



SUSTAINABLE GROWTH *to* DRIVE ALL DREAMS



Annual Report 2024
(Form 56-1 One Report)

Thai Oil
Public Company Limited



**SUSTAINABLE
GROWTH
to DRIVE
ALL DREAMS**

Content

008	Financial Highlights	062	Future Projects	173	Relationship with Major Shareholders' Business Groups
010	Message from the Board of Directors	065	Risk Factors and Enterprise Risk Management	174	Thaioil and Subsidiaries' Business Structure
014	Audit Committee Report	077	Internal Controls	176	General Information
016	Risk Management Committee Report	080	Sustainability	185	Products and Services
018	Nomination and Remuneration Committee Report	087	Research and Development of Thaioil and Subsidiaries	188	Business Assets
020	Corporate Governance and Sustainability Committee Report	092	Human Resource and Organization Development	192	Investment Promotion Privileges
023	Thaioil and Subsidiaries' Vision, Mission, and Strategies	098	Corporate Governance Policy	194	Revenue Structure
026	Awards and Certificates of 2024 Achievement	111	Corporate Governance Report	196	Related Party Transactions
028	Summary of Business Achievements in 2024	120	Organization Structure	209	Management Discussion and Analysis of Financial Position and Operating Results Fiscal Year 2024
034	2024 Milestones & Significant Progress of Thaioil and Subsidiaries	124	Board of Directors	218	Summary of Financial Data
040	Market Review and Outlook	152	Executives	229	Board of Directors' Responsibility for Financial Reporting
050	Feedstock Procurement, Product Distribution, and Industrial Competition	158	Executive Biography (Disclosure Required by Law)	230	Financial Statements
055	Production Processes and Process Development	169	Assets and Shareholders Information		

Investors can find financial, related party transaction, and company's past information on Thaioil's website (www.thaioilgroup.com) through 'Investor Relations/Financial Information' and 'Publication'

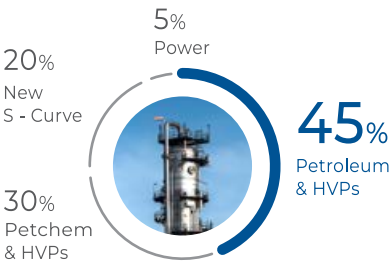


DREAMS OF EMPOWERING THE FUTURE FOR ALL

To strive for competitive advantage enhancement, Thailoil endeavors to value maximization from the existing production base and establish itself as a business excellence. Moreover, increasing the manufacturing production capacity of the Clean Fuel Project (CFP) for value enhancement in the core business. In addition, becoming a sustainable organization for supporting everyone in achieving their dreams, and building energy security.

Clean Fuel
Project (CFP) | PT Chandra Asri
Petrochemical (CAP)

PORTFOLIO STRATEGIC DIRECTION



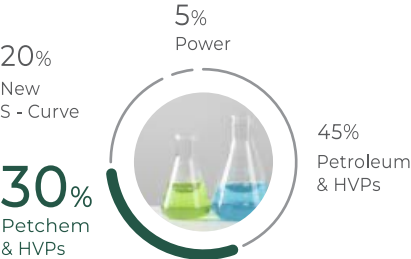


DREAMS OF GREEN INNOVATIONS

To build sustainability and respond to megatrends, Thailoil seeks investment opportunities in High-Value Businesses with low-carbon emissions like Disinfectants+Surfactants (D+S). Furthermore, Thailoil is interested in investing in businesses that are eco-friendly and technology-driven. Integrated value chain management is also our commitment to improve the quality of life and ensure the well-being of all.

- High Value Business
- Specialty Chemicals
- International Value Chain

PORTFOLIO STRATEGIC DIRECTION





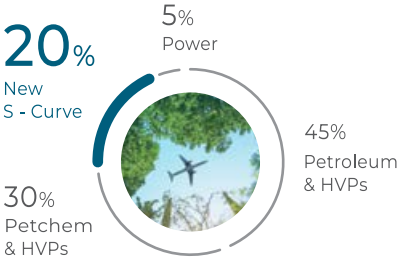
DREAMS OF SUSTAINABILITY AND WELL-BEING FOR ALL

Our current investment is in low-carbon enterprises and goods, bearing in mind our commitment to a sustainable environment and communities. Thaioil aspires to combine the ambition of a green world with responsible business practices while achieving the Net Zero target between 2026 and 2060.

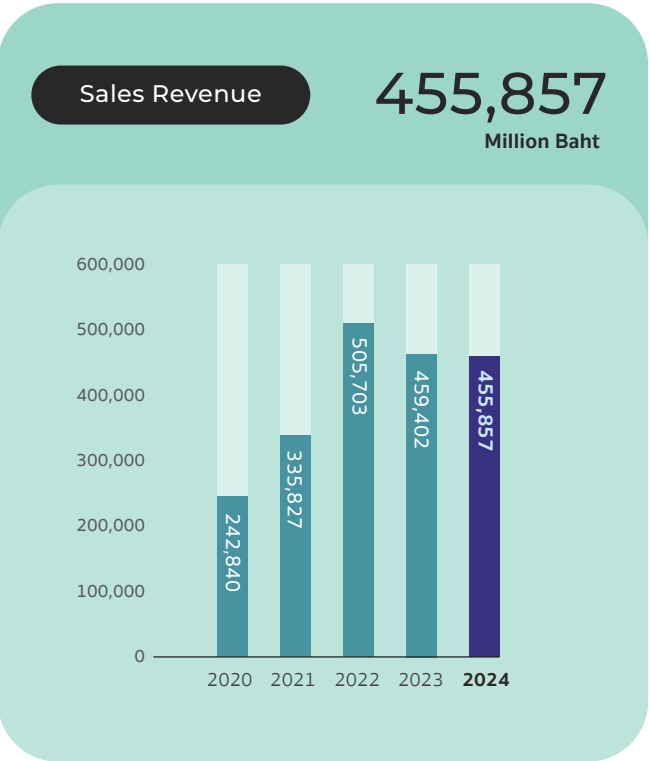
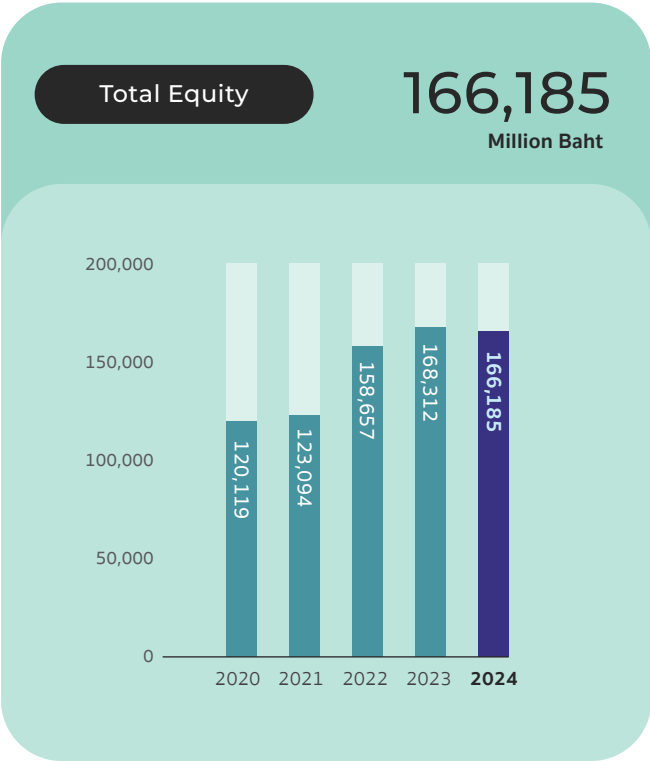
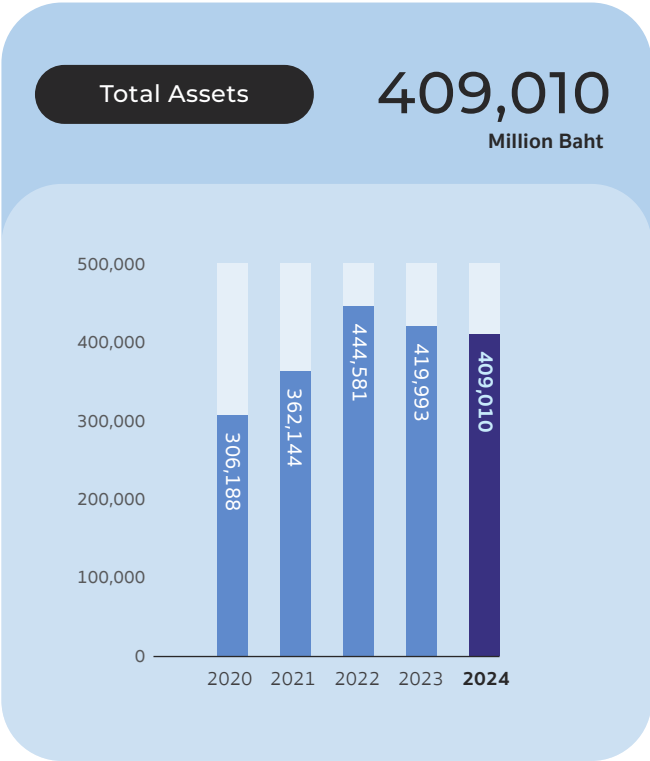
Sustainable Aviation
Fuel : SAF

Decarbonization
Business

PORTFOLIO STRATEGIC DIRECTION



Financial Highlights



		2024	2023	2022	2021	2020 ⁽¹⁾
--	--	------	------	------	------	---------------------

Operating Results

Sales Revenue	Million Baht	455,857	459,402	505,703	335,827	242,840
EBITDA	"	22,026	35,453	37,187	28,142	(2,056)
Net Profit/(Loss)	"	9,959	19,443	32,668	12,578	(3,301)
Basic Earnings/(Loss)	Baht/Share	4.46	8.70	15.63	6.17	(1.62)

Financial Position

Total Assets	Million Baht	409,010	419,993	444,581	362,144	306,188
Total Liabilities	"	242,825	251,681	285,924	239,050	186,069
Total Equity	"	166,185	168,312	158,657	123,094	120,119

Financial Ratios

Interest Coverage Ratio	Times	5.5	8.7	9.6	7.8	(0.5)
Current Ratio	"	1.7	1.7	1.5	2.6	4.0
Net Debt to Equity Ratio	"	0.8	0.9	1.0	1.4	0.7
Return on Equity ⁽⁵⁾	Percent	6.0	12.0	23.5	10.7	(2.4)
Return on Assets	"	2.4	4.5	8.2	3.9	(1.0)

Important Information in Capital Market

Annual Average	Baht/Share	50.69	50.40	53.93	54.38	43.95
Daily Closing Stock Price						
Market Capitalization ⁽³⁾	Million Baht	63,106	120,069	114,752	110,937	89,659
Dividend Payment	Baht/Share	xx ⁽²⁾	3.40	3.70	2.60	0.70
Dividend Yield ⁽⁴⁾	Percent	xx	6.7	6.9	4.8	1.6
Book Value	Baht/Share	73.17	74.12	69.85	59.25	56.97

Remark :

⁽¹⁾ Re-present the Revisited the impact on the financial statements in accordance with Thai Financial Reporting Standards No. 5-Non-Current Assets Held for Sale and Discontinued Operations (TFRS 5)

⁽²⁾ Include the interim dividend for 2024 half-year results at the rate of 1.20 baht per share paid on September 27, 2024, and the remaining dividend of xx baht per share which is to be proposed to the 2025 Annual General Meeting of Shareholders for approval

⁽³⁾ Calculated from the annual average of the daily closing stock price

⁽⁴⁾ Calculated from average closing price for the year 2024

⁽⁵⁾ Represent from the revised method of calculation based on The Securities and Exchange Commission, Thailand

Message from the Board of Directors



Air Chief Marshal

A handwritten signature in white ink on a dark blue background.

Chanon Mungthanya
Chairman of the Board

A handwritten signature in white ink on a dark blue background.

