group's shareholding portion with an amount equivalent to US Dollar 0.43 million.

On 20 June 2024, MoZ LNG1 Holding Company Ltd (MOZ LNG1 Holding), an associate of the Group, increased its authorised share capital amounting to US Dollar 61.30 million by issuing of 61.30 million new ordinary shares at a par value of US Dollar 1 each. The Group paid the share subscription according to the Group's shareholding portion amounting to US Dollar 5.21 million.

On 3 December 2024, HDL increased its authorised share capital by Omani Rial 0.28 million by issuing 0.28 million new ordinary shares at a par value of Omani Rial 1 each. The Group paid the share subscription according to the Group's shareholding portion with an amount equivalent to US Dollar 0.74 million.

On 30 December 2024, MOZ LNG1 Holding increased its authorised share capital by US Dollar 61.41 million by issuing 61.41 million new ordinary shares at a par value of US Dollar 1 each. The Group paid the share subscription according to the Group's shareholding portion amounting to US Dollar 5.22 million.

Details of investments in associates of the Group and the Company are as follows:

List of associates [1, 2]	Country of incorporation	Type of business	Consolidated financial statements (Equity method)					
			Participating interest (%) (including indirect holding)		Unit: Million US Dollar		Unit: Million Baht	
			31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Energy Complex Company Limited (EnCo)	Thailand	Property rental services	50	50	81	75	2,757	2,579
PTT Digital Solutions Company Limited (PTT Digital)	Thailand	Information technology and communication services	20	20	24	22	809	751
PTTEP AP Group's Associates [3]	Commonwealth of Australia	Air base services	50	50	-	-	-	-
Leismer Aerodrome Limited (LAL)	Canada	Air transportation	32	32	-	-	-	-
MOZ LNG1 Holding Company Ltd (MOZ LNG1 Holding) [4]	United Arab Emirates	Petroleum	8.5	8.5	46	37	1,548	1,246
Gas Investments and Services Company Limited (GISCO) [4]	Bermuda	Investment funding, technology, and human resource support	5	5	-	-	-	-
Hydrogen Duqm LLC (HDL) [4]	Sultanate of Oman	Renewable energy and related new business	11	11	1	-	41	15

List of associates [1, 2]	Country of incorporation	Type of business	Separate financial statements (Cost method)					
			Participating interest (%) (including indirect holding)		Unit: Million US Dollar		Unit: Million Baht	
			31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Energy Complex Company Limited (EnCo)	Thailand	Property rental services	50	50	25	25	842	848
PTT Digital Solutions Company Limited (PTT Digital)	Thailand	Information technology and communication services	20	20	1	1	27	27

[1] All investments in associates have been assessed as immaterial to the Group.

[2] The Group has no contingent liabilities with participating interest in associates.

[3] PTTEP AP's Group Associates are North Kimberley Airport Pty Ltd and Troughton Island Pty Ltd.

[4] The Group has significant influence over these companies due to its contractual rights to appoint directors, but not to the point of having joint control.

Individually immaterial associates

The Group has interests in a number of individually immaterial associates that are accounted for using equity method as follows:

	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Aggregate carrying amount of share of individually immaterial associates	152	134	5,155	4,591

	Unit: Million US Dollar		Unit: Million Baht	
For the years ended 31 December	2024	2023	2024	2023
Aggregate amounts of the Group's share of associates:				
Profit from continuing operations	8	10	274	350
Other comprehensive income	2	1	52	31
Total comprehensive income for the years	10	11	326	381

17.3 Investments in joint ventures

Changes of investments in joint ventures during the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
For the years ended 31 December	2024	2023	2024	2023
Opening book value	151	162	5,177	5,607
Share of net profit after income taxes	30	33	1,043	1,127
Dividends received	(54)	(50)	(1,926)	(1,734)
Share of other comprehensive income				
- Currency differences arising from translation of financial statements of joint ventures	(14)	-	(578)	1
Increase in investments	94	6	3,326	211
Currency translation differences	-	-	-	(35)
Closing book value	207	151	7,042	5,177

On 21 December 2023, FutureTech SG Pte. Ltd. (FSG), a subsidiary of the Group, has entered into a Share Purchase Agreement (SPA) to acquire 50% share capital in TotalEnergies Renewables Seagreen Holdco (TERSH) from TotalEnergies Renewables UK Ltd (TERUK), a subsidiary in TotalEnergies SE group company (TotalEnergies). The acquisition was completed on 31 May 2024. The Group classified the investment in TERSH as an investment in a joint venture which has acquisition value after working capital adjustment according to the SPA amounting to US Dollar 94.21 million (Baht 3,407.91 million). Upon the completion of the acquisition, FSG is to hold an indirect investment in the Seagreen Offshore Wind Farm in Scotland, United Kingdom of Great Britain and Northern Ireland, at 25.5% (TERSH has changed its name to Renewable Energy Seagreen Holdco Limited (RESH)). This investment aligns with the Group's strategy to expand into the clean energy business.The estimated fair value of net identifiable assets acquired is equivalent to the acquisition value amounting to US Dollar 94.21 million (Baht 3,407.91 million). The fair value of the identifiable assets acquired is US Dollar 708.28 million (Baht 25,620.43 million), which primarily consist of investment in offshore wind projects and loans to related parties. The fair value of the identifiable liabilities acquired is US Dollar 614.07 million (Baht 22,212.52 million), which mainly consist of long-term loans from financial institutions and loans from related parties.

As at 31 December 2024, the Group is in the process of determining the fair value of the net identifiable assets acquired and reviewing the purchase price allocation (PPA), which might result in fair value adjustments. The process is expected to be completed within 12 months from the acquisition date.

Details of investments in joint ventures of the Group are as follows;

List of joint ventures [1, 2]	Country of incorporation	Type of business	Consolidated financial statements (Equity method)					
			Participating interest (%) (including indirect holding)		Unit: Million US Dollar		Unit: Million Baht	
			31 December 2024	31 December 2023	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Erawan 2 FSO PTE. Ltd. (E2FSO)	Singapore	FSO rental services	13.11	13.11	25	29	865	997
APICO LLC (APICO)	United States of America	Petroleum	72.8215	72.8215	93	97	3,150	3,326
Oman LNG LLC (OLNG)	Sultanate of Oman	Petroleum	2	2	5	16	163	560
ATI Technologies Co., Ltd (ATi) [3]	Thailand	Technology	40.91	45	-	-	-	-
ZeaQuest Co., Ltd (ZeaQuest)	Thailand	Technology	50	50	1	2	19	61
Aerosky Solutions Co Ltd. (Aerosky)	Thailand	Technology	33	33	-	-	1	1
B-MED X Company Limited (B-MED X) [4]	Thailand	Technology	42.5	50	-	-	3	5
SkyVIV Company Limited (SkyVIV)	Thailand	Technology	23.2	23.2	-	1	14	17
Nila Solutions Company Limited (Nila)	Thailand	Technology	50	50	-	-	6	10
Green Aranya Company Limited (GARY) [5]	Thailand	Technology	8.182	9	6	6	195	200
Renewable Energy Seagreen Holdco Limited (RESH)	United Kingdom of Great Britain and Northern Ireland	Renewable energy and related new business	50	-	77	-	2,626	-

[1] All investments in joint ventures have been assessed as immaterial to the Group.

[2] The Group has no contingent liabilities with participating interests in joint ventures.

[3] From the change in the ordinary shares of Varuna (Thailand) Company Limited (Varuna), a subsidiary of the Group, as disclosed in Note 17.1 to the financial statements. As a result, the Group's shareholding interest in ATi decreased to 40.91%.

[4] From the change in the ordinary shares of Cariva (Thailand) Company Limited (Cariva), a subsidiary of the Group, as disclosed in Note 17.1 to the financial statements. As a result, the Group's shareholding interest in B-MED X decreased to 42.5%.

[5] From the change in the ordinary shares of Varuna as disclosed in Note 17.1 to the financial statements. As a result, the Group's shareholding interest in GARY decreased to 8.182%.

Individually immaterial joint ventures

The Group has investments in a number of individually immaterial joint ventures that are accounted for using equity method as follows:

	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Aggregate carrying amount of share of individually immaterial joint ventures	207	151	7,042	5,177

	Unit: Million US Dollar		Unit: Million Baht	
For the years ended 31 December	2024	2023	2024	2023
Aggregate amounts of the Group's share of joint ventures:				
Profit from continuing operations	30	33	1,043	1,127
Other comprehensive income	(14)	-	(578)	1
Total comprehensive income for the years	16	33	465	1,128

17.4 Investments in joint operations

Details of investments in joint operations of the Group are as follows;

List of joint operations	Country of incorporation	Type of business	Participating interest (%) (including indirect holding) 31 December 2024	31 December 2023
Carigali - PTTEPI Operating Company Sdn Bhd (CPOC)	Malaysia	Petroleum	50	50
Moattama Gas Transportation Company Limited (MGTC) [1]	Bermuda	Gas pipeline transportation	62.963	37.0842
Orange Energy Limited (Orange)	Thailand	Petroleum	53.9496	53.9496
B8/32 Partners Limited (B8/32 Partners)	Thailand	Petroleum	25.0009	25.0009
Hoang Long Joint Operating Company (HL JOC)	Socialist Republic of Vietnam	Petroleum	28.5	28.5
Hoan-Vu Joint Operating Company (HV JOC)	Socialist Republic of Vietnam	Petroleum	25	25
Groupement Bir Seba (GBRS)	People's Democratic Republic of Algeria	Petroleum	35	35
Andaman Transportation Limited (ATL)	Cayman Islands	Gas pipeline transportation	80	80
Natuna 2 B.V. (Natuna)	Netherlands	Petroleum	50	50
Petroleum Development Oman LLC (PDO)	Sultanate of Oman	Petroleum	2	2
Abu Dhabi Gas Industries Limited (AGP)	United Arab Emirates	Petroleum	2	2
Private Oil Holdings Oman Limited (POHOL)	United Kingdom of Great Britain and Northern Ireland	Petroleum	5	5
Petroleum Development Oman Services LLC (PDO-S)	Sultanate of Oman	Petroleum	1.9998	1.9998
Groupement Hassi Bir Rekaiz (GHBR)	People's Democratic Republic of Algeria	Petroleum	49	49

[1] Chevron Global Ventures, Ltd., a shareholder of Moattama Gas Transportation Company Limited (MGTC) with a participating interest of 41.1016%, decided to withdraw all investments. As a result, from 1 April 2024 onwards, PTTEP Offshore Investment Company Limited (PTTEPO), a subsidiary of the Company and an operator of this project, increased the participating interest to 62.963% in MGTC. The withdrawal processes were subsequently fulfilled on 5 April 2024.

17.5 Exploration and production projects

Details of exploration and production projects operated by the Group comprise of the projects which the Group had joint control and control. The projects with control are the projects that the Group has 100% participating interest.

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTT Exploration and Production Public Company Limited				
Bongkot [1]	Thailand	PTT Exploration and Production Public Company Limited	66.6667	66.6667
Arthit	Thailand	PTT Exploration and Production Public Company Limited	80	80
Contract 4 (B12/27)	Thailand	Chevron Thailand Exploration and Production, Ltd.	45	45
Sinphuhorm (E5 North)	Thailand	PTTEP SP Limited	20	20
S1	Thailand	PTTEP Siam Limited	25	25
Contract 3 (B10, B11, B12 and B13) [2]	Thailand	Chevron Thailand Exploration and Production, Ltd.	5	5
E5	Thailand	ExxonMobil Exploration and Production Khorat Inc.	20	20
Algeria Hassi Bir Rekaiz	People's Democratic Republic of Algeria	Groupement Hassi Bir Rekaiz	49	49

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTTEP International Limited (PTTEPI)				
Yadana [3]	Republic of the Union of Myanmar	PTTEP International Limited	62.963	37.0842
PTTEP 1	Thailand	PTTEP International Limited	100	100
G4/43	Thailand	Chevron Offshore (Thailand) Ltd	21.375	21.375
G9/43	Thailand - Kingdom of Cambodia	PTTEP International Limited	100	100
L22/43	Thailand	PTTEP International Limited	100	100
L53/43 and L54/43	Thailand	PTTEP International Limited	100	100
G4/48	Thailand	Chevron Pattani, Ltd.	5	5
Bongkot (G12/48)	Thailand	PTTEP International Limited	66.6667	66.6667
Contract 4 (G7/50)	Thailand	Chevron Pattani, Ltd.	60	60
Arthit (G8/50)	Thailand	PTTEP International Limited	80	80
Zawtika	Republic of the Union of Myanmar	PTTEP International Limited	80	80
Myanmar M3	Republic of the Union of Myanmar	PTTEP International Limited	100	100
MTJDA	Thailand - Malaysia	Carigali-PTTEPI Operating Company Sdn Bhd.	50	50
PTTEP Offshore Investment Company Limited (PTTEPO)				
B8/32 and 9A [4]	Thailand	Chevron Offshore (Thailand) Ltd.	25.001	25.001
PTTEP Southwest Vietnam Company Limited (PTTEP SV)				
Vietnam 52/97	Socialist Republic of Vietnam	Vietnam Oil and Gas Group	7	7

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTTEP Kim Long Vietnam Company Limited (PTTEP KV)				
Vietnam B and 48/95	Socialist Republic of Vietnam	Vietnam Oil and Gas Group	8.5	8.5
PTTEP Hoang-Long Company Limited (PTTEP HL)				
Vietnam 16-1	Socialist Republic of Vietnam	Hoang Long Joint Operating Company	28.5	28.5
PTTEP Hoan-Vu Company Limited (PTTEP HV)				
Vietnam 9-2	Socialist Republic of Vietnam	Hoan-Vu Joint Operating Company	25	25
PTTEP Algeria Company Limited (PTTEP AG)				
Algeria 433a and 416b	People's Democratic Republic of Algeria	Groupement Bir Seba	35	35
PTTEP Siam Limited (PTTEP Siam)				
Sinphuhorm (EU-1)	Thailand	PTTEP SP Limited	20	20
B6/27 [5]	Thailand	PTTEP Siam Limited	100	100
S1	Thailand	PTTEP Siam Limited	75	75
PTTEP Australia Perth Pty Ltd (PTTEP AP)				
PTTEP Australasia *	Commonwealth of Australia			

Block	Operator	Participating interest (%) 31 December 2024	31 December 2023
* Details of operators and participating interests in PTTEP Australasia Project are as follows:			
AC/RL12 [6]	PTTEP Australasia (Ashmore Cartier) Pty Ltd	100	100

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTTEP Mozambique Area 1 Limited (PTTEP MZA1)				
Mozambique Area 1	Republic of Mozambique	TotalEnergies EP Mozambique Area 1 Limitada	8.5	8.5
Natuna 2 B.V. (Natuna)				
Natuna Sea A	Republic of Indonesia	Premier Oil Natuna Sea BV	11.5	11.5
PTTEP SP Limited (PTTEP SP)				
Contract 4 (B12/27)	Thailand	Chevron Thailand Exploration and Production Ltd.	15	15
Sinphuhorm (E5 North and EU-1)	Thailand	PTTEP SP Limited	35	35
PTTEP HK Offshore Limited (PTTEP HKO)				
Malaysia SK410B	Malaysia	PTTEP HK Offshore Limited	42.5	42.5
Malaysia SK417	Malaysia	PTTEP HK Offshore Limited	80	80
Malaysia SK438	Malaysia	PTTEP HK Offshore Limited	80	80
Malaysia PM407 [7]	Malaysia	PTTEP HK Offshore Limited	-	55
Malaysia SB412	Malaysia	PTTEP HK Offshore Limited	60	60
PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP)				
Mexico block 12 (2.4) [8]	Mexico	PC Carigali Mexico Operations, S.A. de C.V.	20	20
Mexico block 29 (2.4) [9]	Mexico	Repsol Exploración México, S.A. de C.V.	16.67	16.67
PTTEP Energy Development Company Limited (PTTEP ED)				
G1/61	Thailand	PTTEP Energy Development Company Limited	60	60
G2/61	Thailand	PTTEP Energy Development Company Limited	100	100
G1/65	Thailand	PTTEP Energy Development Company Limited	100	100
G3/65	Thailand	PTTEP Energy Development Company Limited	100	100

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTTEP MENA Limited (PTTEP MENA)				
Abu Dhabi Offshore 1	United Arab Emirates	Eni Abu Dhabi B.V.	30	30
Abu Dhabi Offshore 2	United Arab Emirates	Eni Abu Dhabi B.V.	30	30
Oman Onshore Block 12	Sultanate of Oman	TotalEnergies EP Oman Block 12 B.V.	20	20
Abu Dhabi Offshore 3	United Arab Emirates	Eni Abu Dhabi B.V.	30	30
Oman Block 61	Sultanate of Oman	BP Exploration (Epsilon) Limited	20	20
Sharjah Onshore Area A [10]	United Arab Emirates	Eni Sharjah B.V.	-	25
Sharjah Onshore Area C [11]	United Arab Emirates	Eni Sharjah B.V.	-	25
Ghasha [12]	United Arab Emirates	Abu Dhabi National Oil Company	10	-
PTTEP Sabah Oil Limited (PTTEP SBO)				
Malaysia Block K **	Malaysia			
Malaysia Block H ***	Malaysia			

** Details of operators and participating interests in Malaysia Block K project are as follows:

Block	Operator	Participating interest (%) 31 December 2024	31 December 2023
Kikeh	PTTEP Sabah Oil Limited	56	56
SNP	PTTEP Sabah Oil Limited	22.4	22.4
GK	Sabah Shell Petroleum Co., Ltd.	7.1657292	7.1657292

*** Details of operators and participating interests in Malaysia Block H project are as follows:

Block	Operator	Participating interest (%) 31 December 2024	31 December 2023
Rotan	PTTEP Sabah Oil Limited	56	56
Others	PTTEP Sabah Oil Limited	42	42

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTTEP Sarawak Oil Limited (PTTEP SKO)				
Malaysia SK314A	Malaysia	PTTEP Sarawak Oil Limited	59.5	59.5
Malaysia SK405B [13]	Malaysia	PTTEP Sarawak Oil Limited	49.5	59.5
Malaysia SK325	Malaysia	Petronas Carigali Sdn. Bhd.	32.5	32.5
Malaysia SK309 and SK311 ****	Malaysia			

**** Details of operators and participating interests in Sarawak SK 309 and Sarawak SK 311 projects are as follows:

Block	Operator	Participating interest (%) 31 December 2024	31 December 2023
East Patricia	PTTEP Sarawak Oil Limited	42	42
Others	PTTEP Sarawak Oil Limited	59.5	59.5

Project	Country	Operator	Participating interest (%) 31 December 2024	31 December 2023
PTTEP Holding Group B.V. (PGH)				
Dunga	Kazakhstan	Dunga Operating GmbH	20	20
Oman Block 6	Sultanate of Oman	Petroleum Development Oman LLC	2	2
Oman Block 53	Sultanate of Oman	Occidental Mukhaizna,LLC	1	1

[1] On 7 March 2023, the concession of Bongkot Project, which the Company holds 66.6667% participating interests, has ended. The Company returned those blocks. However, the concessionaire still has joint obligations for decommissioning until it has been finished as required by the specific laws.

[2] On 23 April 2022, the concession of Contract 3 Project, which the Company holds 5% participating interests, has ended. The Company returned those blocks. However, the concessionaire still has joint obligations for decommissioning until it has been finished as required by the specific laws.

[3] Unocal Myanmar Offshore Company Limited, a partner of Yadana project with a participating interest of 41.1016%, decided to withdraw all investments. As a result, from 1 April 2024 onwards, PTTEP International Limited (PTTEPI), a subsidiary of the Company and an operator of this project, increased the participating interest to 62.963% in Yadana project. The withdrawal processes were subsequently fulfilled on 5 April 2024.

[4] PTTEP Offshore Investment Company Limited (PTTEPO) has shareholding interest in Orange Energy Limited and B8/32 Partners Limited, which hold the project's concession.

[5] On 5 February 2023, the concession of B6/27 Project, which PTTEP Siam Limited (PTTEP Siam), a subsidiary of the Company, holds 100% participating interests, has ended. PTTEP Siam returned those blocks. However, the concessionaire still has joint obligations for decommissioning until it has been finished as required by the specific laws.

[6] On 16 September 2024, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA), a subsidiary of the Group holding 100% participating interests in AC/RL12, submitted a surrender application to return the block. It will be effective upon receiving the official approval from the Government of the Commonwealth of Australia.

[7] On 20 March 2024, Malaysia PM407 Project has ended the first exploration phase. PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group holding 55% participating interest in this block, submitted a surrender application to return the block, and received the official approval from the Government of Malaysia.

[8] On 12 June 2023, Mexico block 12 (2.4) Project has ended the first exploration phase. PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP), a subsidiary of the Group, holds 20% participation interests in this block. The operator submitted a request to relinquish and return the block. The relinquishment will be effective after receiving the official approval from the Government of Mexico.

[9] On 17 September 2024, PTTEP MEP entered into a Sale and Purchase Agreement (SPA) to sell its entire 16.67% interest in Mexico block 29 (2.4) to REPSOL EXPLORACIÓN MÉXICO, S.A. DE C.V. The sale and purchase shall be completed when the conditions specified in the SPA are met as disclosed in Note 15.

[10] On 30 September 2024, Sharjah Onshore Area A, in which PTTEP MENA holds a 25% participating interest, ended its first exploration phase. The operator and PTTEP MENA agreed to not enter the second exploration phase and returned the block to the Government of United Arab Emirates.

[11] On 31 December 2024, Sharjah Onshore Area C, in which PTTEP MENA holds a 25% participating interest, ended its second exploration phase. The operator and PTTEP MENA agreed to not enter the third exploration phase and returned the block to the Government of United Arab Emirates.

[12] On 10 June 2024, PTTEP MENA signed a SPA to acquire 10% participating interest in the Ghasha Concession in United Arab Emirates from Wintershall Dea Middle East GmbH. The acquisition was completed on 11 June 2024 and the investment was classified as an investment in a joint operation. The acquisition of the participating interest is considered an asset acquisition because it does not fall within the definition of a business under Thai Financial Reporting Standards 3 - Business Combinations as disclosed in Note 18.

[13] On 29 September 2023, PTTEP Sarawak Oil Limited (PTTEP SKO), a subsidiary of the Group, signed a Farm-Out Agreement with Petronas Carigali Sdn. Bhd. (PCSB) to dispose of a 10% participating interest in Block SK405B Production Sharing Contract (PSC), located offshore Sarawak in Malaysia. The sale transaction was completed on 30 April 2024 and PTTEP SKO remains the operator with a 49.5% participating interest.

For the projects that the Group had joint control, the joint operting agreements assigned the structure of the business operation and strategic, operating and financing decisions which required unanimous consent from all parties.