Mr. Bandhit Thamprajamchit
Chief Executive Officer and President

Dear Shareholders,

With the volatile situation in 2024, Thaipol and Subsidiaries were relentlessly challenged, whether by concerns about economic growth, geopolitical conflicts, uncertainty of the energy industry, and public energy policy, including the challenge of the Clean Fuel Project (CFP)'s delay. Nonetheless, the Board of Directors kept driving activities under the strategic plan of Thaipol along the "Empowering Human Life through Sustainable Energy and Chemicals" vision with proactive actions and relentless improvement of management and employees and cooperative efforts of all sectors. This year, therefore, Thaipol and Subsidiaries emerged with a net profit of THB 9,959 million.



Integrated Value Chain Management to Excellence

Thaipol and Subsidiaries aim to increase profits by stressing Integrated Management to ensure Operational Excellence, Commercial Excellence, and Value Chain Excellence. Feedstock optimization is employed to identify new crude oil grade potential with significant yield, alongside a partnership with the PTT Group for crude oil procurement. To meet the market demand and oil demand, we provided resilient production planning, process safety, and efficient processes. As a result, we have successfully maintained a high utilization rate as well as an outstanding safety record at the "Excellence" level. Moreover, not only products have been sold to regional markets with high market growth rates, but consistently High Value Products (HVP) have also been sold in parallel with optimal cost control management. All these moves gave Thaipol and Subsidiaries remarkable overall outcomes as planned.

SUSTAINABLE GROWTH TO DRIVE ALL DREAMS

ENSURE LEGACY ASSETS VALUE

Generate benefits and returns from assets



INTEGRATE SUSTAINABILITY INTO BUSINESS

Emphasize on sustainability management by incorporating sustainability as a part of existing business operation and so equipped with License to Operate & Grow



PREPARE FOR SELECTIVE GROWTH

Invest in business group with potentials to grow into high value business with low-carbon emission, supporting future world trend





Commitment to Project Implementation and Scaling up Business to enhance Competitiveness

Thaioil and Subsidiaries remain committed to driving and scaling up business expansion projects under defined strategic directions and plans, notably the Clean Fuel Project (CFP), which has achieved its first success with the trial run of the diesel Hydrodesulfurization Unit 4 (HDS-4) in order to enhance the production of the Euro 5 diesel fuel standard since February 14, 2024. Meanwhile, the other units are currently under construction with the main contractor who agreed to abide by the EPC contract. Additionally, Thaioil focuses on the expansion of the Disinfectant+Surfactants (D+S) chemicals business, which has a high value and growth rate. Finally, Thaioil commands Integrated Value Chain Management by expanding and distributing commodity products and specialty chemicals to target countries to enhance a sustainable competitiveness.



Enhancing Potential and Preparing Readiness for Business Value

Recognizing that Thaioil's personnel hold the key to organizational driving to overcome challenges and continuously operate and achieve targets as planned, Thaioil and Subsidiaries groom the people for business growth. Advocating a better quality of life, Thaioil nurtures a "Happy Employee, Happy Company" culture, duly restructure the organization to suit future endeavors, applies Digital Literacy to add business value, and fosters innovation to create new products that lead to commercial uses while addressing customers' requirements. Finally, Thaioil and Subsidiaries maintain fiscal discipline by maintaining an Investment Grade from a reputable internal and external Credit Rating Agency (CRA).



Integrated ESG for Sustainable Growth

Thaioil and Subsidiaries strive to integrate sustainability into business operations and future growth. The company, duly fulfills the expectations of all stakeholders with the ESG framework, the pledge calls on Thaioil and Subsidiaries to tackle decarbonization through goals such as reducing the greenhouse gas emissions by 15% by 2035 from the base year (Interim Target), attaining Carbon Neutrality by 2050, and achieving net zero greenhouse gas emissions by 2060. In 2024, Thaioil proceeded with the energy efficiency improvement project in each unit while applying Internal Carbon Pricing (ICP) as an element of project investment criteria. Moreover, the social projects are continuously executed, such as solar power generation installation for Border Patrol Police schools and subdistrict healthcare centers. Finally, Thaioil and Subsidiaries continuously accepted and recognized by all sectors for CG practices and business code of conduct.



Uphold Standards, Strive for Excellence

The aforementioned projects have earned Thaioil and Subsidiaries 30 awards and recognition from several leading both international and domestic entities, with acclaim spanning all aspects, including SET Award 2024 in the Sustainability Excellence under the Commended Sustainability Awards; recognized as a DJSI member for the 12th consecutive year; Sustainable Asia Award; The Strongest Adherence to Corporate Governance Award; the Best Strategic CSR award for the 9th consecutive year; selected to be one of the FTSE4GOOD Emerging Index and ASEAN 5 Index groups; Low Emission Support Scheme (LESS) certificate 2024; and certified Best Places to Work 2024.

The Board of Directors, along with executives and staff, remain grateful for all shareholders' full support to Thaioil's business operations. Thaioil and Subsidiaries pledge to leverage the robust foundation as well as the commitment to integrate knowledge, experience, and proficiency from all sectors to ensure the business operation is achieved as strategically planned. In addition, Thaioil and Subsidiaries are more than ready to fully perform in order to overcome various disruptions to ensure shareholders' best interests and address stakeholders' expectations.

Audit Committee Report

Lt. Gen. Apichat Chaiyadar

Chairman of the Audit Committee



Dear Shareholders,

The Board of Directors (the Board) appointed the Audit Committee (AC), consisting of three independent directors, all of whom command diverse expertise, skills, and experience. The AC is chaired by Lt. Gen. Apichat Chaiyadar. Pol. Capt. Piya Raksakul and Mrs. Pantip Sripimol serving as members; the composition and qualifications are regarded as suitable. Mrs. Pantip Sripimol is particularly qualified to review financial statements' credibility against the requirements of Thailand's Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET).

The Committee independently executed Board-assigned and charter duties, which conform to the requirements and best practices for audit committees of SEC and SET. In 2024, the AC held nine meetings with perfect attendance by all members. The meetings included consultation with management, the head of Corporate Internal Audit, the internal auditor, and the external auditor. In addition, the AC held one non-executive meeting with the external auditor for open consultation on the external auditor's work, the auditor's views, matters from the review and audit of financial reports as well as the cooperation with the committee and Corporate Internal Audit. Each quarter, the AC filed a performance report to the Board. This year's performance highlights appear below:

1. Financial Report Reviews

The AC reviewed financial reports, including quarterly and annual separate and consolidated reports. The AC also

examined key audit matters, the suitability of the account entry system, and the disclosure of other key information. To this end, the committee reviewed the credibility of estimated figures, management assumptions requiring discretion, significant changes in figures and financial ratios, significant anomalous items, disclosed spending of mobilized funds under objectives, and display of key transactions potentially affecting financial reports, while obtaining clarification from the external auditor and management to ensure that financial report preparation was accurately, credibly, promptly, and adequately disclosed for the best interest and benefit of financial reports users. The external auditor reviewed and performed the audit and then provided unqualified opinions.

2. Connected Transactions

Having reviewed related-party transactions or those posing potential conflicts of interest with Thailoil and Subsidiaries under SET's and SEC's announcements as well as related laws and regulations, the AC concluded that such transactions comply with regular business practices, with fairness and sensibility executed for the best interests of Thailoil and its shareholders. The transactions were also promptly disclosed to SET as required.

3. Review of Compliance, Corporate Governance, Risk Management, and Internal Control

The AC has reviewed the efficiency and effectiveness of Corporate Governance in compliance with relevant laws

and regulations, emphasizing the importance of raising awareness among employees to conduct their duties with caution and thoroughness. Additionally, the AC has reassessed the regulations related to operational practices to ensure they are appropriate within the organizational context. Furthermore, the AC has underscored the importance of strategic and operational readiness to align with regulations and standards for reporting financial reports related to sustainability. The AC also reviewed the efficiency and effectiveness of risk management and mitigation measures while tracking management of key risk matters. The Committee provided observations and advised management about potential short-term and long-term risks affecting Thail's goal fulfillment so that proper steps may be taken for unexpected outcomes. Furthermore, the committee reviewed the adequacy and suitability of Thail and Subsidiaries' internal control systems through the examination of an internal audit report. The AC made observations on the findings and inquired about the causes and scopes of the auditing. The committee relentlessly and regularly oversaw and monitored improvement, thus encouraging the identification of how to prevent future harm to Thail and related parties. In addition, the Committee tracked key process improvement and advised management to be more prudent in risk management and internal control. Finally, the committee endorsed the report on the sufficiency of the internal control system as required by the SEC, resulting in confidence in Thail's appropriate and sufficient internal control.

4. Internal Audit

The AC approved strategic plans, annual and long-term audit plans, plan execution, and audit outcomes, focusing on leveraging internal audit standards to efficiently and effectively meet stakeholder expectations or add sustainable value to the organization. Furthermore, the AC advised and monitored the progress of a few significant issues in order to achieve Corporate Governance and effective internal control. The AC usually also considered the independence of the internal audit and annually reviewed the charter of the internal audit. The AC valued the manpower preparation budget, the internal audit recruitment and development to ensure staff competency and consistent efficiency and effectiveness of auditing. The committee advocated auditors' certification for greater professionalism. To this

end, the committee advocated consistently applying digital technology to the internal audit process and required internal audit assessment against international professional standards. Finally, the AC conducted the annual performance assessment of the Vice President of Corporate Internal Audit.

5. Approval of External Auditor and Auditing Fee for 2025

The committee has reviewed the suitability of the criteria for external auditor selection and nomination procedure in accordance with the SEC's regulations, taking into account qualifications such as competency, experience, audit program, performance records, independence, and audit fees. EY Office Co., Ltd. (EY) has been proposed for the Board of Directors endorsement and submitted to the 2025 Annual General Meeting for shareholder approval. Finally, the AC provided pre-concurrence to the external auditor's non-assurance services so that the auditor could present and serve Thail so that such scopes of service do not compromise its auditing independence.

In conclusion, this year the Audit Committee executed its charter duties and responsibilities with diverse expertise, prudence, and independence while providing creative views and advice for fair benefit to all stakeholders. The committee concluded that Thail and its Subsidiaries had valued efficient and effective business conduct, and prepared accurate, credible, and material financial reports in line with reporting standards along with adequate disclosure of connected transactions with potential conflicts of interest. Thail and Subsidiaries also commanded suitable and sufficient corporate governance, risk management, and internal control processes, and complied with applicable laws and regulations.

February 7, 2025

on behalf of the Audit Committee

Lieutenant General

(Apichat Chaityadar)

Chairman of the Audit Committee
Thai Oil Public Company Limited

Risk Management Committee Report

Mr. Kris Imsang

Chairman of the Risk Management Committee



Dear Shareholders,

The Board of Directors (the Board) appointed the Risk Management Committee (RMC), consisting of six members who are competent and experienced directors with various expertise and mastery of Thaioil and Subsidiaries' businesses. The committee is chaired by Mr. Kris Imsang, with Ms. Pattaralada Sa-ngasang, Ms. Phenrasmi Bhuritdhanalert, Dr. Sompop Pattanariyankool, Mr. Prasong Intaranongpai and Mr. Bandhit Thamprajamchit as members. The committee is responsible for supporting the Board in managing corporate risks to achieve business goals and enhance confidence in and credibility of Thaioil and Subsidiaries among investors and stakeholders.

The Risk Management Committee defines and reviews the corporate risk management framework and policies and processes in accordance with duties indicated in RMC charter, in addition to recommending an approach for appropriate risk management for efficient business operations, consistent with strategic business directions and plans. The RMC relentlessly supports and improves the efficiency of risk management throughout the organization under international standards so that risk management may become a corporate culture.

The committee also constantly monitors the outcomes of corporate risk management and project risks. In 2024, the RMC held a total of five meetings, with perfect attendance by members. At the first three meetings, Ms. Pannalin Mahawongtikul served as Chairman. Later, the committee elected Mr. Kris Imsang as Chairman.

The committee has fulfilled its essential duties as follows:

1. On a quarterly basis, oversaw, tracked, and reviewed plans; revised the Enterprise Risk Management Policy and the RMC Charter; recommended enterprise risk management approaches, risk management measures, key risk indicators, and key projects for 2024 so that effective and proper risk management may be in place at an acceptable level, consistent with the Risk Management Policy. The RMC regularly reported the findings of enterprise risk management together with their performance to the Board.
2. Reviewed and recommended corporate risks, mitigation plans, and 2025 key risk indices so that Thaioil and Subsidiaries may operate their business efficiently and ensure consistency with strategic directions, business plans, and prevailing business environments.

3. On a quarterly basis, the RMC oversaw, supervised, and advised on hedging oil and products, which included developing guidelines for managing the impact of hedging oil and product management, as well as monitoring levels for efficient operation and suitable risk mitigation.
4. Oversaw, monitored and advised on financial risk for efficient operation.
5. Acknowledged milestone events, risk factors as analyzed from external factors, or key risk matters affecting Thailoil as quarterly reported by management, including long-term water supply strategy and business continuity plan. Also, the committee provided management comments, advice, and support to corporate risk management at all levels.

In 2024, the Risk Management Committee concluded that Thailoil and Subsidiaries had developed an extensive corporate risk management system for all aspects of risks and commanded ongoing risk management practices to cope with prevailing circumstances. The RMC's meetings were regularly organized to promptly review key and urgent risks for the effectiveness of Thailoil and Subsidiaries' risk management process. Thailoil and Subsidiaries indeed effectively and suitably managed key corporate risks within the indicated risk appetite.

December 13, 2024

On behalf of the Risk Management Committee



(Mr. Kris Imsang)

Chairman of the Risk Management Committee
Thai Oil Public Company Limited

Nomination and Remuneration Committee Report



Pol. Lt. Gen. Thiti Sangsawang

Chairman of the Nomination and Remuneration Committee

Dear Shareholders,

Thai Oil Plc's Board of Directors (the Board) appointed the Nomination and Remuneration Committee (NRC), which consists of at least three directors, the majority of whom must be independent directors. The current committee is chaired by Pol. Lt. Gen. Thiti Sangsawang (independent director), with Lt. Gen. Apichat Chaiyadar (independent director) and Assoc. Prof. Dr. Sittidaj Pongkijvorasin (independent director) serving as members.

The NRC is charged with recruiting qualified persons under Thaioil's process and criteria for nomination as directors and the Chief Executive Officer (CEO) & President. The committee also selects directors for Board committees and reviews directors' remuneration models and criteria, before proposing for the consideration of the Board and the AGM as required by law.

In 2024, the committee executed all its charter duties, holding six meetings fully attended by all incumbent members (meeting attendance shown on page 103).

Below are the NRC's performance highlights in 2024:

Nomination

The NRC proceeded strictly with the process and criteria defined in the Corporate Governance and Code of Conduct manual to nominate qualified persons for the Board of Directors' or shareholders' approval to appoint

as required by law. To this end, the committee examined the composition and qualifications of the Board, both overall and individually, to match size, type, complexity, and diversity of Thaioil's businesses. The committee also reviewed personal qualifications, which included education, expertise, skills, experience, and specialization applicable to Thaioil's businesses, as well as independence as defined by law and the company's requirements in accordance with the defined structure and qualifications. These focus on Board Diversity, which includes gender and age, and do not allow race, nationality, or origin to become a limitation in the selection, in line with international corporate governance. Below are the highlights of the committee's performance.

1. Recruited directors in place of those who resigned during the year, namely Gen. Kukiatt Srinaka, Dr. Nattapon Nattasomboon, Mr. Terdkiat Prommool, Mr. Buranin Rattanasombat, Mr. Plakorn Wanglee, Mr. Distat Hotrakitya, Mr. Suchat Ramarch, and Ms. Pannalin Mahawongtikul, and approved and proposed a list to the Board for the appointment of Assoc. Prof. Dr. Sittidaj Pongkijvorasin, Pol. Lt. Gen. Thiti Sangsawang, Mr. Prasong Intaranongpai, Ms. Peangpanor Boonklum, Mr. Goanpot Asvinvichit, Ms. Phenrasmi Bhuritdhanalert, Mr. Kris Imsang, and Ms. Pattaralada Sa-ngasang in place of the resigned directors.

2. Recruited and nominated directors for the Board in place of retiring directors with term completion in 2024 and proposed a list to the Board and the AGM. The two re-elected directors were Dr. Sompop Pattanariyankool and Mr. Bandhit Thamprajamchit. The three replacement directors were ACM Chanon Mungthanya, Mr. Prajuck Boonyoung, and Mrs. Pantip Sripimol.
3. Recruited and nominated directors for sub-committees, namely Mrs. Pantip Sripimol to the Audit Committee, Assoc. Prof. Dr. Sittidaj Pongkijvorasin and Pol. Lt. Gen. Thiti Sangsawang to the Nomination and Remuneration Committee, Mr. Prajuck Boonyoung to the Corporate Governance and Sustainability Committee, Dr. Sompop Pattanariyankool to the Risk Management Committee, Mr. Goanpot Asvinvichit to the Corporate Governance and Sustainability Committee, Ms. Peangpanor Boonklum to the Corporate Governance and Sustainability Committee, Mr. Prasong Intaranongpai to the Risk Management Committee, Ms. Phenrasmi Bhuritdhanalert to the Risk Management Committee, Pol. Lt. Gen. Thiti Sangsawang to the Corporate Governance and Sustainability Committee (in addition to his current Nomination and Remuneration Committee chairmanship), Mr. Kris Imsang and Ms. Pattaralada Sa-ngasang to the Risk Management Committee.
4. Organized orientation and provided useful documents to newly appointed directors. In 2024, 11 new directors were appointed, namely ACM Chanon Mungthanya, Mr. Prajuck Boonyoung, Mrs. Pantip Sripimol, Assoc. Prof. Dr. Sittidaj Pongkijvorasin, Pol. Lt. Gen. Thiti Sangsawang, Mr. Prasong Intaranongpai, Ms. Peangpanor Boonklum, Mr. Goanpot Asvinvichit, Ms. Phenrasmi Bhuritdhanalert, Mr. Kris Imsang, and Ms. Pattaralada Sa-ngasang.
5. Encouraged and supported minor shareholders' nomination of directors ahead of the 2025 AGM between October 3, 2024 - January 3, 2025.

Remuneration

The NRC considered the directors' remuneration based on Thail's criteria, which include 1) the company performance and business complexity; 2) Board

performance; 3) Board Responsibilities; and 4) Comparison with peers in the same industry. The performance is highlighted below

1. Reviewed the director remuneration payment structure and criteria for shareholder approval in the 2024 AGM. The survey of comparison with leading peer companies revealed that Thail's criteria and director remuneration payment structure remained appropriate. Therefore, the same remuneration rate of 2023 had been recommended and approved by shareholders in the 2024 AGM.
2. Acknowledged the performance assessment results of the CEO & President for 2023 as well as merit salary increment and bonus payment, and submitted them for the Board's approval.
3. Acknowledged the performance assessment criteria and merit salary increment for the CEO and Executive Vice President since 2024 for the Board's approval. The performance appraisal criterion was made up of corporate KPIs (70 marks) and leadership competency (30 marks).

January 20, 2025

On behalf of the Nomination and Remuneration Committee

Police Lieutenant General

(Thiti Sangsawang)

Chairman of the Nomination
and Remuneration Committee
Thai Oil Public Company Limited

Corporate Governance and Sustainability Committee Report

Pol. Capt. Piya Raksakul

Chairman of the Corporate Governance
and Sustainability Committee



Dear Shareholders,

As assigned by the Board of Directors, the Corporate Governance and Sustainability Committee (CGC) is committed to the oversight of Thailo's steadfast compliance with the Corporate Governance (CG) Code together with sustainable development embracing the Environment, Social, and Governance (ESG) aspects under international practices. The present CGC, chaired by Pol. Capt. Piya Raksakul (independent director), consists of Pol. Lt. Gen. Thiti Sangsawang (independent director), Mr. Goanpot Asvinvichit (independent director), Mr. Prajuck Boonyoung, and Ms. Peangpanor Boonklum, serving as members.

This year the CGC held a total of five meetings, with perfect attendance by all incumbent members. It performed all the duties prescribed by the charter and as assigned by the Board, with routine reporting for the Board's acknowledgment. Below are its performance highlights.

1. Development of the CG Policy and Procedures

The CGC endorsed amendments made to the Anti-Fraud Policy, the Corporate Governance and Code of Conduct manuals, and its own charter for greater clarity and comprehensiveness. It also endorsed the Complaint Filing and/or Whistle-Blowing process for greater clarity,

prudence, and efficiency, and developed a form for Board meeting agenda proposals.

2. Oversight, Promotion, and Monitoring of CG Practices Consistent with International Practices and Rules Issued by Domestic Regulators:

- >> Endorsed the plan for organizing the 2024 Annual General Meeting of Shareholders (AGM), which subsequently proceeded smoothly under the CG Code and consistent with the AGM Checklist of the Thai Investors Association. As a result, Thailo garnered full 100 marks for the ninth consecutive year. Also, the CGC endorsed the 2024 report on AGM quality assessment and advised management to apply certain points contained in the report to the next AGM.
- >> Endorsed the criterion for giving shareholders an opportunity to propose agenda items and nominate directors ahead of the 2025 AGM
- >> Endorsed revision of the application of the CG Code 2017 to Thailo's business circumstances and context
- >> Endorsed the outcomes of the 2023 Board of Directors' performance assessment and the performance assessment form for 2024

>> Endorsed the annual CG development plan and monitored its performance outcomes under such plan. For instance, key activities for 2024 included:

>> CG: Amended customers' registration and screening process; counseled and supported TOPNEXT International Co., Ltd., in applying for renewed membership of the Thai Private Sector Collective Action against Corruption (CAC) in Q2/2024; advocated the corporate culture of CG through various communication and activities, including training on Integrated Governance, Risk Management & Internal Control, and Compliance (GRC); staging "GRC in Action" activities; and developed the "GRC The Series" short clips

>> Treatment of various stakeholder groups: Routinely communicated notable activities with shareholders and analysts; staged activities to nurture cordial relations with customers; provided academic knowledge, applied technological systems to the procurement process and staged training for suppliers on system application; nurtured and maintained good relations with government agencies through assorted activities, including academic talks for government officials; and planned manpower to sustain Thairoil's needs

3. Oversight, Promotion, and Monitoring of Actions on Sustainability Development (SD) and Corporate Social Responsibility (CSR)

>> Endorsed the annual Sustainable Development Plan together with strategies and Net Zero Greenhouse Gas (GHG) Emissions Pathway Plan by providing advice to management and tracking performance outcomes against plans. Key activities this year included:

>> Applied Internal Carbon Pricing (ICP) to the assessment of the impact of carbon prices on Thairoil's various investment projects under the climate change law to be promulgated. To this end,

ICP is applied to the calculation of such impact on project economics.

>> Reviewed the Thairoil Circular Economy Roadmap 2024-2030 under the "Thairoil CE WE GO" (Water and wastewater management, Energy management, Green procurement and office, Opportunity for upcycling) strategy

>> Fostered the corporate sustainability culture through various activities, including SD e-News and Sustainability Talks by external experts; Green Office Project; publicized sustainability data through Integrated Reports and other disclosure criteria; and knowledge-sharing on sustainability knowledge with external agencies

>> Endorsed the annual CSR Plan for community relations and CSR development by advising management and monitoring performance outcomes against plans. Key activities this year included

>> Activities promoting the quality of life for refinery neighbors spanned six aspects (public health, community economy, environment, education, society and culture, and community communication). These activities included youth sports skill development with professional coaches under a project called "Thairoil Sculpturing Youths' Dreams to Professional Athletes"; vocational support and income generation for communities through the formation of the Community Enterprise Laem Chabang Dolphin Group and the "Thairoil Market Refining Happiness" activity; education on waste management and participation in making brooms from plastic bottles under a project named "Youths Conserve the Environment TOP GREEN X, New Life for Garbage." These ongoing, regular activities have resulted in Thairoil scoring 95.54% on community engagement this year, attested by an independent consultant.