18 Property, plant and equipment

	Consolidated financial statements				
	Unit: Million US Dollar				
	Exploration and production assets	Pipeline	Others	Assets under construction	Total
As at 1 January 2023					
Cost	31,644	819	188	3,580	36,231
Less Accumulated depreciation	(23,648)	(314)	(110)	-	(24,072)
Less Accumulated impairment	(279)	-	-	-	(279)
Net book value	7,717	505	78	3,580	11,880
For the year ended 31 December 2023					
Opening net book value	7,717	505	78	3,580	11,880
Additions	2,291	3	27	738	3,059
Disposals and write-off, net	(5)	-	(1)	(8)	(14)
Reclassification	1,343	-	-	(1,120)	223
Depreciation charged	(2,241)	(29)	(13)	-	(2,283)
Closing net book value	9,105	479	91	3,190	12,865
As at 31 December 2023					
Cost	30,966	822	211	3,190	35,189
Less Accumulated depreciation	(21,582)	(343)	(120)	-	(22,045)
Less Accumulated impairment	(279)	-	-	-	(279)
Net book value	9,105	479	91	3,190	12,865

	Consolidated financial statements				
	Unit: Million US Dollar				
	Exploration and production assets	Pipeline	Others	Assets under construction	Total
For the year ended 31 December 2024					
Opening net book value	9,105	479	91	3,190	12,865
Additions *	1,173	5	13	2,827	4,018
Disposals and write-off, net	(3)	(23)	-	(8)	(34)
Reclassification	1,237	-	-	(1,096)	141
Depreciation charged	(2,516)	(27)	(16)	-	(2,559)
Closing net book value	8,996	434	88	4,913	14,431
As at 31 December 2024					
Cost	32,952	797	221	4,913	38,883
Less Accumulated depreciation	(23,681)	(363)	(133)	-	(24,177)
Less Accumulated impairment	(275)	-	-	-	(275)
Net book value	8,996	434	88	4,913	14,431

	Consolidated financial statements				
	Unit: Million Baht				
	Exploration and production assets	Pipeline	Others	Assets under construction	Total
As at 1 January 2023					
Cost	1,093,703	28,314	6,478	123,755	1,252,250
Less Accumulated depreciation	(817,353)	(10,846)	(3,789)	-	(831,988)
Less Accumulated impairment	(9,648)	-	-	-	(9,648)
Net book value	266,702	17,468	2,689	123,755	410,614
For the year ended 31 December 2023					
Opening net book value	266,702	17,468	2,689	123,755	410,614
Additions	79,678	119	928	25,643	106,368
Disposals and write-off, net	(201)	-	(33)	(281)	(515)
Reclassification	46,728	-	7	(38,965)	7,770
Depreciation charged	(77,985)	(1,033)	(447)	-	(79,465)
Currency translation differences	(3,324)	(157)	(25)	(995)	(4,501)
Closing net book value	311,598	16,397	3,119	109,157	440,271
As at 31 December 2023					
Cost	1,059,763	28,153	7,214	109,157	1,204,287
Less Accumulated depreciation	(738,612)	(11,756)	(4,095)	-	(754,463)
Less Accumulated impairment	(9,553)	-	-	-	(9,553)
Net book value	311,598	16,397	3,119	109,157	440,271

	Consolidated financial statements				
	Unit: Million Baht				
	Exploration and production assets	Pipeline	Others	Assets under construction	Total
For the year ended 31 December 2024					
Opening net book value	311,598	16,397	3,119	109,157	440,271
Additions *	41,349	168	449	99,676	141,642
Disposals and write-off, net	(115)	(819)	(13)	(279)	(1,226)
Reclassification	43,617	-	-	(38,638)	4,979
Depreciation charged	(88,889)	(938)	(557)	-	(90,384)
Currency translation differences	(1,811)	(54)	(16)	(2,917)	(4,798)
Closing net book value	305,749	14,754	2,982	166,999	490,484
As at 31 December 2024					
Cost	1,119,970	27,106	7,491	166,999	1,321,566
Less Accumulated depreciation	(804,873)	(12,352)	(4,509)	-	(821,734)
Less Accumulated impairment	(9,348)	-	-	-	(9,348)
Net book value	305,749	14,754	2,982	166,999	490,484

* According to acquisition of the 10% participating interest in Ghasha Concession (Ghasha) resulted in an increase in property, plant and equipment amounting to US Dollar 540.34 million (Baht 19,045.95 million) as disclosed in Note 17.5 (12).

	Separate financial statements			
	Unit: Million US Dollar			
	Exploration and production assets	Others	Assets under construction	Total
As at 1 January 2023				
Cost	12,573	111	470	13,154
Less Accumulated depreciation	(11,456)	(67)	-	(11,523)
Net book value	1,117	44	470	1,631
For the year ended 31 December 2023				
Opening net book value	1,117	44	470	1,631
Additions	257	8	112	377
Disposals and write-off, net	(3)	-	(5)	(8)
Reclassification	218	4	(222)	-
Depreciation charged	(523)	(6)	-	(529)
Closing net book value	1,066	50	355	1,471
As at 31 December 2023				
Cost	8,828	122	355	9,305
Less Accumulated depreciation	(7,762)	(72)	-	(7,834)
Net book value	1,066	50	355	1,471

	Separate financial statements			
	Unit: Million US Dollar			
	Exploration and production assets	Others	Assets under construction	Total
For the year ended 31 December 2024				
Opening net book value	1,066	50	355	1,471
Additions	229	6	175	410
Disposals and write-off, net	-	-	-	-
Reclassification	138	2	(140)	-
Depreciation charged	(362)	(7)	-	(369)
Closing net book value	1,071	51	390	1,512
As at 31 December 2024				
Cost	8,812	130	390	9,332
Less Accumulated depreciation	(7,741)	(79)	-	(7,820)
Net book value	1,071	51	390	1,512

	Separate financial statements			
	Unit: Million Baht			
	Exploration and production assets	Others	Assets under construction	Total
As at 1 January 2023				
Cost	434,566	3,843	16,234	454,643
Less Accumulated depreciation	(395,962)	(2,308)	-	(398,270)
Net book value	38,604	1,535	16,234	56,373
For the year ended 31 December 2023				
Opening net book value	38,604	1,535	16,234	56,373
Additions	8,949	290	3,889	13,128
Disposals and write-off, net	(99)	(6)	(176)	(281)
Reclassification	7,568	145	(7,713)	-
Depreciation charged	(18,051)	(225)	-	(18,276)
Currency translation differences	(494)	(18)	(96)	(608)
Closing net book value	36,477	1,721	12,138	50,336
As at 31 December 2023				
Cost	302,134	4,198	12,138	318,470
Less Accumulated depreciation	(265,657)	(2,477)	-	(268,134)
Net book value	36,477	1,721	12,138	50,336

	Separate financial statements			
	Unit: Million Baht			
	Exploration and production assets	Others	Assets under construction	Total
For the year ended 31 December 2024				
Opening net book value	36,477	1,721	12,138	50,336
Additions	8,054	222	6,191	14,467
Disposals and write-off, net	(13)	(2)	-	(15)
Reclassification	4,858	72	(4,930)	-
Depreciation charged	(12,755)	(250)	-	(13,005)
Currency translation differences	(239)	(13)	(129)	(381)
Closing net book value	36,382	1,750	13,270	51,402
As at 31 December 2024				
Cost	299,500	4,437	13,270	317,207
Less Accumulated depreciation	(263,118)	(2,687)	-	(265,805)
Net book value	36,382	1,750	13,270	51,402

During the year ended 31 December 2024, the Group reclassified the petroleum reserves that have been found to be technically and commercially producible from exploration and evaluation assets (Note 21) to property, plant and equipment.

As at 31 December 2024 and 2023, the Group has capital expenditure commitments as disclosed in Note 35.1.

As at 31 December 2024, the Group has pledged assets for guarantee of loan agreement in the form of project finance amounting to US Dollar 895.22 million (Baht 30,426.69 million).

As at 31 December 2024, the Group has cost relating to the Carbon Capture and Storage (CCS) recognised in property, plant and equipment with the cost of US Dollar 5.92 million (Baht 201.30 million) (2023: US Dollar 5.39 million (Baht 184.40 million)).

19 Right-of-use assets

	Consolidated financial statements		
	Unit: Million US Dollar		
	Exploration and production assets	Others	Total
As at 1 January 2023			
Cost	1,234	61	1,295
Less Accumulated amortisation	(298)	(22)	(320)
Net book value	936	39	975
For the year ended 31 December 2023			
Opening net book value	936	39	975
Additions	144	3	147
Decreases	(25)	(5)	(30)
Agreement modification	24	-	24
Amortisation charged	(259)	(18)	(277)
Closing net book value	820	19	839
As at 31 December 2023			
Cost	1,292	46	1,338
Less Accumulated amortisation	(472)	(27)	(499)
Net book value	820	19	839

	Consolidated financial statements		
	Unit: Million US Dollar		
	Exploration and production assets	Others	Total
For the year ended 31 December 2024			
Opening net book value	820	19	839
Additions	384	30	414
Agreement modification	(14)	1	(13)
Amortisation charged	(336)	(12)	(348)
Closing net book value	854	38	892
As at 31 December 2024			
Cost	1,538	51	1,589
Less Accumulated amortisation	(684)	(13)	(697)
Net book value	854	38	892

	Consolidated financial statements		
			Unit: Million Baht
	Exploration and production assets	Others	Total
As at 1 January 2023			
Cost	42,644	2,113	44,757
Less Accumulated amortisation	(10,316)	(753)	(11,069)
Net book value	32,328	1,360	33,688
For the year ended 31 December 2023			
Opening net book value	32,328	1,360	33,688
Additions	4,996	91	5,087
Decreases	(867)	(159)	(1,026)
Agreement modification	850	(2)	848
Amortisation charged	(9,015)	(623)	(9,638)
Currency translation differences	(247)	(1)	(248)
Closing net book value	28,045	666	28,711
As at 31 December 2023			
Cost	44,200	1,593	45,793
Less Accumulated amortisation	(16,155)	(927)	(17,082)
Net book value	28,045	666	28,711

	Consolidated financial statements		
	Unit: Million Baht		
	Exploration and production assets	Others	Total
For the year ended 31 December 2024			
Opening net book value	28,045	666	28,711
Additions	13,554	1,055	14,609
Agreement modification	(495)	8	(487)
Amortisation charged	(11,831)	(429)	(12,260)
Currency translation differences	(244)	(22)	(266)
Closing net book value	29,029	1,278	30,307
As at 31 December 2024			
Cost	52,262	1,726	53,988
Less Accumulated amortisation	(23,233)	(448)	(23,681)
Net book value	29,029	1,278	30,307

	Separate financial statements		
	Unit: Million US Dollar		
	Exploration and production assets	Others	Total
As at 1 January 2023			
Cost	41	50	91
Less Accumulated amortisation	(28)	(19)	(47)
Net book value	13	31	44
For the year ended 31 December 2023			
Opening net book value	13	31	44
Additions	42	-	42
Decreases	(3)	(4)	(7)
Agreement modification	4	-	4
Amortisation charged	(13)	(16)	(29)
Closing net book value	43	11	54
As at 31 December 2023			
Cost	61	33	94
Less Accumulated amortisation	(18)	(22)	(40)
Net book value	43	11	54

	Separate financial statements		
	Unit: Million US Dollar		
	Exploration and production assets	Others	Total
For the year ended 31 December 2024			
Opening net book value	43	11	54
Additions	74	24	98
Agreement modification	(4)	-	(4)
Amortisation charged	(22)	(10)	(32)
Closing net book value	91	25	116
As at 31 December 2024			
Cost	113	33	146
Less Accumulated amortisation	(22)	(8)	(30)
Net book value	91	25	116

	Separate financial statements		
	Unit: Million Baht		
	Exploration and production assets	Others	Total
As at 1 January 2023			
Cost	1,445	1,717	3,162
Less Accumulated amortisation	(980)	(645)	(1,625)
Net book value	465	1,072	1,537
For the year ended 31 December 2023			
Opening net book value	465	1,072	1,537
Additions	1,452	9	1,461
Decreases	(97)	(159)	(256)
Agreement modification	120	(4)	116
Amortisation charged	(468)	(540)	(1,008)
Currency translation differences	(20)	1	(19)
Closing net book value	1,452	379	1,831
As at 31 December 2023			
Cost	2,096	1,132	3,228
Less Accumulated amortisation	(644)	(753)	(1,397)
Net book value	1,452	379	1,831

	Separate financial statements		
	Unit: Million Baht		
	Exploration and production assets	Others	Total
For the year ended 31 December 2024			
Opening net book value	1,452	379	1,831
Additions	2,618	832	3,450
Agreement modification	(120)	-	(120)
Amortisation charged	(778)	(335)	(1,113)
Currency translation differences	(75)	(20)	(95)
Closing net book value	3,097	856	3,953
As at 31 December 2024			
Cost	3,860	1,114	4,974
Less Accumulated amortisation	(763)	(258)	(1,021)
Net book value	3,097	856	3,953

20 Goodwill

	Consolidated financial statements		Separate financial statements	
	Unit: Million US Dollar	Unit: Million Baht	Unit: Million US Dollar	Unit: Million Baht
As at 1 January 2023				
Cost	2,014	69,609	75	2,598
Less Provision for impairment	(465)	(16,085)	-	-
Net book value	1,549	53,524	75	2,598
For the year ended 31 December 2023				
Opening net book value	1,549	53,524	75	2,598
Decrease *	(76)	(2,623)	(75)	(2,614)
Allowance for impairment of assets	(120)	(4,255)	-	-
Currency translation differences	-	(335)	-	16
Closing net book value	1,353	46,311	-	-
As at 31 December 2023				
Cost	1,938	66,345	-	-
Less Provision for impairment	(585)	(20,034)	-	-
Net book value	1,353	46,311	-	-
For the year ended 31 December 2024				
Opening net book value	1,353	46,311	-	-
Currency translation differences	-	(319)	-	-
Closing net book value	1,353	45,992	-	-
As at 31 December 2024				
Cost	1,938	65,888	-	-
Less Provision for impairment	(585)	(19,896)	-	-
Net book value	1,353	45,992	-	-

* The decrease of goodwill was due to the project, which has ended during the year.