>> National social development activities. Thailoil applied the knowledge, experience, and proficiency of Thailoil and Subsidiaries to social development, focusing on optimizing natural resource consumption, including a project to install solar power systems for healthcare facilities and Border Patrol Police schools, totaling six places; a reforestation project for carbon credit covering 8,300 rai in Phrae province; cultural advocacy for employee volunteers through the “You Initiate...We Fulfill” activities in its fourth consecutive year, which stressed engagement and project development by leveraging employees’ skills, with the engagement of 1,200 employees from 30 departments.

Thailoil’s commitment and earnest intention behind all these activities have contributed to multiple accolades and recognition at the international and domestic levels, including renewed membership of the Dow Jones Sustainability Indices (DJSI) in its 12th consecutive year in the Oil & Gas Refining and Marketing Industry, assessed by S&P Global; SET Awards 2024 in the Sustainability Excellence Group (Commended Sustainability Awards); and Excellent assessment outcomes, the ultimate recognition,

under the Corporate Governance Report of Thai Listed Companies (CGR) for the 16th consecutive year. These successes have illustrated collaboration among the Board of Directors, executives, and employees in improving and upgrading CG and sustainability, which will help Thailoil earn confidence from stakeholders as well as international recognition.

January 15, 2025

On behalf of the Corporate Governance
and Sustainability Committee

Police Captain



(Piya Raksakul)

Chairman of the Corporate Governance
and Sustainability Committee
Thai Oil Public Company Limited

Thaioil and Subsidiaries' Vision, Mission, and Strategies



Vision

Empowering Human Life through Sustainable Energy and Chemicals



Mission

To enrich stakeholders' well-being and deliver sustainable returns built upon innovation, technology, and resilient portfolio, with top-class management and accountable corporate governance

Thaioil and Subsidiaries strive to become a leader in the energy and chemical sector with competitiveness in international level, by enhancing energy security while supporting domestic economic growth. At the same time, we are poised to grow businesses and elevate societal quality of life consistent with the trend of clean energy transition. This is in parallel with the environmental, social, and governance activities under the corporate **vision** of “Empowering Human Life through Sustainable Energy and Chemicals” and **mission** of “To enrich stakeholders’ well-being and deliver sustainable returns built upon innovation, technology, and resilient portfolio, with top-class management and accountable corporate governance”.

In driving the organization toward long-term, sustainable growth, Thaioil and Subsidiaries leverage three main strategies, known as 3Vs.



1) Value Maximization: Integrated Crude to Chemicals

Optimizing the value chains of current businesses by pursuing investment in petrochemicals and high value products, including specialty chemicals, to supplement flexibility and competitiveness. The products are divided into 4 businesses as follows:

Refinery business: The core production platform for petrochemical feedstock with investment in the Clean Fuel Project (CFP) to grow the diversity of crude intake and enhance long-term competitiveness, both of which contribute to domestic energy security during the looming energy transition to new energy forms

Aromatics business: An extension of the refining business to satisfy domestic and regional aromatics demand

Olefins business: An extension of the refining business to the petrochemical business through investment in PT Chandra Asri Pacific Tbk (CAP), Indonesia’s major petrochemical producer, to fulfill petrochemical demand—particularly olefins and others—and shape high growth opportunities in the Indonesian market, a net importer.

High Value Products (HVP): Product development and value chain extension to innovate high-value products to meet customers’ demand



2) Value Enhancement: Integrated Value Chain Management

Our activities enhance competitiveness for sustainability through increasing sales volumes of commodities, market expansion for specialty products, and product development

as well as distribution to promising regional markets such as Vietnam, Indonesia and India.



3) Value Diversification

Pursue investment opportunities in New S-Curve businesses for flexibility and sustainability for Thailo and Subsidiaries' investment portfolios through High-Value Businesses (HVB), including disinfectant+surfactant (D+S) businesses,

businesses compatible with megatrends with low-carbon emissions, including bio-businesses, new energy technology businesses, and businesses that enhance profit security, including the power business.

Thailo and Subsidiaries strive to sustainably operate businesses and maintain their international leadership in sustainability by leveraging the management of the Environment, Social, and Governance (ESG) in parallel with fostering confidence and meeting all stakeholders' expectations to become a truly sustainable organization.

34 Awards and Certificates of 2024 Achievement

**Management**

8 Awards

Thai Oil Plc received 7 awards, and Subsidiaries received 1 award

- Three awards at the 14th Asian Excellence Award 2024, organized by Corporate Governance Asia Magazine:
 - » Asia's Best CEO
 - » Asia's Best CFO
 - » Best Investor Relations Professional
- A Thailand Top CEO of the Year 2024 Award (energy industry category) from BUSINESS + Magazine in collaboration with Faculty of Commerce and Accountancy, Thammasat University
- Certification by WorkVenture as one of the 'Best Places to Work' for 2024
- A CEO of the Year 2024 Award in Transformation Excellence, presented by Bangkok Post Newspaper
- A perfect score of 100 in the AGM Checklist 2024 for the 9th year from the Thai Investors Association
- Sak Chaisidhi Co., Ltd., was given the Wellness Corporate Nation-Building Award by the Nation-Building Institute.





**Finance and Investment**

6 Awards

Thai Oil Plc received 6 awards

- A Best Investor Relations Company Award at the 14th Asian Excellence Award 2024, organized by Corporate Governance Asia Magazine
- Two awards at the Alpha Southeast Asia Awards 2024:
 - » Most Consistent Dividend Policy, for the 4th year
 - » Most Organised Investor Relations, for the 4th year
- Three awards from IR Magazine Forum&Awards South East Asia 2024:
 - » Best Crisis Communication
 - » Best Innovation in Shareholder Communication
 - » Rising Star



**Operations**

4 Awards

Thai Oil Plc received 2 awards, and Subsidiaries received 2 award

- The top score at the Super Star level from the PTT Group Operation Excellence Management System (OEMS) 3rd Maturity Assessment in 2024
- PTT Group Operation Excellence Award 2024 Category: Best Practice Sharing
- Sak Chaisidhi Co., Ltd., earned an Outstanding Environmental Governance and Safety Award for 9th consecutive year.
- TOP SPP Co., Ltd., was certified for its business continuity management system for power and steam generation and distribution, based on ISO 22301:2019 standards.



**Sustainability**

9 Awards

Thai Oil Plc received 9 awards

- Certification as a member of the Dow Jones Sustainability Indices (DJSI) 2024 for the 12th year in the Oil & Gas Refining and Marketing Industry, assessed by S&P Global.
- Recognition as a "Top 1% S&P Global Corporate Sustainability Assessment Score 2023" in the Oil & Gas Refining and Marketing Industry, assessed by S&P Global, for the 9th year, in the Sustainability Yearbook report for 2024.
- Membership of the Global Sustainability Index, in the "FTSE4Good Emerging Index" and "FTS4EGood ASEAN 5 Index" by FTSE Russell, UK.
- A Sustainable Asia Award at the 14th Asian Excellence Award 2024, organized by Corporate Governance Asia Magazine
- A Sustainability Excellence Award in the category of Commended Sustainability Awards at the SET Awards 2024.
- The ultimate rating (AAA level) for the 2nd consecutive year from the SET ESG Ratings 2024 (Resources sector), granted by the Stock Exchange of Thailand (SET).
- A Sustainability Disclosure Award 2024, presented by Thaipat Institute, for 7th years in a row.
- Carbon Footprint Certification for nine products, presented by the Greenhouse Gas Management Organization (Public Organization, TGO).
- Thai Oil Plc, along with Thai Paraxylene Co., Ltd., Thai Lube Base Plc, and Labix Co., Ltd., received certificates of honor as model organizations for greenhouse gas reduction under the Low Emission Support Scheme (LESS) for 2024 from the Ministry of Natural Resources and Environment.



**Corporate governance**

4 Awards

Thai Oil Plc received 3 awards, and Subsidiaries received 1 award

- Two Award for the renewal of membership in the Thai Private Sector Collective Action Against Corruption (CAC):
 - » Thai Oil received third renewal, with certification valid for 3 years (2023-2027)
 - » TOPNEXT International Co., Ltd., received first certification, valid for 3 years (2024-2027)
- The assessment of the Corporate Governance Report of Listed Companies 2024 (CGR), achieving the excellent level for 16 straight years
- An award for the Strongest Adherence to Corporate Governance for the 9th year, presented at Alpha Southeast Asia Awards 2024



**Social responsibility**

3 Awards

Thai Oil Plc received 2 awards, and Subsidiaries received 1 award

- The Best Strategic CSR Award, presented at the Alpha Southeast Asia Awards 2024, for the 9th year
- Two awards from the CSR-DIW Project 2024 Promoting industrial factories sustainable social and community responsibility, in the CSR-DIW continuous category by the Department of Industrial Work. Thailoil received the award for the 16th consecutive year, and Sak Chaisidhi Co., Ltd., received the award for the first time.



Summary of Business Achievements in 2024

In 2024, Thailoil and Subsidiaries have been facing various ongoing challenges, whether economic growth concerns, geopolitical conflicts, uncertainties in the energy industry, ambiguous government energy policy change, or the postponement of the Clean Fuel Project (CFP) challenge.

However, a robust organizational culture, dedicated workforce striving for operational excellence, prioritization of work plans, proactive execution, ongoing development and enhancement, risk management, and resilience enable the operation to navigate fluctuations and capitalize

on business opportunities during volatile circumstances. In 2024, Thailoil and Subsidiaries posted a net profit of THB 9,959 million. Below are the highlights of the business achievements:



1. Achievement in Operation under Short-Term Direction and Strategic Plans.

Thaioil and Subsidiaries have used integrated value chain management to achieve operational excellence and ensure business excellence as follows:

>> **Safety and Capacity Operation**, our prime corporate culture. Our successes in process efficiency are captured below.

- **Maintaining an Outstanding Safety Record.**

Outstanding Safety Statistics Thaioil and Subsidiaries' continuously outstanding safety records with the Total Recordable Case Frequency (TRCF) at 0.25 cases per one million man-hours, which exceeded the target. Thus, Thaioil's personal safety statistic is placed first among PTT Group due to the safety management and efficient operation. Thaioil's safety management required the cultivation of a safety culture as well as safety training for employees and contractors through a variety of project activities.

- **Utilization Rate.** The utilization rate soared to 110.5%, which surpassed the peer industrial average, while the Crude Distillation Unit 3 (CDU-3) unplanned shutdown occurred. So, this challenge reflected Thaioil's ability and resilience in production that respond to market situations and oil demand.

>> **Productivity Improvement.** This move improved Thaioil and Subsidiaries' performance outcome by THB 7,649 million. It resulted from the collaboration of employees driving new ideas for operational and commercial excellence in tandem with the efficient management of operational expenditures amid various uncertainties and challenges, as detailed below.

- **Operational Excellence.** This excellence consisted of systematic and efficient management and coordination among all functions for improved competitiveness. Prominent actions were crude

procurement and feedstock procurement for a higher yield, process enhancement for greater efficiency, as well as saved process energy consumption, all contributed to increased energy efficiency.

- **Commercial Excellence.** This excellence stemmed from proactive marketing management. Notable actions were product sales to vibrant, high-demand markets, collaboration with PTT Group in crude procurement and exporting products, as well as the sale of High Value Products (HVP).

- **Cost Management.** This achievement resulted from financial, accounting, and other cost reductions, including insurance bidding with PTT Group, proactive foreign exchange rate risk management, and procurement management.



2. Long-Term Strategic Execution for Sustainability.

In driving our businesses, Thaioil leveraged the 3Vs strategies to shape national energy security while growing new businesses consistent with megatrends. In 2024, the successful projects were

>> **The achievement of Thaioil's first success with the trial run of the diesel Hydrodesulfurization Unit-4 (HDS-4)** to enhance flexibility and the production of the Euro 5 diesel fuel standard in response to public policy since February 14, 2024.

>> **Growth in High Value Business (HVB).** Thaioil is focusing on the Disinfectant+Surfactants (D+S) chemicals business, which plays a significant role in the high-growth rate and value. In 2024, Thaioil and Subsidiaries created marketing moves for these products and signed an academic collaboration agreement with Suan Dusit University to jointly develop research on technology and products for the high value products (HVB).

>> **Product Market Growth and Sales in Target Countries.**

In Vietnam, Indonesia, and India, this year we strived for growth through the TOPNEXT International group (TX) to enhance sustainable business competitiveness. Thailoil and Subsidiaries engaged in several activities, including raising commodity sales and growing the market to specialty products. Also, the commercial operation of terminal expansion in a major port in northern Vietnam since October 2024, Hai Phong would create opportunities for market penetration and the solvent and chemical business expansion to meet the rising demand accompanying economic growth.

>> **Study of Specialty Chemical Business.** Our goal is product innovation as well as petrochemical and specialty chemical technical services. To this end, Thailoil improved the quality of polymers to meet customers' needs. In 2024, Thailoil and Subsidiaries researched data and selected markets as well as fascinating products while developing details of short-term and long-term plans.

>> **Study of Sustainable Aviation Fuel (SAF) Production:** In conjunction with PTT Group and business alliance, we developed the Hydroprocessed Esters and Fatty Acid (HEFA) and the Alcohol to Jet (ATJ) technologies in addition to the study of co-processing with our current processes.

>> **Investment through Corporate Venture Capital (CVC).** In 2024, Thailoil and Subsidiaries are investing in green hydrogen. And we are now investing in startup and venture capital funds.

>> **Reaching an agreement with the Treasury Department, Ministry of Finance, in registering an up-front land leasing right** (a "Joint-Venture Agreement on Leasing a State Properties") signed on August 21, 2018. The contract period of 30 years is from September 11, 2022, until September 10, 2052 for the real right of the

lease, and for the continuous Thailoil and Subsidiaries' business benefits.



3. Achievement in Strategic Support and Sustainability Management

3.1 Treasury Management

>> **Retention of investment grade ratings** from credit rating agencies, namely Moody's, S&P Global, and Fitch Ratings, which was maintained by proactive communication and relations with credit rating agencies in parallel with financial discipline.

>> **Fiscal Management through Financial Tools.** Financial cost restructure of the Cross Currency Swap (CCS), Sustainability Linked Swap, and Sustainable Deposit were the first innovations in Thailand's oil refinery industry, which illustrated our clear commitment to driving operations with sustainability.

3.2 Human Resources and Organization

>> **Sufficient Workforce Preparation for Business Growth.** Thailoil and Subsidiaries successfully recruited all the capable people needed. We initiated innovative approaches to vocational management that are flexible for the strategic directions and types of work that value speedy results.

>> **Development of People Capacity and Competency.** Thailoil enhance our staff's experience and competency to drive business and systematically execute our plan for a learning organization. Thailoil also launched a project to speed up employees' implementation of Thailoil and Subsidiaries' strategic direction through advocating experience and competency via theoretical and practical

learning. We focus on knowledge application for business value supplementation.

- >> **People Experience.** Thailoil and Subsidiaries' focus is on employee stewardship for their good quality of life. Our goal is to nurture a culture of happiness at work "Happy Employee, Happy Company" through assorted projects and activities, including Joyfinity (Hackathon Program), which allows employees to propose creative ideas for a common ambiance of happiness; a project to promote equilibrium between work life and private life; and leadership development focusing on leadership skill enhancement and efficient teamwork management. This caused 2024, Thailoil and Subsidiaries' employee engagement score had increased. Thailoil is proud of the awards as well as certification of the Best Places to Work for 2024, attested by WorkVenture Technologies Co., Ltd., a leading organization brand consultant.
- >> **Organizational Restructuring.** This means restructuring the organization and commercial manpower for overseas business expansion and high value product sales. A sustainability unit was also set up to drive efficient and comprehensive sustainability activities.

3.3 Innovation

Thailoil and Subsidiaries promote enterprise innovation while fostering the innovation element of the corporate culture to make products that meet customers' needs. In 2024, Thailoil earned a "Challenger" assessment rating of enterprise innovation, which means we commanded teambuilding and development of innovative employees who are ready to manage innovation within the organization. Finally, Thailoil and Subsidiaries have evolved prototype products that should lead to commercialization.

3.4 Digital Technology

Thailoil and Subsidiaries have applied digital technology to digital business transformation to drive the group with quality and reliable data. In place is the development of application platforms as well as artificial intelligence (AI) for greater business precision and speed. In 2024, notable activities included the establishment of a commercial platform for higher efficiency of data management and system development to aid data search or address engineering questions.

3.5 Sustainability

It is Thailoil and Subsidiaries' determination to weave sustainability into business and future growth and to duly address stakeholders' expectations with the ESG business scope. Today, Thailoil and Subsidiaries have been recognized as a DJSI member for the 12th consecutive year in the Oil & Gas Refining and Marketing Industry. Below are our main activities.

- >> **Environment:** Thailoil and Subsidiaries elevated its environmental management in line with global trends. A pathway was developed for the pursuit of interim targets of 15% GHG reduction by 2035, Carbon Neutrality by 2050, and Net Zero Greenhouse Gas Emission by 2060. The goal of which would be achieved through 3C strategies:

- 1) **Cut Down Existing Emissions** through the project to increase energy efficiency, and digital technology application in managing GHG and carbon credit data to prepare reports for the public sector; and carbon credit management under a carbon mechanism to be announced by the public sector.
- 2) **Compensate Residual Emission.** In 2024, the reforestation project was implemented,

accounting for 5,106 rai. Also, we accumulated over 1,674,618 tons of carbon dioxide equivalent of carbon credit through TOP SPP Co., Ltd.'s 239 megawatt cogeneration power plant, which has earned T-VER certification in Thailand for accumulating carbon credit after using clean energy and high-efficiency technology on a par with international practices from 2019 to 2024.

3) Controlling the Levels of GHGs and Investing in Low-Carbon Businesses. To this end, Thailoil and Subsidiaries applied the Internal Carbon Pricing (ICP) system to project consideration of investment projects within the group to assess the impact of GHG emissions arising from our businesses. This move would aid decision-making on whether to support investment in projects with GHG emissions.

>> **Social:** Thailoil and Subsidiaries launched an array of projects to relentlessly benefit and engage with communities around the refinery and society as a whole, including a project where solar power generation was installed for Border Patrol Police Schools and subdistrict healthcare centers, as well as sports promotion to promote youths' health and proper spending of leisure time.

>> **Governance:** Thailoil and Subsidiaries continuously garner recognition as well as admiration from all sectors on good governance and the code of conduct. In 2024, Thailoil and Subsidiaries engaged in proactive risk management practices, including the improvement of customer and supplier inspection processes, which enabled us to achieve our goal of preventing breaches of the law and engaging in no corrupt practices.


Projects and executions are clear evidence that Thailoil and Subsidiaries are committed to applying knowledge and expertise in energy and chemical leadership with integrated business operations across the value chain. Thailoil and Subsidiaries are also committed to corporate governance, responsibility for the environment, communities, and society, as well as fair treatment for all sectors and stakeholders, to drive toward sustainable growth alongside society and the country. The commitment and success have earned Thailoil and Subsidiaries various awards and certificates of honor presented by leading agencies and entities both in Thailand and from abroad (details as described under "Awards and Certificates of 2024 Achievements").



2024 Milestones & Significant Progress of Thailoil and Subsidiaries


January

01



Thailoil participated in a handover ceremony of “Hope Library”, a project of library for intellectual development, along with books for the youth at Wat Manorom School, Sriracha, Chonburi.


02



Thailoil joined PTT Group in organizing the National Children’s Day under the ‘Science for Life’ theme at PTT Head Office.

February


03



Thailoil was ranked the world’s top sustainability in the Oil and Gas Refining and Marketing Industry for the 9th year, from S&P Global’s assessment.


April

07



Thailoil organized the 2024 Annual General Meeting of Shareholders (AGM).

08



Thailoil earned 13 awards at the PTT Group Operational Excellence Award 2024 event, a proof of operational excellence to foster sustainable growth.

May


09



Thailoil, as a member of the Thailand Mangrove Alliance, took part in the signing ceremony of a memorandum of understanding with the Department of Marine and Coastal Resources.

February


04



Thailoil and Subsidiaries organized the “Run for the Great Future 2024” for health and the environment at the Bang Phra Reservoir, Sriracha, Chonburi.


March

05



Thailoil joined PTT Group in supporting various sports associations under Sports Authority of Thailand.


06



Thailoil welcomed leaders of communities around Thailoil Refinery who paid a visit to the Hydrodesulfurization Unit 4 (HDS-4) under the Clean Fuel Project (CFP).

May


10



Thailoil and Subsidiaries launched the “You Initiate ... We Fulfill” volunteer project (Year 4), in which employee volunteers improved toilets and installed drinking water machines for Wat Wang Hin School, Sriracha, Chonburi.


June

11



Mr. Bandhit Thamprajamchit received the Thailand Top CEO of the Year Award for 2024 in the energy industry category. The event was co-organized by BUSINESS+ Magazine and the Faculty of Commerce and Accountancy, Thammasat University.


12



Thailoil won five excellence awards at the Asian Excellence Award 2024 event, organized by Corporate Governance Asia Magazine, a leading media agency in Hong Kong and Asia.


July

13



Thaioil gained membership of the FTSE4Good Index Series-the Global Sustainability Index, organized by the UK's FTSE Russell.

14



Thaioil handed over the project for installation of a solar power system (phase 2) to Koh Si Chang Hospital, Koh Si Chang, Chonburi.

August


15



Thaioil held the 2024 scholarship presentation ceremony to grant scholarships to schoolchildren and educational institutes, an activity commemorating Thaioil's 63rd anniversary.


September

19



Thaioil received support for long-term loans and financial solutions from TTB to drive its business plan on clean energy under the ESG concept.

20



Thaioil joined the Anti-Corruption Day 2024, organized by the Anti-Corruption Organization of Thailand to highlight the values of integrity and anti-corruption.

October


21



Thaioil won a Sustainability Excellence Award at the SET Awards 2024 event.


August

16



Thaioil executives and staff joined hands in packing over 1,000 relief bags for flood victims in the North.

17



Thaioil and Siam Commercial Bank took the lead in managing interest rate risk entailed in investment in sustainability-linked deposit products, the first of its kind in the oil refining industry.

September

18



Thaioil was certified as one of the 'Best Places to Work' and received an award for 2024 from WorkVenture.

October

22



Thaioil together with communities around the refinery organized the annual Kathin ceremony for 2024 at Wat Mai Noen Payom, Sriracha, Chonburi.

23






Thaioil signed a memorandum of understanding to support the Thailand Aquatics Association, Thailand Volleyball Association, Table Tennis Association of Thailand, and Sports Association for the Disabled of Thailand.

November

24



Thaioil was assessed by the Thai Institute of Directors Association (IOD) of corporate governance and received an Excellent CGR Rating for 16 consecutive years.

November		December	
25		26	27
			
<p>Thaioil joined PTT Group CG Day 2024, organized under the concept of CG Citizen Sustainability Connect.</p>		<p>Thaioil successfully maintained its Investment Grade as assessed by S&P Global Ratings and Moody's, following an announcement to increase investment in the Clean Fuel Project (CFP).</p>	<p>Thaioil joined PTT Group in presenting disaster relief bags along with drinking water to disaster victims in five Southern provinces.</p>

Remark: Investors can find Milestone of 2022-2023 on the Company's website (www.thaioilgroup.com) through 'Investor Relations/Publications/Form 56-1 One Report'.