Goodwill is allocated to the Group's cash-generating units (CGUs).

Goodwill allocation net from impairment presented by the CGUs as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
As at 31 December				
Exploration and production				
Thailand	445	445	15,126	15,230
Other Southeast Asia	454	454	15,434	15,541
Middle East	142	142	4,827	4,861
Africa	251	251	8,524	8,583
Others	44	44	1,490	1,500
Others	17	17	591	596
Total	1,353	1,353	45,992	46,311

Goodwill impairment testing

The Group tested impairment of goodwill from business acquisition annually, or more frequently if events or changes in circumstances indicate that it might be impaired. The Group compares the carrying amount of the goodwill with the recoverable amount of each cash-generating units which is the higher of the fair value less cost to sell or value-in-use.

An asset or group of assets described as cash-generating unit (CGU) is the smallest identifiable group of assets that generates inflows that are largely independent from the cash flows from other CGUs. The Group considers the CGU at the individual project level assessing the expected future cash flows over the average life of the project with a growth rate along with the industry's information.

The measurements of fair value less cost to sell and value-in-use are based on a proved and probable reserve production profile including other key estimates and assumptions. These include the short-term forward oil price curve, e.g. Brent and Dubai, and the long-term oil price based on global supply and demand. They also include the project management teams estimate of the capital expenditure and operating expenditure approved by management using a constant inflation rate at rate of 2% for periods beyond five years, exchange rates, discount rates, and past industry performance. These estimates and assumptions were consistent with external information sources. The weighted average cost of capital of each project in each region is used as the discount rate for financial estimates.

For the consolidated financial statements, the discount rates for the exploration and production segment are:

- Southeast Asia: 7% - 9% per annum (2023: 8% - 10% per annum)
- Africa: 10% - 11% per annum (2023: 10% - 11% per annum)
- Middle East: 7% - 10% per annum (2023: 7% - 12% per annum)
- Others: 10% - 11% per annum (2023: 11% - 12% per annum)

If the discount rate used for goodwill impairment testing of CGUs, which did not recognise any impairment loss in the current year, increases by approximately 0.01% - 8% per annum, there would still be no allowance for goodwill impairment recognised in the consolidated financial statements for the year ended 31 December 2024.

21 Exploration and evaluation assets

	Consolidated financial statements	
	Unit: Million US Dollar	Unit: Million Baht
As at 1 January 2023		
Cost	4,312	149,032
Less Accumulated impairment	(1,240)	(42,871)
Net book value	3,072	106,161
For the year ended 31 December 2023		
Opening net book value	3,072	106,161
Additions	159	5,531
Decreases	(63)	(2,182)
Decrease from disposal of participating interest	(189)	(6,542)
Reclassification to property, plant and equipment	(223)	(7,770)
Currency translation differences	-	(867)
Closing net book value	2,756	94,331
As at 31 December 2023		
Cost	2,756	94,331
Less Accumulated impairment *	-	-
Net book value	2,756	94,331

	Consolidated financial statements	
	Unit: Million US Dollar	Unit: Million Baht
For the year ended 31 December 2024		
Opening net book value	2,756	94,331
Additions	146	5,148
Decreases	(43)	(1,523)
Reclassification to property, plant and equipment	(141)	(4,979)
Reclassification to assets held-for-sale (Note 15)	(59)	(2,066)
Currency translation differences	-	(527)
Closing net book value	2,659	90,384
As at 31 December 2024		
Cost	2,659	90,384
Less Accumulated impairment	-	-
Net book value	2,659	90,384

* Terminate and return all of the exploration block of Mariana Oil Sands Project of PTTEP Canada Limited (PTTEP CA), completed on 1 August 2023.

22 Deferred income taxes

Deferred tax assets and liabilities are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Deferred tax assets	576	534	19,591	18,274
Deferred tax liabilities	(1,468)	(1,526)	(49,911)	(52,238)
Deferred taxes, net	(892)	(992)	(30,320)	(33,964)

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Deferred tax assets	260	270	8,830	9,245
Deferred tax liabilities	(1)	(1)	(38)	(18)
Deferred taxes, net	259	269	8,792	9,227

The movements of deferred tax assets and liabilities during the years are as follows:

	Consolidated financial statements				
	Unit: Million US Dollar				
	As at 1 January 2024 as previously reported	Statement of income	Statement of comprehensive income	Reclassified	As at 31 December 2024
Deferred tax assets					
Decommissioning costs	915	-	-	(915)	-
Non-current provision for decommissioning costs	-	124	-	1,267	1,391
Non-current provision for employee benefits	67	1	2	-	70
Property, plant and equipment and intangible assets	3	6	-	-	9
Loss carried forward	35	(8)	-	-	27
Financial derivatives	16	(16)	-	-	-
Allowance for impairment loss on assets	130	16	-	-	146
Lease liabilities	58	26	-	180	264
Cost recovery	24	-	-	-	24
Others	76	(4)	-	-	72
	1,324	145	2	532	2,003
Tax effect of currency translation on tax base	-	-	-	-	-
	1,324	145	2	532	2,003
Deferred tax liabilities					
Property, plant and equipment and intangible assets	2,271	21	-	357	2,649
Right-of-use assets	-	25	-	181	206
Financial derivatives	2	-	8	-	10
Others	18	(1)	-	(6)	11
	2,291	45	8	532	2,876
Tax effect of currency translation on tax base	25	(6)	-	-	19
	2,316	39	8	532	2,895
Deferred taxes, net	(992)	106	(6)	-	(892)

	Consolidated financial statements Unit: Million US Dollar				
	As at 1 January 2023	Statement of income	Statement of comprehensive income	Reclassified	As at 31 December 2023
Deferred tax assets					
Decommissioning costs	994	(79)	-	(915)	-
Non-current provision for decommissioning costs	-	-	-	1,267	1,267
Non-current provision for employee benefits	63	1	3	-	67
Property, plant and equipment and intangible assets	6	(3)	-	-	3
Loss carried forward	116	(81)	-	-	35
Financial derivatives	9	2	5	-	16
Allowance for impairment loss on assets	134	(4)	-	-	130
Lease liabilities	16	42	-	180	238
Cost recovery	26	(2)	-	-	24
Others	116	(40)	-	-	76
	1,480	(164)	8	532	1,856
Tax effect of currency translation on tax base	-	-	-	-	-
	1,480	(164)	8	532	1,856
Deferred tax liabilities					
Property, plant and equipment and intangible assets	2,031	240	-	357	2,628
Right-of-use assets	-	-	-	181	181
Financial derivatives	2	6	(6)	-	2
Others	76	(58)	-	(6)	12
	2,109	188	(6)	532	2,823
Tax effect of currency translation on tax base	17	8	-	-	25
	2,126	196	(6)	532	2,848
Deferred taxes, net	(646)	(360)	14	-	(992)

	Consolidated financial statements					
	Unit: Million Baht					
	As at 1 January 2024 as previously reported	Statement of income	Statement of comprehensive income	Reclassified	Currency translation differences	As at 31 December 2024
Deferred tax assets						
Decommissioning costs	31,330	-	-	(31,330)	-	-
Non-current provision for decommissioning costs	-	4,317	-	43,371	(392)	47,296
Non-current provision for employee benefits	2,236	54	89	-	(11)	2,368
Property, plant and equipment and intangible assets	112	233	-	-	(37)	308
Loss carried forward	1,206	(294)	-	-	11	923
Financial derivatives	563	(513)	-	-	(48)	2
Allowance for impairment loss on assets	4,473	526	-	-	(26)	4,973
Lease liabilities	1,991	681	-	5,646	624	8,942
Cost recovery	824	(17)	-	-	(2)	805
Others	2,575	(113)	-	-	(11)	2,451
	45,310	4,874	89	17,687	108	68,068
Tax effect of currency translation on tax base	-	-	-	-	-	-
	45,310	4,874	89	17,687	108	68,068
Deferred tax liabilities						
Property, plant and equipment and intangible assets	77,716	616	-	12,212	(504)	90,040
Right-of-use assets	-	647	-	5,699	636	6,982
Financial derivatives	64	2	274	-	(10)	330
Others	643	(60)	-	(224)	27	386
	78,423	1,205	274	17,687	149	97,738
Tax effect of currency translation on tax base	851	(211)	-	-	10	650
	79,274	994	274	17,687	159	98,388
Deferred taxes, net	(33,964)	3,880	(185)	-	(51)	(30,320)

	Consolidated financial statements					
	Unit: Million Baht					
	As at 1 January 2023	Statement of income	Statement of comprehensive income	Reclassified	Currency translation differences	As at 31 December 2023
Deferred tax assets						
Decommissioning costs	34,386	(3,058)	-	(31,330)	2	-
Non-current provision for decommissioning costs	-	-	-	43,371	-	43,371
Non-current provision for employee benefits	2,134	32	96	-	(26)	2,236
Property, plant and equipment and intangible assets	202	(89)	-	-	(1)	112
Loss carried forward	4,014	(2,797)	-	-	(11)	1,206
Financial derivatives	335	49	173	-	6	563
Allowance for impairment loss on assets	4,649	(279)	-	-	103	4,473
Lease liabilities	545	1,483	-	5,646	(37)	7,637
Cost recovery	904	(71)	-	-	(9)	824
Others	3,968	(1,411)	-	-	18	2,575
	51,137	(6,141)	269	17,687	45	62,997
Tax effect of currency translation on tax base	-	-	-	-	-	-
	51,137	(6,141)	269	17,687	45	62,997
Deferred tax liabilities						
Property, plant and equipment and intangible assets	70,218	7,767	-	12,212	(269)	89,928
Right-of-use assets	-	-	-	5,699	-	5,699
Financial derivatives	54	228	(219)	-	1	64
Others	2,626	(1,969)	-	(224)	(14)	419
	72,898	6,026	(219)	17,687	(282)	96,110
Tax effect of currency translation on tax base	563	304	-	-	(16)	851
	73,461	6,330	(219)	17,687	(298)	96,961
Deferred taxes, net	(22,324)	(12,471)	488	-	343	(33,964)

	Separate financial statements				
	Unit: Million US Dollar				
	As at 1 January 2024 as previously reported	Statement of income	Statement of comprehensive income	Reclassified	As at 31 December 2024
Deferred tax assets					
Decommissioning costs	419	-	-	(419)	-
Non-current provision for decommissioning costs	-	29	-	463	492
Non-current provision for employee benefits	61	1	3	-	65
Lease liabilities	-	30	-	28	58
Loss carried forward	-	-	-	-	-
Others	11	(11)	-	-	-
	491	49	3	72	615
Deferred tax liabilities					
Property, plant and equipment and intangible assets	219	28	-	44	291
Right-of-use assets	-	29	-	29	58
Others	3	-	5	(1)	7
	222	57	5	72	356
Deferred taxes, net	269	(8)	(2)	-	259