Market Review and Outlook

Global Market and Economic Review

The overall global economy in 2024 was under challenges and great pressure from several diverse factors, mainly from China's deteriorating economic indicators reflecting the weakness of domestic consumption, continuous decline of investment in the property sector and unresolved debts of the local administrative authorities. The average gross domestic product (GDP) of China for the first three

quarters was 4.8% year-on-year, below the 5.0% target, resulting in challenges to drive the economy. The People's Bank of China (PBOC), under government policy, responded with several relaxing measures, such as reduced policy interest rates and the reserve requirement ratio to increase the liquidity of capital for infrastructure investment. Meanwhile, the high inflation rates in the United States

and the EU had been continuously decreased close to the 2.0% target, causing the U.S. Federal Reserve (FED) to gradually drop the policy interest rates from 4.25-4.50% posted earlier in the year to 5.25-5.50%, and the European Central Bank (ECB) to reduce their policy interest rates to 3.00-3.40% to stimulate domestic investments and economic growth. However, challenges still remained, especially after the U.S. presidential election in late November 2024 leading to uncertainties, particularly on global trade and investments as well as geopolitics in various regions.

The International Monetary Fund (IMF), due to these uncertainties and subsequently associated risks, lowered the 2024 global economic growth forecast in their October 2024 report from 3.3% in 2023 to 3.2% in 2024, and that the 3.2% growth level would likely remain throughout 2025. Key challenges to be monitored in 2025 included (1) the economic recovery of major developed economies, particularly the United States and the European Union, whose policy interest rates had been reduce continuously, (2) the revival of the economic structure in China, especially of the property sector, after several economic stimulus measures, (3) unrest situations in multiple regions, and (4) increasing geopolitical polarization between the United States and China, driven by several policies of the new U.S. President, challenging global economic growth.

Crude Oil Market and Refining Industry

The 2024 average Dubai crude price dropped to 79.6 USD per barrel, decreasing from the average of 82.2 USD per barrel in 2023. The lower average crude price reflected the lower-than-expected demand for crude from the major consuming countries, particularly China and the United States. The U.S. Energy Information Administration (EIA) forecasted the crude demand growth at 0.9 million barrels per day for 2024, decreasing from 2.1 million barrels per day for 2023. Meanwhile, the market became more relaxed and less concerned on the geopolitical conflicts

in the Middle East and the Russia-Ukraine, as the fighting was limited in the certain areas and not escalated to a regional level, and as the conflicts did not directly impact the crude supply from the Middle East. The global crude price therefore continuously decreased especially in the latter half of 2024.

Following the continuously downward trend of crude pricing, OPEC+ agreed to extend the secondary 'voluntary cut' of 2.2 million barrels per day, and postpone the UAE's production capacity boost of 0.3 million barrels per day to March 2025, as well as extending the first 'voluntary cut' of 3.66 million barrels per day from the end of December 2025 to the end of December 2026. This resulted in OPEC+ production output decreasing by 1.4 million barrels per day from 2024, to stabilize the oil market and the global oil price amid weak oil demand and growing supply of 1.3 million barrels per day year-on-year from non-OPEC countries.

The 1.5 million barrels per day surplus supply from non-OPEC producing countries, led by the United States, Canada, Brazil and Guyana against the expected 1.3 million barrels per day oil demand growth in 2025, will continuously put more pressure on OPEC+ on higher production outputs. The Dubai crude price in 2025 will therefore likely maintain or drop from the 2024 level. Nevertheless, the U.S. Energy Information Administration (EIA) foresees higher oil demand growth in 2025 following the cuts of policy interest rates by the U.S. Federal Reserves and the European Central Bank to stimulate investments for economic growth. Also, several economic measures have been introduced by the Chinese government to revive their economy. However, there are certain factors to be monitored since they can significantly impact the oil market with higher oil price volatility. These are geopolitical conflicts between Russia-Ukraine, conflicts in the Middle East, and new U.S. policies, including higher trade tariffs imposed on certain countries

which could conversely drive the downward inflation to rise and subsequently pressure the oil demand in the following year.

The refining industry approached equilibrium in 2024, being pressured by the lower-than-expected demand for refined products during the driving season in the United States, leaving higher gasoline inventory in the system. The global economy assessed by the Purchasing Manager Index (PMI) showed an unrecovery of the industrials sector in Europe, China, and the U.S. in 2024. Meanwhile, shipment of refined products from Asia to Europe was under great hindrance from a series of attacks in the Red Sea. Shipment cargoes were rerouted, resulting in greater delivery time and distance as well as higher freight rates, leading to higher costs of procurement and lower trade demand. Conversely, supplies from new refineries were limited in volume due to facilities commissioning delay and several technical difficulties. Moreover, many refineries in the U.S. were forced to conduct emergency shutdowns after facing severe cold snaps in early 2024. Furthermore, refineries in the U.S., Europe, and Asia decided to cut down their outputs to stabilize the balance of refined products. Meanwhile, China lowered export tariffs deduction for exports of refined products, causing the final exports of refined products from China fell slightly, resulting in the spread between crude oil and refined products slightly decreased.

The overall global refining business outlook in 2025 is expected to recover mildly, supported by higher demand for refined products, especially the aviation fuel, following a record-high number of flights compared with the Pre-COVID-19 Era, particularly in Asia. The diesel market is also set to recover mildly, following higher economic activities led by Asian countries, particularly India. The gasoline market, however, is likely to be under pressure despite higher demand in Asian countries because of new supplies from new refining facilities in Nigeria and

Mexico which came onstream in 2025 and additional supplies from large refining facilities in Kuwait resuming the operation in early 2025, as well as from new and existing refining units in China which had already been on production since late 2024. With higher supplies from the above-mentioned facilities, the overall global refining business outlook will still come under pressure in 2025.

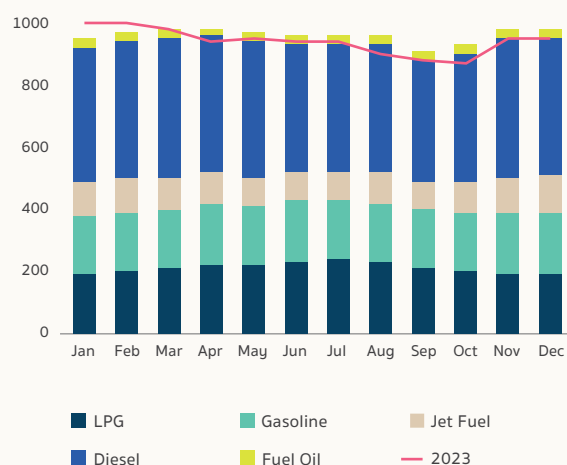
Domestic Market for Petroleum Products

The Thai domestic economic growth forecast for 2024 was recorded at 2.6%, or 1.9% higher than the previous year, boosted by healthy domestic private consumption and higher tourism activities, as well as higher export volumes and value, reported by the National Economic and Social Development Council (NESDC). The export forecast grew 5.9%, higher than the projected 1-2%, following relaxed concerns for high inflation in many global markets. Moreover, the government launched economic



Domestic Demand for Petroleum Products, 2024 (Jan-Dec 2024)

Thousand barrels per day



Source: Department Energy Business, Ministry of Energy

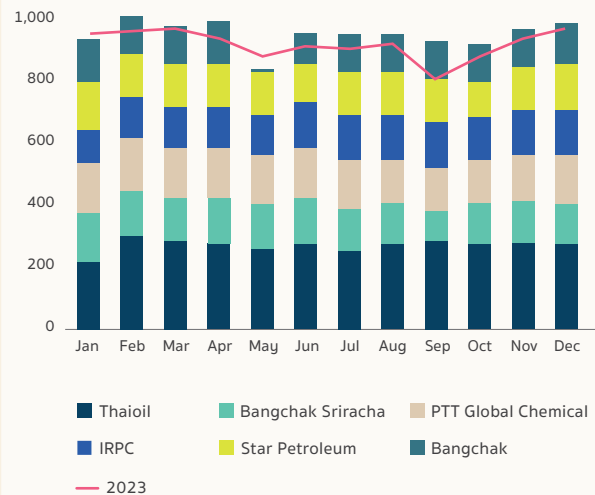
measures to stimulate economic activities, such as free visas for tourists, capping retail diesel prices at 33 THB per liter, agricultural promotion, and others. These led to higher local consumption. However, certain foreseeable risks remain, including the uncertainty of global economic recovery, high to very-high domestic household debts, and private business debts limiting the purchasing power and investment of the private sector, and climate change widely affecting agricultural products and prices.

The 2024 domestic demand for refined petroleum products, excluding LPG, grew by 1.8% from 2023 and by 2.2% including LPG. The main driving factor was the increasing demand for aviation jet fuels of 18.3% compared to that of 2023 due to higher tourist arrivals. The top five tourist groups were from China, Malaysia, India, South Korea, and Russia. In addition, the government introduced a 'visa-free' campaign for foreign visitors to boost the domestic tourism market. Meanwhile the demand for gasoline dropped to 0.1% year-on-year, following the continuously lower number of vehicle registrations in 2024 because of higher household debts and more stringent financial loans imposed by financial institutions. The demand for diesel slightly dropped to 0.1%, mainly due to lower demand for diesel for power generation, high household debts, and more stringent financial loans. Meanwhile, demand for diesel, excluding that for the power generation business, rose 2.5%. The posted retail diesel price had been capped at 33 THB per liter, supported by the subsidy mechanism of the Oil Fund under the condition that the global oil price is below 100 USD per barrel. The demand for fuel oil decreased to 6.8% from the previous year, following lower demand for fuel oil for power generation and certain industrial sectors. The demand for LPG rose about 3.6%, driven by the petrochemical sector, the transportation sector, and higher household uses. The retail LPG price has been capped at 423 THB per 15-kilogram tank until the end of March 2025.



Domestic Petroleum Refinery Production in 2024 (Jan-Dec 2024)

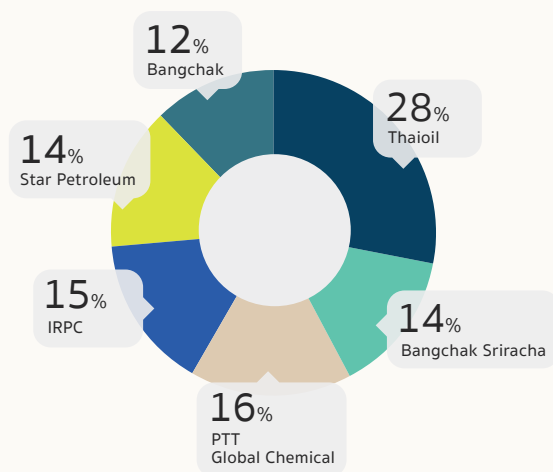
Thousand barrels per day



Source: Department Energy Business, Ministry of Energy



Share of Refining Output in 2024 (Jan-Dec 2024)



Source: Department Energy Business, Ministry of Energy

The 2024 average domestic petroleum refining output, including gasoline, diesel, jet fuel, and fuel oil, stood at 948,174 barrels per day, 4.4% increase from 908,564 barrels per day, the average output of the same period in 2023. This reflects higher domestic demand. Thai Oil remained the largest producer, with a market share of 28.3%.

Office of the National Economic and Social Development Council (NESDC) issued the economic forecast for Thailand in 2025, with 2.3-3.3% growth, stated in its November 2024 report. The key contributing factors to this growth are (1) higher demand, following higher investment by the private sector, (2) consistent growth of the tourism industry, (3) continuous growth of the outbound trade or export, and (4) capital spending by the government sector. However, there still are risks to be monitored including (1) uncertainty of the global economy and global trade, which could be lower than expected, varying with the changing economic policy of the U.S., the ongoing geopolitical conflicts in the Middle East, and the sluggish economy of China, (2) relatively high level of debts in the household and business sectors, and (3) volatility of the agricultural sector in products and pricing.