	Separate financial statements				
	Unit: Million US Dollar				
	As at 1 January 2023	Statement of income	Statement of comprehensive income	Reclassified	As at 31 December 2023
Deferred tax assets					
Decommissioning costs	531	(112)	-	(419)	-
Non-current provision for decommissioning costs	-	-	-	463	463
Non-current provision for employee benefits	58	1	2	-	61
Lease liabilities	-	-	-	28	28
Loss carried forward	52	(52)	-	-	-
Others	12	(5)	4	-	11
	653	(168)	6	72	563
Deferred tax liabilities					
Property, plant and equipment and intangible assets	57	162	-	44	263
Right-of-use assets	-	-	-	29	29
Others	47	(41)	(3)	(1)	2
	104	121	(3)	72	294
Deferred taxes, net	549	(289)	9	-	269

	Separate financial statements					
	Unit: Million Baht					
	As at 1 January 2024 as previously reported	Statement of income	Statement of comprehensive income	Reclassified	Currency translation differences	As at 31 December 2024
Deferred tax assets						
Decommissioning costs	14,312	-	-	(14,312)	-	-
Non-current provision for decommissioning costs	-	846	-	15,839	43	16,728
Non-current provision for employee benefits	2,120	21	97	-	(9)	2,229
Lease liabilities	-	858	-	971	147	1,976
Loss carried forward	-	-	-	-	-	-
Others	402	(321)	-	(8)	(61)	12
	16,834	1,404	97	2,490	120	20,945
Deferred tax liabilities						
Property, plant and equipment and intangible assets	7,493	790	-	1,527	79	9,889
Right-of-use assets	-	851	-	982	146	1,979
Others	114	(2)	192	(19)	-	285
	7,607	1,639	192	2,490	225	12,153
Deferred taxes, net	9,227	(235)	(95)	-	(105)	8,792

	Separate financial statements					
	Unit: Million Baht					
	As at 1 January 2023	Statement of income	Statement of comprehensive income	Reclassified	Currency translation differences	As at 31 December 2023
Deferred tax assets						
Decommissioning costs	18,347	(3,893)	-	(14,312)	(142)	-
Non-current provision for decommissioning costs	-	-	-	15,839	-	15,839
Non-current provision for employee benefits	1,999	53	91	-	(23)	2,120
Lease liabilities	-	-	-	971	-	971
Loss carried forward	1,798	(1,798)	-	-	-	-
Others	419	(151)	138	(8)	(4)	394
	22,563	(5,789)	229	2,490	(169)	19,324
Deferred tax liabilities						
Property, plant and equipment and intangible assets	1,958	5,609	-	1,527	(74)	9,020
Right-of-use assets	-	-	-	982	-	982
Others	1,647	(1,434)	(99)	(19)	-	95
	3,605	4,175	(99)	2,490	(74)	10,097
Deferred taxes, net	18,958	(9,964)	328	-	(95)	9,227

During the year end 31 December 2024, the Group reclassified the deferred tax related to assets and liabilities arising from a single transaction, which comprises leases and non-current provision for decommissioning costs to better reflect the future tax impact of these transactions.

Deferred income tax assets are recognised for tax loss and carried forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. The Group does not recognise deferred tax asset from tax losses of US Dollar 950 million (2023: US Dollar 919 million) to carry forward against future taxable income. Some portions of tax losses could be carried forward against future taxable income without expiration invalid and some portions will be expired during 2025 to 2044.

23 Other non-current assets

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Pension scheme investments from joint operation	82	69	2,798	2,372
Contingent consideration from disposal of participating interests	65	61	2,196	2,083
Advance payment *	36	36	1,219	1,227
Prepaid expenses	11	13	378	437
Others	45	51	1,518	1,748
	239	230	8,109	7,867

* This represents tax prepayment assessed by the Republic of the Union of Myanmar Revenue Department from the privilege of tax exemptions in case of the reinvestment and the transfer of participating interest to the investors for the projects in Republic of the Union of Myanmar. The Group is in process of preparing to appeal the tax assessment case to the Supreme Court's consideration.

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Prepaid expenses	4	5	127	159
Deferred remuneration under agreement	3	4	85	146
Others	8	17	286	600
	15	26	498	905

24 Trade and other payable

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Trade payable	347	185	11,787	6,329
Working capital to co-ventures	27	12	930	414
Account payable - related parties	42	28	1.417	976
Accrued expenses	1,343	1,200	45,653	41,048
Accrued interest expense	38	19	1,302	645
	1,797	1,444	61,089	49,412

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Trade payable	16	18	535	628
Account payable - related parties	23	9	769	307
Accrued expenses	305	276	10,380	9,434
Accrued interest expense	6	7	203	227
	350	310	11,887	10,596

25 Debentures and lease liabilities

Debentures and lease liabilities are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Current portion				
Current portion of lease liabilities	390	281	13,254	9,612
	390	281	13,254	9,612
Non-current portion				
Debentures	2,795	2,785	95,009	95,320
Lease liabilities	576	588	19,572	20,107
	3,371	3,373	114,581	115,427
Total debentures and lease liabilities	3,761	3,654	127,835	125,039

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Current portion				
Current portion of lease liabilities	54	34	1,840	1,169
	54	34	1,840	1,169
Non-current portion				
Debentures	512	508	17,392	17,390
Lease liabilities	75	32	2,533	1,105
	587	540	19,925	18,495
Total debentures and lease liabilities	641	574	21,765	19,664

a) Debentures

The carrying value of unsecured and unsubordinated debentures is comprised:

				Consolidated financial statements			
				Unit: Million US Dollar		Unit: Million Baht	
	Interest rates (% per annum)	Effective interest rates (% per annum)	Maturity date	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Maturity date over 1 years but not exceeding 3 years							
- Debentures of Baht 1,500 million	2.51	2.576	10 May 2026	44	44	1,499	1,498
- Debentures of Baht 6,000 million	2.00 - 2.75	2.284	5 November 2026	177	175	5,996	5,995
- Debentures of Baht 5,000 million	2.09	2.121	5 April 2027	147	146	4,998	4,997
- Debentures of US Dollar 500 million	2.587	2.637	10 June 2027	499	499	16,973	17,081
Maturity date over 3 years but not exceeding 5 years							
- Debentures of Baht 1,000 million	2.69	2.725	5 April 2029	29	29	999	999
- Debentures of Baht 11,400 million	4.82	4.89	6 June 2029	335	333	11,396	11,395

	Interest rates (% per annum)	Effective interest rates (% per annum)	Maturity date	Consolidated financial statements			
				Unit: Million US Dollar		Unit: Million Baht	
				31 December 2024	31 December 2023	31 December 2024	31 December 2023
Maturity date over 5 years							
- Debentures of US Dollar 350 million	2.993	3.064	15 January 2030	332	328	11,279	11,242
- Debentures of Baht 6,000 million	3.05	3.084	5 April 2032	176	175	5,996	5,995
- Debentures of US Dollar 458.11 million	6.35	6.467	12 June 2042	458	458	15,552	15,658
- Debentures of US Dollar 600 million	3.903	3.959	6 December 2059	598	598	20,321	20,460
Total carrying value				2,795	2,785	95,009	95,320

				Separate financial statements			
				Unit: Million US Dollar		Unit: Million Baht	
	Interest rates (% per annum)	Effective interest rates (% per annum)	Maturity date	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Maturity date over 1 years but not exceeding 3 years							
- Debentures of Baht 6,000 million	2.00 - 2.75	2.284	5 November 2026	177	175	5,996	5,995
Maturity date over 3 years but not exceeding 5 years							
- Debentures of Baht 11,400 million	4.82	4.89	6 June 2029	335	333	11,396	11,395
Total carrying value				512	508	17,392	17,390

The fair values of debentures as at 31 December 2024 and 2023 are disclosed in Note 10.2.3.

The movements of debentures for the years ended 31 December are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Opening net book value	2,785	2,809	95,320	97,095
Cash flows:				
Increase	-	45	-	1,549
Repayment of debentures	-	(82)	-	(2,848)
Deferred finance cost	-	(1)	-	(22)
Non-cash movement:				
Amortisation of deferred finance cost	4	6	137	218
Foreign exchange differences	6	8	220	267
Currency translation differences	-	-	(668)	(939)
Closing net book value	2,795	2,785	95,009	95,320

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Opening net book value	508	503	17,390	17,387
Non-cash movement:				
Amortisation of deferred finance cost	-	-	3	3
Foreign exchange differences	4	5	124	173
Currency translation differences	-	-	(125)	(173)
Closing net book value	512	508	17,392	17,390

b) Lease liabilities

The movements of lease liabilities for the years ended 31 December are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Opening net book value	869	1,024	29,719	35,384
Cash flows:				
Repayment of lease liabilities	(354)	(283)	(12,465)	(9,859)
Non-cash movements:				
Deferred finance cost	29	21	1,017	741
Increase of lease liabilities	436	190	15,370	6,621
Decrease of lease liabilities	-	(102)	-	(3,545)
Agreement modification	(14)	18	(486)	620
Foreign exchange differences	-	1	(6)	18
Currency translation differences	-	-	(323)	(261)
Lease liabilities	966	869	32,826	29,719
Less Current portion	(390)	(281)	(13,254)	(9,612)
Closing net book value	576	588	19,572	20,107

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Opening net book value	66	50	2,274	1,748
Cash flows:				
Repayment of lease liabilities	(34)	(16)	(1,209)	(562)
Non-cash movements:				
Deferred finance cost	3	1	91	33
Additions of lease liabilities	98	42	3,450	1,461
Decreases of lease liabilities	-	(14)	-	(501)
Agreement modification	(3)	3	(120)	115
Foreign exchange differences	(1)	-	(19)	6
Currency translation differences	-	-	(94)	(26)
Lease liabilities	129	66	4,373	2,274
Less Current portion	(54)	(34)	(1,840)	(1,169)
Closing net book value	75	32	2,533	1,105

Related leases transaction recognised in the statement of income for the years ended 31 December are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Expenses related to short-term lease	26	15	931	533
Expenses related to low-value assets lease	4	4	150	129
Expenses related to variable lease payment, which does not include in lease liabilities	-	-	13	7

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Expenses related to short-term lease	4	2	131	63
Expenses related to low-value assets lease	3	3	105	109
Expenses related to variable lease payment, which does not include in lease liabilities	-	-	-	1

26 Non-current provision for decommissioning costs

Non-current provision for decommissioning costs are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Non-current provision for decommissioning costs	4,367	3,912	148,426	133,898
Less Current portion	(100)	(60)	(3,395)	(2,078)
Non-current portion of provision for decommissioning costs	4,267	3,852	145,031	131,820

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Non-current provision for decommissioning costs	1,003	942	34,101	32,250
Less Current portion	(28)	(16)	(967)	(560)
Non-current portion of provision for decommissioning costs	975	926	33,134	31,690

The movements of non-current provision for decommissioning costs during the years as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Balance as at 1 January	3,912	3,114	133,898	107,623
Additional provision	449	942	15,830	32,762
Provision used during the year	(84)	(300)	(2,985)	(10,440)
Finance costs	187	152	6,618	5,297
Reversal of provision	(97)	(1)	(3,432)	(29)
Foreign exchange differences	-	5	-	187
Currency translation differences	-	-	(1,503)	(1,502)
Balance as at 31 December	4,367	3,912	148,426	133,898

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Balance as at 1 January	942	1,080	32,250	37,336
Additional provision	81	108	2,860	3,755
Provision used during the year	(12)	(190)	(436)	(6,609)
Finance costs	48	43	1,710	1,496
Reversal of provision	(56)	(104)	(1,981)	(3,626)
Foreign exchange differences	-	5	-	187
Currency translation differences	-	-	(302)	(289)
Balance as at 31 December	1,003	942	34,101	32,250

The Group recognised non-current provision for decommissioning costs of production projects under production sharing contracts. The recognition is in accordance with the related laws and there is a probable possibility of the present obligation. In addition, the Company has paid the decommissioning costs for a portion of the project that had come to the end of concession, resulting in the decrease in non-current provision for decommissioning costs. Approximately 78% and 58% of non-current portion of non-current provision for decommissioning costs in the consolidated and separate financial statements, respectively, will be settled over 5 years.