The projected demand growth for refined products in 2025 is 2.3% including LPG and 2.7% excluding LPG. This projected growth translates into 0.9% demand growth for gasoline, 14.1% for jet fuel, 1.0% for diesel, 0.1% for fuel oil, and 1.1% for LPG all in a relatively low growth pattern, projected from the lower economic growth of the country under high household debt levels and more stringent on financial loans, resulting in a stagnant sales growth of the private and commercial vehicles compared to that of the previous year. The tourism sector, on the other hand, is set to grow with Tourism Authority of Thailand (TAT) expecting tourist arrivals to reach 40 million in 2025. With several measures to stimulate tourism activities, the demand for jet fuels is expected to keep rising.

Aromatics

The 2024 paraxylene market was depressed further from that of 2023 due to concerns about the global economy recession, a continuously sluggish economy of China and the lower margin of downstream Purified Terephthalic Acid (PTA). However, the paraxylene market was supported due to the facts that there was no new supply of paraxylene in 2024 and many maintenance shutdowns took place around Q2/2024. On the other hand, the benzene market in 2024 picked up from the 2023 level after tight supply and low inventory in China. This resulted from maintenance shutdowns of certain producers, and higher demand for high-performance octane gasoline production in Q2/2024. Moreover, China launched an economic stimulus program to support the electrical appliance and electronics industries, including the 'swap with the new ones' in Q4/2024. Despite all these efforts, the demand for benzene was still under pressure due to vulnerable Chinese economic recovery, unrest situations in the Middle East, and the oversupply market of benzene.

The paraxylene market in 2025 is expected to recover from the downward cycle following the smaller supply growth than the demand growth in the region, in line with the increased demand for downstream petrochemical products and as supported by China's economic stimulus measures to boost consumer confidence to spend more. The benzene market growth, however, is likely to be limited due to the new supply expected to increase; the commencement dates must be closely monitored.

Linear Alkyl Benzene (LAB)

The 2024 linear alkyl benzene (LAB) market in 2024 slightly slow down from that of 2023 due to higher pressure from the sluggish global economy as part of the battle with high inflation, which affected consumers' confidence and level of economic activities. The LAB market, however, was supported by higher LAB demand



in Asia following a higher demand for cleaning products, which was consistent with higher population growth, particularly in India and Vietnam.

LAB market growth in 2025 is expected to slow down from the 2024 level due to more supply from India, China, and Indonesia with a total output capacity of 230,000 tons per year. The regional demand growth was driven by higher demand for cleaning products following greater awareness of good health and hygiene standards, in line with the population growth of the region.

Olefins

The 2024 market for high-density Polyethylene (HDPE) and Polypropylene (PP) was weakened from that of 2023 with the 1.5 million tons of HDPE supply and the ongoing increase in PP supply. The uncertain economic recovery in China and conflicts in the Middle East caused the 2024 global HDPE and PP demand growth was lower than supply growth even though the market was supported

by the production halts of Polyethylene (PE) and PP around the year-end in many Southeast Asian facilities.

With the likely scenario of economic recovery after the cut in policy interest rate by the U.S. Federal Reserve, a more relaxing fiscal policy by the Chinese government supported by lower policy interest rates and other state economic stimulus programs, the HDPE and PP market in 2025 is projected to grow. However, it still is pressured by continuous excess supplies from China to the world market and the uncertain trade barriers of the newly elected U.S. president, Donald Trump. The situation of which must be closely monitored.

Lube Base Oil and Bitumen

The 2024 lube base oil market was relatively stable due to limited supply because of lower export from Japan to the world market after the permanent closure of facilities producing lube base oil Group 1 and many maintenance shutdowns nearly throughout the year. The market was

therefore slightly oversupplied. Moreover, the price of fuel oil, major feedstock of the lube base oil Group 1, was relatively low, close to the 2023 level. This supported minor decrease of the spread with lube base oil Group 1, relative to 2023. Nevertheless, the market for lube base oil Group 2 and Group 3 was under pressure from the additional supply from new facilities in India, with a combined capacity of 670,000 tons per year, and the uncertainty of economic recovery in the region, especially China, whose demand for lube base oil was limited.

The 2024 bitumen market slowed down from 2023, reflecting the lower-than-expected economic recovery in China. However, the bitumen market was still supported by limited regional supply, especially that from Singapore, while demand for bitumen for structural infrastructure development in India and Indonesia was continuously higher.

The 2025 market for lube base oil is projected to become slightly weaker, pressured by new supply of lube base oil Group 2 and Group 3 from India, beginning with the Singapore market. The demand for lube base oil Group 1 is expected to fall amid uncertainty about the regional economic growth.

The bitumen market in 2025 is also expected to become weaker compared to that of 2023 due to additional supply from refineries in the region, some with capacity expansion. The regional demand is expected to grow from higher government budgets for structural infrastructure and lower prices of fuel oil, thus widening the spread between bitumen and fuel oil.

Solvent and Chemicals

The overall 2024 market for solvent and chemical products in Asia and Thailand grew slightly from the previous year, but still less than expected. This was mainly because geopolitical tensions in many parts of the world

impacted economic recovery in many countries. The global market, however, has gradually recovered with an increase in demand for solvents and chemical products in the Asian market, higher than that of other regions. On the supply side, a more competitive market was obvious due to higher outputs from South Korea and China driving the market to oversupply, particularly aromatic solvents and chemical solvents. Despite the cut in production output from Thai producers to prevent an oversupply, the market equilibrium was inevitably imbalance, thus leading to higher pricing competition in the market.

For specialty chemicals, the overall demand gradually increase both in the domestic and international markets, but not for all consumer groups. Lower demand was observed in the automotive, construction, and industrial plastic sectors. On the contrary, demand for specialty chemicals of disinfectants+surfactants (D+S) have been rising continuously, both in domestic and international markets, supported by higher awareness of new and more health and hygiene standards and partly by the health and wellness service industry. Many producers, especially from China and India, have shown interests in supplying specialty chemicals to the Thai and Southeast Asian markets.

The overall 2025 outlook for solvents and chemical products in the Thai and Asian markets is projected to grow in line with the GDPs following world economic growth, especially in Thailand and Southeast Asia, classified as the emerging market. The overall supply is expected to grow, with additional outputs from China and South Korea. Paraxylene is an obvious example of higher pricing competition in 2025, after higher supplies from capacity expansion of existing facilities and new facilities in China. This competition may become less aggressive due to shortages of cargo vessels and lower freight rates.

For specialty chemicals and chemicals for D+S products in 2025, the demand is expected to grow constantly and strongly in both Thai and international markets, mainly in the emerging markets. The specialty chemicals were used in five major industrial sectors: automotive, personal care, food & nutrition, electronics, and healthcare sectors, reflecting higher industry expansion and higher economic activities. D+S products have become widely used in the personal care and homecare, and the demand growth reflects more awareness of new and higher hygiene standards and more stringent health-related regulatory controls. The overall supply of specialty chemicals and chemicals for D+S products, is expected to expand to better address market needs, especially from the emerging markets.

Ethanol

Demand for ethanol for gasoline blending in 2024 was around 3.5 million liters per day, slightly decreasing by 0.7% from that of 2023, following continuous drops in demand for E20 and E85 gasohol in view of more surcharges from E20 and E85 gasohol to the Oil Fund, resulting in a continuous increase of posted gasoline prices at the station. The 2024 average spread between E10 and E20 of gasohol 95 in 2024 was 2.11 THB per liter, dropping from 2.23 THB per liter in 2023. The average spread between E20 and E85 gasohol in 2024 was around 0.25 THB per liter while the 2023 average price of E20 gasohol was 0.32 THB per liter more expensive than the E85 gasohol.

Due to smaller volumes of molasses and cassava, the ethanol supply in 2024 decreased from that of the previous year. The total volume of cane stocked from the 2023/2024 milling season was 82.2 million tons, lower than the 93.9 million tons stocked from 2022/2023 milling season. This was because El Nino phenomenon had caused drought to many parts of the country,

especially in the first quarter of 2024. The total volume of cassava stocked from the 2023/2024 cropping season (October 2023-September 2024) was 26.8 million tons, decreasing by 12.5% year-on-year, resulting from drought and ongoing Cassava Mosaic Disease (CMD). However, the cassava price plummeted in the latter half of 2024, following continuously drastic drops in export to China, as Chinese producers turned to corn as feedstock for gasohol instead of cassava.

The ethanol price in 2024 increased by 2.4% year-on-year to 30.1 THB per liter, following the higher cost of feedstock, especially the tight supply of molasses. The average price of molasses was 6.2-6.9 THB per kilogram. Nevertheless, the average price of cassava chips dropped by 13.7% to 7.4 THB per kilogram year-on-year, following a drop in demand for cassava from China.

The 2025 demand for ethanol is expected to increase, in view of the rise in demand for gasoline of 0.9% from the previous year, projected from a 2.0% rise in newly registered private vehicles together with tourist arrivals and land transport during domestic trips.

The 2025 ethanol supply is likely to increase from that of the previous year, with a projected increase in feedstock from molasses and cassava. The 2024/2025 cane milling season began on December 6, 2024, with an expected total stock increase by 13.4% to 93.2 million tons due to higher rainfall and higher prices. Cane prices given to cane farmers were attractive, thus driving up cane plantation. Meanwhile cassava output is expected to rise 1.5% to 27.2 million tons due to proper weather and stricter disease control. For instance, the government launched a program to distribute new-breed anti-CMD cassava to farmers, intended to limit the spread of the contagious disease and increase the survival chance of cassava.

With an expected rise in supply of feedstock in 2025, the feedstock cost tends to decrease, resulting in ethanol prices projected to drop to an average of 25 THB per liter, 17% lower than that of the previous year.

Currently, Thailand boasts an ethanol production capacity at 7.1 million liters per day while the actual production is around 3.5-3.8 million liters per day. The unused capacity could support other industries such as Sustainable Aviation Fuels (SAF), bio-ethylene production for the bioplastic industry, traditional medicinal plant extracts, medical industry, cosmetics, and cleaning products. Posting impacts to the ethanol demand and supply, public policies on ethanol must still be closely monitored.

The Thai Cabinet decided on September 17, 2024, to extend the biofuels compensation program for two more years, ending on September 24, 2026, as proposed by the Ministry of Energy. The program was developed as incentives to compensate gasoline producers on higher costs to blend with biofuels, including E20 gasohol, E85 gasohol, B10 biodiesel, and B20 biodiesel. The resolution was made to maintain the marketing margin of gasoline blended with biofuels by creating price spread among different types of biofuel-blended gasoline. This is to prevent impacts on various stakeholder groups while maintaining support for biofuel farmers to ensure their revenue from selling agricultural products before the end of compensation program. In general, the price of biofuels is higher than that of oil content before blending. It is expected that once the compensation program matures or is revoked, the Ministry of Energy would have to adjust the blending ratio between biofuels and gasoline to maintain the cost of gasoline production.

The draft of the 2024-2037 fuel oil operating plan (or the so-called Oil Plan 2024) provides two choices for gasoline administration: (1) defining E20 gasohol as the standard

gasoline, effective 2027, leaving the ULG (Unleaded Gasoline) as an optional fuel in the system for old vehicles not compatible with gasohol, and (2) defining E10 gasohol 95 as the standard gasoline, effective 2031, with ULG as an optional fuel for old vehicles. The E20 gasohol will still be available until 2030 to ensure sufficient time for ethanol and refining industries to properly adjust. This Oil Plan 2024 draft is scheduled to submit to the Cabinet by Q1/2025.