The Group records a non-current provision for decommissioning costs whenever it is probable that there would be an obligation as a result of a past event and the amount of that obligation is reliably estimated by the Group's engineers and management's judgment. The Group recognises non-current provision for decommissioning costs as part of oil and gas properties, using the discounted present value before tax based on the estimated eventual costs that relate to the removal of the production facilities and amortised based on the unit of production of the proved reserve or the proved developed reserve. The Group recognises an increase that reflects the passage of time from the unwinding discount in each period, as a finance cost in the statements of income.

The provisions are based on the current situation such as regulations, technologies and prices. The actual results could differ from these estimates as future confirming events occur.

27 Non-current provision for remuneration for production bonus and the renewal of petroleum production

Non-current provision for remuneration for production bonus and the renewal of petroleum production is as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Provision for remuneration for production bonus and the renewal of petroleum production	187	202	6,364	6,923
Less Current portion	(54)	(43)	(1,842)	(1,482)
Non-current provision for remuneration for production bonus and the renewal of petroleum production	133	159	4,522	5,441

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Provision for remuneration for the renewal of petroleum production	23	24	790	824
Less Current portion	(7)	(6)	(260)	(195)
Non-current provision for remuneration for production bonus and the renewal of petroleum production	16	18	530	629

The movements of provision for remuneration for production bonus and the renewal of petroleum production during the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Balance as at 1 January	202	237	6,923	8,202
Additional provision	17	6	596	202
Provision used during the year	(43)	(45)	(1,518)	(1,578)
Finance costs	9	(1)	308	(26)
Reversal of provision	2	4	60	147
Foreign exchange differences	-	1	24	35
Currency translation differences	-	-	(29)	(59)
Balance as at 31 December	187	202	6,364	6,923

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Balance as at 1 January	24	44	824	1,531
Additional provision	4	1	142	47
Provision used during the year	(6)	(27)	(221)	(963)
Finance costs	1	1	37	36
Reversal of provision	-	5	12	177
Currency translation differences	-	-	(4)	(4)
Balance as at 31 December	23	24	790	824

The Group recognised provision for remuneration for production bonus and the renewal of petroleum production which has to pay remuneration fee to the Ministry of Energy by using the discounted cash flows based on the significant assumptions, such as sales volume data, accumulate volume of total petroleum production, oil price and discounted rate, etc.

28 Non-current provision for employee benefits

Non-current provision for employee benefits is as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Statement of financial position				
Retirement benefits	214	195	7,272	6,660
Other long-term benefits	19	12	659	415
Liabilities in the statements of financial position	233	207	7,931	7,075
Statement of income				
Retirement benefits	23	21	792	737
Other long-term benefits	9	3	309	83
	32	24	1,101	820

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Statement of financial position				
Retirement benefits	115	109	3,901	3,719
Other long-term benefits	12	11	403	396
Liabilities in the statements of financial position	127	120	4,304	4,115
Statement of income				
Retirement benefits	9	9	322	292
Other long-term benefits	1	2	27	80
	10	11	349	372

The movements of provision for retirement benefits during the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
As at 1 January	195	181	6,660	6,246
Current service cost	14	13	489	462
Interest expense	9	8	303	275
	218	202	7,452	6,983
Loss from actuarial assumptions	3	12	108	434
Benefits paid	(13)	(7)	(451)	(250)
Foreign exchange differences	6	(12)	215	(441)
Currency translation differences	-	-	(52)	(66)
	(4)	(7)	(180)	(323)
As at 31 December	214	195	7,272	6,660

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
As at 1 January	109	97	3,719	3,362
Current service cost	6	6	201	183
Interest expense	3	3	121	109
	118	106	4,041	3,654
Loss from actuarial assumptions	6	5	193	183
Benefits paid	(10)	(3)	(339)	(115)
Foreign exchange differences	1	1	27	40
Currency translation differences	-	-	(21)	(43)
	(3)	3	(140)	65
As at 31 December	115	109	3,901	3,719

Expenses recognised in the statements of income for the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Current service cost	14	13	489	462
Interest expense	9	8	303	275
Total	23	21	792	737
Other long-term benefits	9	3	309	83
Expenses recognised in statement of income	32	24	1,101	820

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Current service cost	6	6	201	183
Interest expense	3	3	121	109
Total	9	9	322	292
Other long-term benefits	1	2	27	80
Expenses recognised in statement of income	10	11	349	372

(Gain) loss from actuarial assumptions recognised in the statements of comprehensive income are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Change in financial assumptions	25	3	839	132
Change in demographic assumptions	(2)	1	(69)	19
Experience adjustment	(20)	8	(662)	283
Total	3	12	108	434

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Change in financial assumptions	19	3	623	124
Change in demographic assumptions	(2)	-	(71)	-
Experience adjustment	(11)	2	(359)	59
Total	6	5	193	183

The significant actuarial assumptions used were as follows:

	% per annum	
	2024	2023
Discount rate	2.60 - 6.65	2.46 - 6.85
Inflation rate	2.00 - 2.50	2.00
Turnover rate	0.00 - 15.00	0.00 - 15.00

Sensitivity analysis for each significant assumption used is as follows:

	Increase (Decrease) in impact on defined retirement benefit obligation			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Discount rate				
Increase 1%	(17)	(13)	(583)	(434)
Decrease 1%	20	15	696	529

The above sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method has been applied as when calculating the retirement benefits recognised in the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

As at 31 December 2024, the weighted average duration of the defined retirement benefit obligation is 22.4 years (2023: 22.1 years).

Maturity analysis of undiscounted retirement benefits are as follows:

	Consolidated financial statements		Separate financial statements	
	Unit: Million US Dollar	Unit: Million Baht	Unit: Million US Dollar	Unit: Million Baht
As at 31 December 2024				
Not later than 1 year	8	284	7	238
Over 1 to 5 years	34	1,154	27	914
Over 5 to 10 years	65	2,221	50	1,716
Over than 10 years	363	12,328	243	8,249
	470	15,987	327	11,117

29 Share capital

The total number of authorised ordinary shares is 3,969.98 million shares (2023: 3,969.98 million shares) with a par value of Baht 1 each (2023: a par value of Baht 1 each). All authorised ordinary shares are fully paid.

30 Legal reserves

Under the Public Companies Act., B.E. 2535, the Company is required to set aside as a legal reserve at least 5% of its net profit for the year until the reserve is not less than 10% of the authorised ordinary shares capital. The legal reserve is not available for dividend distribution. The Company has already set aside full legal reserve at 10% of the authorised ordinary shares capital.

31 Dividends

On 1 April 2024, at the Annual General Meeting of the Shareholder approved the payment of a dividend for the year 2023 at the rate of Baht 9.50 per share. The Company made an interim dividend payment for the first half-year operations of 2023 at the rate of Baht 4.25 per share on 29 August 2023, and for the second half-year operations of 2023 at the rate of Baht 5.25 per share which was paid to the shareholders on 22 April 2024.

On 30 January 2025, the Company's Board of Directors endorsed the proposal of dividend payment for the year 2024 at the rate of Baht 9.625 per share. The Company made an interim dividend payment for the first half-year operations of 2024 at the rate of Baht 4.50 per share on 28 August 2024. The remaining is for the second half-year operations of 2024 at the rate of Baht 5.125 per share, which will be paid after receiving approval from the Annual General Meeting of the Shareholders.

32 Expense by nature

Significant expenses by nature of the Group which comprise the expenses based on its participating interest in each project for the years are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Salary, wages and employees' benefits	279	283	9,828	9,840
Repair and maintenance	394	319	13,895	11,079
Exploration well and projects write-off	96	59	3,362	2,070
Geological and geophysical expenses	5	20	187	688
Logistics	424	337	14,956	11,744
Utility and information technology	100	93	3,524	3,248
Rental expenses	30	19	1,094	669

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Salary, wages and employees' benefits	259	266	9,122	9,273
Repair and maintenance	60	45	2,098	1,572
Exploration well and projects write-off	-	1	-	36
Geological and geophysical expenses	-	-	1	1
Logistics	46	29	1,606	1,014
Utility and information technology	68	69	2,399	2,401
Rental expenses	7	5	236	173

33 Income tax expense

Income tax rates for the year ended 31 December 2024 are as follows:

	Tax Rate (%)
Income tax in Thailand	
- Corporate income tax under Revenue Code	Exempt*, 3, 20
- Petroleum income tax on petroleum businesses in Thailand pursuant to Petroleum Income Tax Act, B.E. 2514 and 2532	50
- Petroleum income tax on petroleum business in Thailand pursuant to Petroleum Income Tax Act, B.E. 2560	20
Income tax from the Petroleum business in the Thailand - Malaysia Joint Development Area under the Petroleum Income Tax Act (No.5), B.E. 2541 and Petroleum Income tax in Malaysia	
- From the first to the eighth accounting period	Exempt
- From the ninth to the fifteenth accounting period	10
- From the sixteenth accounting period onwards	20
Income tax in Malaysia	
- Corporate income tax	24
- Petroleum income tax	25, 38
Corporate income tax in the Republic of the Union of Myanmar	25
Corporate income tax in the Socialist Republic of Vietnam	20, 50
Corporate income tax in the Republic of Indonesia	
- Corporate income tax	22
- Income tax from the profit distribution	20

	Tax Rate (%)
Corporate income tax in the Republic of Singapore	17
Corporate income tax in Hong Kong Special Administrative Region of the People's Republic of China	16.5
Corporate income tax in the United Kingdom of Great Britain and Northern Ireland	25
Corporate income tax in the Kingdom of the Netherlands	19, 25.8
Corporate income tax in the Republic of Cyprus	12.5
Corporate income tax in the Commonwealth of Australia	
- Corporate income tax	30
- Petroleum resource rent tax in the Commonwealth of Australia	40
Corporate income tax in Canada	23
Corporate income tax in the United Mexican States	30
Corporate income tax in the Republic of Panama	25
Corporate income tax in the People's Democratic Republic of Algeria	
- Corporate income tax	38, 19 - 80
- Petroleum income tax	20 - 70
Income tax in Sultanate of Oman	
- Corporate income tax	15
- Petroleum income tax	55, 80
Corporate income tax in the United Arab Emirates	
- Corporate income tax	9
- Petroleum income tax in Abu Dhabi Emirate	25 - 78
- Petroleum income tax in Sharjah Emirate	50
Corporate income tax in the Republic of Kazakhstan	
- Corporate income tax	30
- Income tax from the profit distribution	15
Corporate income tax in the Republic of Mozambique	32
Petroleum income tax in the Republic of Angola	50

* FutureTech Solar (Thailand) Co., Ltd. (FST), a subsidiary of the Group, has received promotional privileges from the Office of the Board of Investment (BOI) for its solar power business. Under these privileges, FST has received exemptions from certain taxes and duties as detailed in the certificate.

Income tax expenses for the years ended 31 December are comprised:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Current income tax	1,727	1,470	61,094	51,233
Deferred income tax	(106)	361	(3,880)	12,471
Total income tax expenses	1,621	1,831	57,214	63,704

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Current income tax	431	293	15,269	10,201
Deferred income tax	8	288	235	9,964
Total income tax expenses	439	581	15,504	20,165

The income tax on the Group's profit before income tax differs from the theoretical amount that would arise using the basic tax rate of the home country of the Company are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Profit before income tax	3,848	4,039	136,031	140,408
Tax calculated at a tax rate of 50%	1,924	2,020	68,016	70,204
Tax effect of:				
Loss of the entities not subject to tax	22	78	782	2,707
Expenses not deductible for tax purpose	295	300	10,411	10,447
Adjustment in respect of prior year	(18)	(17)	(703)	(582)
Results of operations of associates and joint ventures, net of tax	(19)	(21)	(658)	(738)
Tax credit on petroleum royalty	(336)	(389)	(11,891)	(13,514)
Tax credit on foreign corporate income tax	(81)	(9)	(2,847)	(330)
Deferred tax on functional currency	(6)	9	(211)	304
Deferred tax related to changes in tax rates	7	-	241	-
Foreign income tax	114	78	4,020	2,723
Difference in tax rate of the Group's operating countries	(279)	(216)	(9,852)	(7,494)
Others	(2)	(2)	(94)	(23)
Tax charge	1,621	1,831	57,214	63,704

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	2024	2023	2024	2023
Profit before income tax	1,501	1,685	53,009	58,515
Tax calculated at a tax rate of 50%	751	843	26,505	29,257
Tax effect of:				
Gain from the entities not subject to tax	(27)	(15)	(969)	(516)
Expenses not deductible for tax purpose	132	146	4,662	5,083
Adjustment in respect of prior year	(4)	21	(216)	729
Tax credit on petroleum royalty	(225)	(283)	(7,927)	(9,806)
Tax credit on foreign corporate income tax	(37)	-	(1,298)	-
Foreign income tax	60	31	2,134	1,079
Tax rate difference impact on profits before tax	(211)	(162)	(7,451)	(5,629)
Others	-	-	64	(32)
Tax charge	439	581	15,504	20,165

The Group falls within the scope of the Pillar Two model rules published by the Organisation for Economic Cooperation and Development or OECD), which require large multinational enterprises to pay a Pillar Two income tax if their average effective tax rate is below 15% in any jurisdiction in which they operate. The Group has applied the exception for recognising and disclosing information about deferred tax assets and liabilities related to the Pillar Two income taxes as provided in TAS 12.

The Group operates in jurisdictions where these legislations become effective on 1 January 2024, consisting of the Commonwealth of Australia, Canada, the Republic of Cyprus, the Kingdom of the Netherlands, the United Kingdom of Great Britain and Northern Ireland and the Socialist Republic of Vietnam. Based on management's assessment, the Group will benefit from the "Transitional Safe Harbour" for most of jurisdictions which Pillar Two legislation was effective, and the remaining jurisdictions had an effective tax rate above 15%. As a result, the Group did not recognise the Pillar Two income tax in the financial statements for the year ended 31 December 2024.

In addition, on 26 December 2024, Thailand's Global Minimum Tax legislation, including the Pillar Two rules, is enacted and will come into effect on 1 January 2025 onwards. The management of the Group is currently assessing the potential impact that Pillar Two income tax may have on the financial statements.

34 Earnings per share

Basic earnings per share for the years ended 31 December are as follows:

	Consolidated financial statements			
	Unit: US Dollar		Unit: Baht	
	2024	2023	2024	2023
Profit attributable to equity holders of parent (unit: million)	2,227	2,208	78,824	76,706
Adjustment				
Foreign exchange difference from repayment of subordinated perpetual loan (unit: million)	-	(49)	-	(1,725)
Profit used to determine basic earnings per share (unit: million)	2,227	2,159	78,824	74,981
Weighted average number of ordinary shares outstanding during the year (million shares)	3,970	3,970	3,970	3,970
Basic earnings per share	0.56	0.54	19.86	18.89

	Separate financial statements			
	Unit: US Dollar		Unit: Baht	
	2024	2023	2024	2023
Profit used to determine basic earnings per share (unit: million)	1,062	1,104	37,505	38,350
Weighted average number of ordinary shares outstanding during the year (million shares)	3,970	3,970	3,970	3,970
Basic earnings per share	0.27	0.28	9.45	9.66

35 Commitments and contingent liabilities

35.1 Contractual commitments

As at 31 December 2024 and 2023, significant contractual commitments contracted but not recognised as liabilities are as follows:

	Consolidated financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Capital commitments	1,678	1,778	57,021	60,837
Other commitments	569	80	19,351	2,729
Total	2,247	1,858	76,372	63,566

	Separate financial statements			
	Unit: Million US Dollar		Unit: Million Baht	
	31 December 2024	31 December 2023	31 December 2024	31 December 2023
Capital commitments	255	223	8,660	7,632
Other commitments	54	9	1,833	300
Total	309	232	10,493	7,932

35.2 Contingent liabilities

As at 31 December 2024, the Company had contingent liabilities in the form of letters of guarantee with an amount equivalent to US Dollar 344.34 million (Baht 11,703.34 million) for the consolidated financial statements (2023: US Dollar 496.18 million (Baht 16,980.96 million)) and with an amount equivalent to US Dollar 149.95 million (Baht 5,096.42 million) for the separate financial statements (2023: US Dollar 273.60 million (Baht 9,363.35 million)).

35.3 Commitments

Commitment from the guarantee of debentures and loans of subsidiaries

As at 31 December 2024, the Company has commitment to guarantee unsecured and unsubordinated capital debenture of US Dollar 1,908.11 million (2023: US Dollar 1,908.11 million) and the senior guaranteed debentures with a bondholders' representative of Baht 13,500 million (2023: Baht 13,500 million) for PTTEP Treasury Center Company Limited (PTTEP TC), a subsidiary of the Company.

As at 31 December 2024 and 2023, the Company has a commitment to of a guarantee cross currency swap transactions for PTTEP TC to swap Baht debenture to US Dollar with a guaranteed amount of US Dollar 348.66 million and to swap the Pound Sterling loan to a related party from Pound Sterling to US Dollar (Cross Currency Swap) with a guaranteed amount of US Dollar 287.05 million.

As at 31 December 2024 and 2023, the Company has commitment to the guarantee senior debt financing agreements in the form of project finance for a subsidiary of MOZ LNG1 Holding Company Ltd (MOZ LNG1 Holding) with a US Dollar 14,900 million facility, which is guaranteed by the Company based on the Group's participating interest in MOZ LNG1 Holding of 8.5%, which is equivalent to US Dollar 1,266.50 million.

The Company has commitment to guarantee PTTEP TC's US Dollar loan agreement for revolving credit facilities with a financial institution. The total loan facility is in amount of US Dollar 400 million. As at 31 December 2024 and 2023, there is unused credit facilities of US Dollar 400 million.

36 Events occurring after the reporting date

On 1 January 2025, PTTEP Australia Timor Sea Pty Ltd (PTTEP AT), a subsidiary of the Group, completed the dissolution.

On 11 January 2025, Abu Dhabi Offshore 1, in which PTTEP MENA Limited (PTTEP MENA), a subsidiary of the Group, holds a 30% participating interest, ended its first exploration phase. The operator and PTTEP MENA agreed to not enter the second exploration phase and returned the block to the Government of United Arab Emirates.

Supplemental Information on Petroleum Exploration and Production Activities (Unaudited)

(A) PTTEP and Our Subsidiaries' Petroleum Reserves Report as of December 31, 2024

The total Proved Reserves of PTTEP and our subsidiaries as of December 31, 2024 are shown in the attached table. The Proved Reserves are reviewed annually by Company's earth scientists and reservoir engineers to ensure rigorous professional standards. The Proved Reserves are reported on a gross basis, which includes the Company's net working interest and related host country's interest.

Furthermore, in order to improve efficiency, check and balance of the Reserves estimation, reporting and disclosure, the company maintains a Reserves Committee which has the following roles and responsibilities:

- Review and endorse the Company's Annual Reserves
- Review and approve Major Changes of Reserves, and Reserves for Newly-Acquired Project
- Ensure that all activities that related to reserves estimation and disclosure of reserves information conform to regulatory and legal requirements as well as to corporate and international standards
- Appoint Reserves Auditor and approve Reserves Audit Results to ensure compliance with Company's framework and continual process improvement

As of December 31, 2024, the total amount of Proved Reserves of PTTEP Group's projects[1] was 488 million stock-tank barrels (MMSTB) of crude oil and condensate[2] and 6,999 billion standard cubic feet (BSCF) of natural gas or 1,149 million barrels of oil equivalent (MMBOE). The total amount of Proved Reserves in terms of oil equivalent was therefore 1,637 MMBOE.

In 2024, the total production of PTTEP Group[1] was 255 MMBOE, consisting of 61 MMSTB of crude oil and condensate[2] and 1,209 BSCF (194 MMBOE) of natural gas. This was equivalent to the average production rate of 696,257 barrels of oil equivalent per day (BOED) which was approximately 57,938 BOED or 9 percent increase from the previous year. The increase in production mainly comes from G1/61 Project production ramp-up to 800 MMSCFD since March 20, 2024. In addition, production of Yadana project increase according to additional working interest of 25.8788% transferred from Unocal Myanmar Offshore Company Limited since April 1, 2024.

[1] Include APICO Joint Venture project

[2] Include Natural Gas Liquids (NGL)

PTT Exploration and Production Public Company Limited

Crude Oil and Condensate and Natural Gas Proved Reserves[1]

	Crude Oil and Condensate [2]			Natural Gas			Barrel of Oil Equivalent		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of proved reserves of consolidated companies									
As of December 31, 2022	133	232	365	3,491	2,981	6,472	704	730	1,434
1) Revision of previous estimates	32	1	33	617	(1)	616	123	1	124
2) Improved recovery	3	0	3	2	-	2	3	0	3
3) Extensions and discoveries	10	3	13	273	278	551	55	46	101
4) Purchases/Sales of Petroleum in place	-	(1)	(1)	-	-	-	-	(1)	(1)
5) Production	(35)	(25)	(60)	(686)	(379)	(1,065)	(146)	(86)	(232)
As of December 31, 2023	143	210	353	3,697	2,879	6,576	739	690	1,429
Company's share of proved reserves of consolidated companies									
As of December 31, 2023	143	210	353	3,697	2,879	6,576	739	690	1,429
1) Revision of previous estimates	33	30	63	435	64	499	103	43	146
2) Improved recovery	3	0	3	3	3	6	4	1	5
3) Extensions and discoveries	16	10	26	353	117	470	72	29	101
4) Purchases/Sales of Petroleum in place	-	104	104	-	604	604	-	202	202
5) Production	(37)	(24)	(61)	(809)	(390)	(1,199)	(167)	(86)	(253)
As of December 31, 2024	158	330	488	3,679	3,277	6,956	751	879	1,630

[1] The Proved Reserves are reported on a gross basis which includes the Company's net working interest and the related host country's interest.

[2] Include Natural Gas Liquids (NGL)

PTT Exploration and Production Public Company Limited

Crude Oil and Condensate and Natural Gas Proved Reserves[1]

	Crude Oil and Condensate[2]			Natural Gas			Barrel of Oil Equivalent		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of proved reserves of equity companies[3]									
As of December 31, 2022	0	-	0	51	-	51	8	-	8
1) Revision of previous estimates	(0)	-	(0)	1	-	1	0	-	0
2) Improved recovery	-	-	-	-	-	-	-	-	-
3) Extensions and discoveries	-	-	-	-	-	-	-	-	-
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(0)	-	(0)	(8)	-	(8)	(1)	-	(1)
As of December 31, 2023	0	-	0	44	-	44	7	-	7
Company's share of proved reserves of equity companies[3]									
As of December 31, 2023	0	-	0	44	-	44	7	-	7
1) Revision of previous estimates	0	-	-	9	-	9	2	-	2
2) Improved recovery	-	-	-	-	-	-	-	-	-
3) Extensions and discoveries	-	-	-	-	-	-	-	-	-
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(0)	-	(0)	(10)	-	(10)	(2)	-	(2)
As of December 31, 2024	0	-	0	43	-	43	7	-	7
Total Proved Reserves As of December 31, 2024	158	330	488	3,722	3,277	6,999	758	879	1,637

[1] The Proved Reserves are reported on a gross basis which includes the Company's net working interest and the related host country's interest.

[2] Include Natural Gas Liquids (NGL)

[3] Reserves from APICO Joint Venture project

(B) Capitalized Costs Relating to Oil and Gas Producing Activities

Capitalized costs represent cumulative expenditures for proved and unproved properties together with related accumulated depreciation, depletion, amortization, and allowance for impairment loss on assets.

Proved properties include exploration wells, development wells, transportation pipelines, producing facilities, right-of-use assets and decommissioning costs. Unproved properties represent amounts associated with capitalized cost of projects which have not yet found proved reserves.

(Unit: Million US Dollar)	2024	2023
Proved properties	40,151	36,238
Unproved properties	2,659	2,756
Gross capitalized costs	**42,810**	**38,994**
Accumulated depreciation, depletion, amortization, and allowance for impairment	(25,003)	(22,676)
Net capitalized costs	**17,807**	**16,318**

(C) Costs Incurred in Oil and Gas Property Acquisition, Exploration, and Development Activities

Costs incurred in oil and gas property acquisition, exploration and development activities represent amounts both capitalized and charged to expense during the year.

Property acquisition costs include costs to purchase proved and unproved properties.

Exploration costs include geological and geophysical expenses, exploratory drilling cost as well as reservation fee for exploration blocks.

Development costs include costs associated with drilling and equipping development wells, improved recovery systems, facilities for extraction, treating, gathering and storage, producing facilities for existing developed reserves, and costs associated with transportation pipeline.

(Unit: Million US Dollar)	2024			2023		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	5	534	539	8	-	8
- Unproved	-	-	-	6	-	6
Exploration costs	89	82	171	59	150	209
Development costs	2,135	847	2,982	1,694	605	2,299
Total	**2,229**	**1,463**	**3,692**	**1,767**	**755**	**2,522**

(D) Results of Operations for Producing Activities

Results of operations from oil and gas producing activities for the year 2024 and 2023 are shown in the following table.

Operating expenses include lifting costs incurred to operate and maintain productive wells and related equipment.

Exploration expenses consist of geological and geophysical costs, and exploratory well including project cost write off expenses.

Administrative expenses are expenses directly related to oil and gas producing activities.

Depreciation, depletion, and amortization expenses relate to capitalized costs incurred in acquisition, exploration and development activities, transportation pipeline, including amortized decommissioning costs.

Other expenses (income) mainly include impairment loss on assets and goodwill, foreign exchange gains and losses directly related to oil and gas producing activities, gain on disposal of participating interests and other income.

Income tax expenses are based on the results of operations from petroleum producing activities.

General corporate overhead and finance costs are excluded from the results of operations for petroleum producing activities.

(Unit: Million US Dollar)	2024			2023		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Revenues						
Revenues from sales – Related parties	5,059	1,965	7,024	4,890	1,869	6,759
Revenues from sales – Third parties	340	1,778	2,118	302	1,866	2,168
Total revenues from sales	**5,399**	**3,743**	**9,142**	**5,192**	**3,735**	**8,927**
Expenses						
Operating expenses	876	834	1,710	802	757	1,559
Exploration expenses	11	114	125	5	89	94
Administrative expenses	102	105	207	71	94	165
Petroleum royalties	352	44	396	397	53	450
Depreciation, depletion and amortization	1,694	948	2,642	1,412	873	2,285
Other (income) / expenses	(65)	(67)	(132)	(97)	3	(94)
Total expenses	**2,970**	**1,978**	**4,948**	**2,590**	**1,869**	**4,459**
Results before income taxes	**2,429**	**1,765**	**4,194**	**2,602**	**1,866**	**4,468**
Income tax expenses	731	885	1,616	866	945	1,811
Net results of operations	**1,698**	**880**	**2,578**	**1,736**	**921**	**2,657**

(E) Standardized Measure of Discounted Future Net Cash Flows (SMDCF) Relating to the Proved Oil and Gas Reserves

The standardized measure of discounted future net cash flows related to the above proved oil and gas reserves, is computed by applying 12-month average prices* (with consideration of price changes only to the extent provided by contractual arrangements), to the estimated future production of year-end remaining proved oil and gas reserves less estimated future expenditures (based on year-end costs) to be incurred in developing and producing the proved reserves.

Future income taxes are calculated by applying the appropriate year-end statutory tax rates to the future pre-tax net cash flows and deducted by applicable tax deductions or tax credits.

Net Cash flows are discounted using a rate of 10% per year to reflect the estimated timing of the future cash flows.

The estimation of discounted future net cash flow shown below is not intended to represent the fair value of oil and gas properties. The fair value should take into account of several factors, such as probable and possible reserves which may turn into proved reserves in the future, anticipated future oil and gas prices, interest rates, changes in development and production costs and risks associated with future production. Therefore, the fair value will subject to the view and perception of analyst.

* Twelve-month average prices are calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month.

Standardized Measure of Discounted Future Net Cash Flows Relating to Prove Oil and Gas Reserves

(Unit: Million US Dollar)	Domestic		Foreign		Total	
	2024	2023	2024	2023	2024	2023
Future cash inflows	20,390	19,515	34,389	27,091	54,779	46,606
Future production costs	(7,544)	(7,012)	(7,517)	(6,128)	(15,061)	(13,140)
Future development costs	(6,268)	(6,165)	(5,613)	(4,588)	(11,881)	(10,753)
Future income tax expenses	(1,985)	(852)	(6,097)	(4,579)	(8,082)	(5,431)
Future net cash flows	**4,593**	**5,486**	**15,162**	**11,796**	**19,755**	**17,282**
10% annual discount	(1,065)	(1,321)	(9,189)	(6,070)	(10,254)	(7,391)
Standardized measure of discounted future net cash flows (SMDCF) of consolidated companies	**3,528**	**4,165**	**5,973**	**5,726**	**9,501**	**9,891**
SMDCF of equity companies [(1)]	194	173	-	-	194	173
Total SMDCF	**3,722**	**4,338**	**5,973**	**5,726**	**9,695**	**10,064**

[(1)] included investment in APICO Joint Venture project

Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Unit: Million US Dollar)	2024	2023
Present value at beginning of year of consolidated companies	**9,891**	**12,003**
Sales and transfers of oil and gas produced, net of production costs during period	(6,512)	(7,087)
Development costs incurred during the period	2,954	2,541
Net changes in prices and production costs	(415)	(4,497)
Net changes in development costs	(231)	(208)
Extensions, discoveries and improved recovery	1,275	1,661
Revisions of previous quantity estimates	2,823	1,243
Purchases / sales of petroleum in place	5,230	0
Accretions of discount	(2,863)	1,878
Net changes in income taxes	(2,651)	2,357
Present value at the year end of consolidated companies	**9,501**	**9,891**
Present value at the year end of equity company [1]	194	173
Total Present value at the year end	**9,695**	**10,064**

[1] included investment in APICO Joint Venture project

(F) Other Information

Producing Oil and Gas Wells

The numbers of producing wells[1] as of December 31, 2024 were as follows:

	Oil	Gas
Thailand	1,845	2,776
Overseas:		
Southeast Asia	114	294
Others	15,212	154
Total	17,171	3,224

Definition of producing wells:

- Producing wells: wells which are either currently producing or temporarily closed but exclude water disposal wells or wells which have been plugged & abandoned.
- Producing Oil wells: wells which primarily produce oil, with or without associated gas.
- Producing Gas wells: wells which primarily produce natural gas, with or without associated liquids.

[1] Total number of wells reported at 100% (Gross), not only PTTEP's participating interest

Drilling in Progress of Oil and Gas Wells

The numbers of wells[1] in progress as at December 31, 2024 were as follows:

	Number of Well
Exploratory	
Thailand	1
Overseas:	
Southeast Asia	2
Others	2
Total	5
Development	
Thailand	68
Overseas:	
Southeast Asia	-
Others	1
Total	69

Oil and Gas Wells[1] Drilled Annually in 2024

	Technical Success	Dry Well
Exploratory		
Thailand	10	1
Overseas:		
Southeast Asia	3	-
Others	29	-
Total	42	1

	Productive Well	Dry Well
Development		
Thailand	580	11
Overseas:		
Southeast Asia	25	1
Others	848	1
Total	1,453	13

[1] Total number of wells reported at 100% (Gross), not only PTTEP's participating interest.

Quarterly information in 2024 and 2023 for the consolidated financial statements are as follows:

Unit: Thousand US Dollar

Year 2024	Q4	Q3	Q2	Q1
Revenues				
Revenue from sales	2,214,099	2,133,415	2,257,467	2,093,482
Revenue from pipeline transportation	33,496	40,044	40,881	29,417
Other income				
Gain on foreign exchange rates	-	22,741	799	-
Gain on remeasuring of financial instruments	39,993	-	13,964	-
Interest income	55,395	59,846	66,399	56,700
Other income	62,004	50,930	32,171	29,487
Total revenues	**2,404,987**	**2,306,976**	**2,411,681**	**2,209,086**
Expenses				
Operating expenses	424,494	367,986	309,718	299,610
Exploration expenses	6,057	45,837	26,601	46,299
Administrative expenses	169,746	129,436	111,533	105,356
Petroleum royalties	94,730	93,523	104,226	103,908
Depreciation, depletion and amortisation	626,913	722,533	716,250	623,245
Other expenses				
Loss on foreign exchange rates	14,987	-	-	2,063
Loss on remeasuring of financial instruments	-	31,036	-	11,832
Finance costs	77,604	84,507	87,501	84,854
Total expenses	**1,414,531**	**1,474,858**	**1,355,829**	**1,277,167**
Share of profit of associates and joint ventures	21,077	1,019	5,475	10,181
Profit before income taxes	**1,011,533**	**833,137**	**1,061,327**	**942,100**
Income taxes	(472,651)	(321,662)	(408,277)	(418,589)
Profit for the period	**538,882**	**511,475**	**653,050**	**523,511**
Profit (loss) attributable to:				
Owners of the parent	538,854	511,576	653,145	523,548
Non-controlling interests	28	(101)	(95)	(37)
	538,882	**511,475**	**653,050**	**523,511**

Unit: US Dollar

	Q4	Q3	Q2	Q1
Earnings per share				
Basic earnings per share	0.13	0.13	0.17	0.13

Unit: Thousand US Dollar

Year 2023	Q4	Q3	Q2	Q1
Revenues				
Revenue from sales	2,201,548	2,192,607	1,923,876	2,193,048
Revenue from pipeline transportation	29,490	30,801	33,595	34,181
Other income				
Gain on foreign exchange rates	25,270	-	8,798	18,966
Gain on remeasuring of financial instruments	-	-	28,538	-
Gain on disposal of participating interests	73,239	-	-	-
Interest income	43,247	36,906	37,334	34,787
Other income	38,242	31,442	41,488	33,373
Total revenues	2,411,036	2,291,756	2,073,629	2,314,355
Expenses				
Operating expenses	280,302	337,237	247,249	360,053
Exploration expenses	62,151	15,426	5,625	10,842
Administrative expenses	167,774	113,153	105,718	100,293
Petroleum royalties	109,240	106,837	93,562	140,516
Depreciation, depletion and amortisation	653,927	629,444	559,716	491,624
Other expenses				
Loss on foreign exchange rates	-	4,905	-	-
Loss on remeasuring of financial instruments	22,457	19,904	-	41,765
Impairment loss on assets and goodwill	120,000	-	-	-
Finance costs	66,244	75,458	75,596	77,159
Total expenses	1,482,095	1,302,364	1,087,466	1,222,252
Share of profit of associates and joint ventures	11,417	9,096	9,623	12,420
Profit before income taxes	940,358	998,488	995,786	1,104,523
Income taxes	(426,247)	(484,442)	(385,423)	(535,276)
Profit for the period	514,111	514,046	610,363	569,247
Profit (loss) attributable to:				
Owners of the parent	514,016	514,102	610,461	569,247
Non-controlling interests	95	(56)	(98)	-
	514,111	514,046	610,363	569,247

Unit: US Dollar

	Q4	Q3	Q2	Q1
Earnings per share				
Basic earnings per share	0.13	0.13	0.14	0.14

Petroleum Sales Volume and Average Unit Prices

	2024	2023
Net sales of petroleum (BOED)	488,794	462,007
Average petroleum unit prices		
Average unit prices of crude oil and condensate (USD/BBL)	77.20	79.09
Average unit prices of natural gas (USD/MMBTU)	5.87	6.00
Average unit prices of petroleum (USD/BOE)	46.78	48.21
Lifting cost (USD/BOE)	4.84	4.69

PTTEP

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