Power

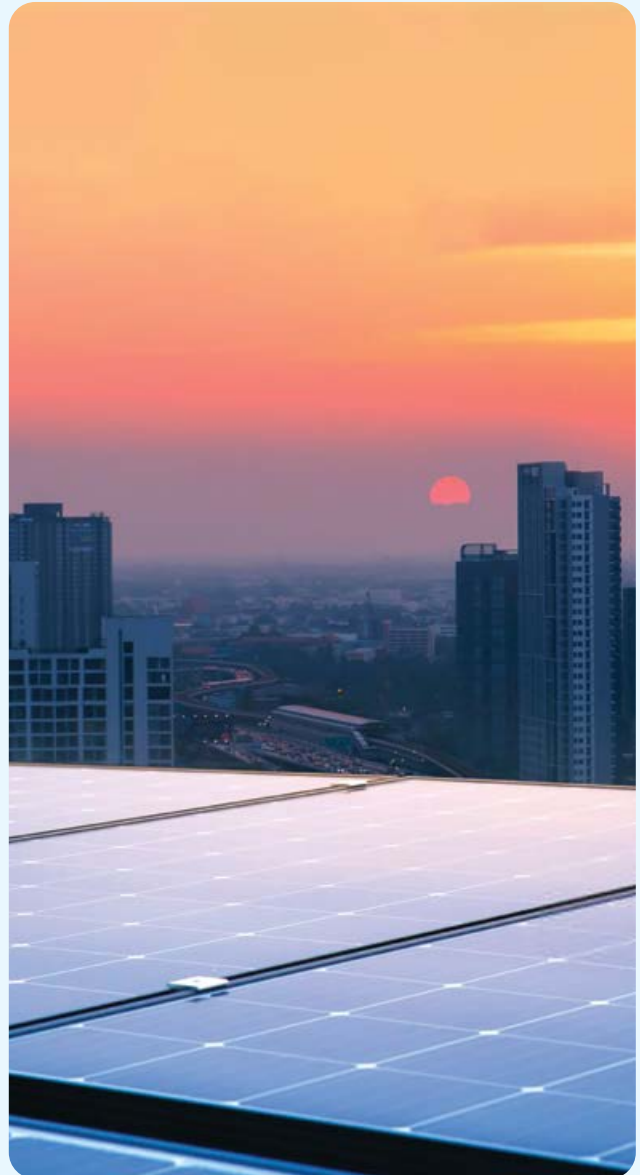
As of December 10, 2024, the total installed generating capacity, including all the contractual capacity operated by the Electricity Generating Authority of Thailand (EGAT) was at 51,160 megawatts, increasing by 3.14% from that of 2023. The 2024 peak electricity demand was recorded on April 29, 2024, at 36,478 megawatts, increasing by 6.88% from that of 2023, due to the economic recovery, higher tourist arrivals and higher temperature as a result of the El Niño phenomenon.

The power generated and traded on the EGAT system in 2024 totaled 220,984 billion units, increasing 6.19% from that of 2023. This can be divided into 61.40% natural gas, 19.70% coal, 17.75% renewable energy, and 1.15% other sources, including diesel and fuel oil. The total power consumption classified by user included 41.00% industrial sector, 29.00% household sector, 25.00% business sector, and 5.00% in other sectors.

As for the power demand under EGAT's system in 2025, EGAT projected that the demand would increase from that of 2024 by 3.05% in line with Thailand's GDP which was forecasted to increase by 2.80%. However, factors affecting the estimate of power demand include the geopolitical conflicts in regions, the economic policies of trading partners, the economic stimulant measures from the public policy on the process, and the climate

change or climate variability. The 2025 power demand proportion on EGAT's system was projected at 80.40%. While the power production for own use from the Small Power Producers (SPPs) and not sold to EGAT and Very Small Power Producers (VSPPs) totaled 19.60%, resulting from more efficient technological evolution and the tendency for more power generation from renewable energy for own use.

In 2025, the proportion of power generation in EGAT's system considered by power producers, would undergo a certain change. EGAT projected that it would generate about 28.50%. SPPs would command greater proportions in line with power plants gradually starting the commercial operation following the public Feed-in Tariff. On the other hand, the Independent Power Producers (IPPs) would also gain a bigger proportion in line with the commercial operation date of new power plants. Considering fuel type, power generation would rely mostly on natural gas at 62.00%, a slight increase from 2024 due to less conservation of natural gas resources than that of 2024. Renewable energy would account for about 17.80%, a possible increase due to the promotion of policy on Electricity Generation from Renewable Energy.



Renewable Energy 2024

Ratio

17.80

2024 Renewable energy would account for about 17.80%, a possible increase due to the promotion of policy on Electricity Generation from Renewable Energy.

Feedstock Procurement, Product Distribution, and Industrial Competition



Feedstock procurement

Thaioil procures crude oil-main feedstock for refining-from domestic and overseas sources, taking into consideration estimated yields from each type of crude against market demand at a given time for maximum returns. Thaioil's policy is to diversify crude procurement from different sources to reduce dependence on any particular supplier to mitigate risk in case of crude cannot be delivered. Two types of crude supply agreement: namely, term contract and spot contract, are made to ensure balance between feedstock security and the opportunity to profit from market fluctuation.

In 2024, Thaioil's imports accounted for 80.87% of the total volume of crude and other feedstock. A majority of the crude, or 92.3%, was procured from Middle Eastern countries such as the UAE and Saudi Arabia

since their crude grades give the maximum yield. A contingency plan is in place should there be interruptions in supply from oil fields in the Middle East. Crude imports from the Far Eastern region, which includes Malaysia

and Indonesia, accounted for 2%; North America, 0.2%; and the remaining 5.5% from domestic sources. Domestic crude is transported by rail and tanker, while imported crude is shipped directly to the refinery. Through a

Single Buoy Mooring (SBM), Thailoil could receive crude and other feedstock delivered by very large crude carriers, enhancing crude oil movement efficiency while reducing the unit cost of shipping.

The table below shows the costs of crude and other feedstock procured from various sources (Excluding by-products provided by Thai Lube Base Plc (TLB) and Thai Paraxylene Co., Ltd. (TPX))

Sources of crude and other feedstock	2024		2023		2022	
	(THB million)	percent of the total volume	(THB million)	percent of the total volume	(THB million)	percent of the total volume
Middle East	296,338	92.3	302,335	91.5	342,647	88.0
Far East	6,282	2.0	4,154	1.3	8,770	2.5
Thailand	17,547	5.5	20,971	6.7	30,653	8.0
Africa	-	-	-	-	4,146	1.0
Europe	-	-	-	-	11	0.0
North America	746	0.2	1,554	0.5	1,693	0.5
Total	320,913	100.0	329,014	100.0	387,920	100.0

In 2024, Thailoil and PTT Group cooperated in securing crude oil, international trading of petroleum products and petrochemicals, derivatives trading, and procuring tankers through PTT Plc under Project ONE. In short, Thailoil purchased wholly from PTT.

For other feedstocks, Thailoil imports additives and product color substances in line with market demand,

the applicable laws, and public-sector requirements. TLB procures long residue (a raw material for lube base oil production) from Thailoil as well as other domestic and overseas markets. LABIX Co., Ltd. (LABIX) imports normal paraffin to accommodate full-scale production of linear alkyl benzene (LAB) (a feedstock for detergents and cleaning agents) for economic value.

Product Sales

In 2024, Thairoil sold a total of 20,834 million liters of products as detailed below.

Product (Million liters/year)	2024		2023		2022	
	Sales volume	Percent of total sales	Sales volume	Percent of total sales	Sales volume	Percent of total sales
LPG	906	4	883	4	850	4
Unleaded Gasoline ⁽¹⁾	3,494	17	3,567	17	3,436	17
Light Naphtha	273	1	256	1	276	1
Isomerase/Reformate	2,421	12	2,295	11	2,235	11
Jet/Kerosene	4,077	20	3,695	18	3,447	17
Low-speed Diesel/ High-speed Diesel	7,311	35	7,576	37	7,408	37
Fuel Oil ⁽²⁾	1,302	6	1,292	6	1,533	8
Long Residue	1,010	5	944	5	891	5
Sulphur	41	0	41	0	40	0
Total	20,834	100	20,549	100	20,116	100

Remarks:

⁽¹⁾ Including Gasohol Sales

⁽²⁾ Including Refinery Slop Oil

Thairoil sells its petroleum products to PTT Oil and Retail Business Plc (OR) under the Product Offtake and Crude Oil Supply Agreement (POCSA) at market prices. Under the procedures for setting product volumes, OR must first propose the types and volumes of desired products, which must account for at least 49.99% of Thairoil's capacity, mainly for domestic sale. Thairoil will then notify OR of the types and volumes to be delivered by an agreed time. In addition, if Thairoil has surplus products, OR is entitled to buy them before other buyers at prevailing market prices under POCSA terms. Other surplus products are exported by Thairoil, based on suitability and favorable market conditions,

both domestically and regionally, through trading partners. Nevertheless, for product exports via large tankers, sales will go through PTT Plc under Project ONE.

Domestic product pricing is referenced to Singapore market prices at a given period for respective products, which are benchmarked to ex-refinery prices. Such prices, set daily in US dollars, reflect regional supply and demand. Thairoil's domestic product pricing is based on an import parity basis, while export pricing is based on an export parity basis. The company sells petroleum products to customers at ex-refinery prices, calculated based on FOB (Free On Board), depending on prevailing market conditions.

In 2024, about 86% of Thailoil's total petroleum products were sold domestically, comprising 32% to OR and 23% to its subsidiaries (TLB, TPX, and LABIX), 20% to PTG Energy Plc (PTG), 4% to Shell Company of Thailand Ltd. (SHELL), 1% to Star Fuels Marketing LTD. (SFL) 1%

to Susco Plc (SUSCO), 0% to Bangchak Corporation Plc (BCP), and 5% to other buyers. The remaining 14% was for export. Details of the types and volumes of Thailoil's petroleum products sold during 2022-2024 together with percentage against total sales appear below.

Petroleum products sold and percentage of total sales by Thailoil (Million liters/year)	2024		2023		2022	
	Sales volume	Percent of total sales	Sales volume	Percent of total sales	Sales volume	Percent of total sales
Domestic						
OR	6,670	32	6,964	34	6,700	33
Thailoil's subsidiaries	4,702	23	4,437	22	4,109	20
PTG	4,173	20	3,803	18	3,324	17
SHELL	768	4	870	4	687	3
SFL	278	1	251	1	343	2
SUSCO	199	1	248	1	201	1
BCP	92	0	105	1	113	1
Others ⁽¹⁾	977	5	960	5	1,693	8
Total	17,858	86	17,638	86	17,170	85
Export						
OR	920	4	1,087	5	1,074	5
PTTT	855	4	621	3	717	4
Others ⁽²⁾	1,201	6	1,249	6	1,202	6
Total	2,976	14	2,957	14	2,993	15
Total sales	20,834	100	20,595	100	20,163	100

Remarks:

⁽¹⁾ Including Refinery Slop Oil

⁽²⁾ Including sales to PTT International Trading Pte. Ltd. in Singapore, wholly owned by PTT

Industrial Competition in 2024 and Outlook

Competition

Currently, there are seven major refineries in Thailand: namely, Thai Oil Plc (TOP), Bangchak Corporation Plc (BCP), Bangchak Sriracha Plc (BSRC), PTT Global Chemical Plc (GC), Star Petroleum Refining Plc (SPRC), IRPC Plc (IRPC), and the Fang Oilfield, operating a combined refining capacity of approximately 1,243,500 barrels per day. BCP and BSRC are the two refineries operating integrated businesses through their own service stations, whereas the rest operate only the refining business under offtake agreements or free-market delivery, or both, for the sale of various products. Thailoil's major and secondary competitors are domestic and regional refineries. Major competitors are largely national and international integrated oil companies with several petroleum businesses, notably those conducting exploration and production of crude oil, oil refining, and marketing. Thanks to integrated businesses, massive investment, and resources in addition to consistently procuring crude oil, these companies thrive through volatile markets and are efficiently price competitive.

The oil-refining business is highly competitive in prices and product yields. Thailoil's advantage lies in the complex refinery with sophisticated refining systems, and in being the country's largest capacity, which enables Thailoil to offer high value products at one of the highest proportions in Asia. Thailoil can also leverage flexibility since its distillation units are connected to petrochemical and lube base oil units, thus benefiting production maneuverability amid volatile market prices. For example, Thailoil can hike its outputs of various grades of gasoline to meet domestic demand, whether gasohol 91, gasohol 95, or E20. Thailoil is the sole domestic refiner of ULG 95 and gains most of Indochina market shares. The company can produce gasoline and diesel of high quality as required by standards, while adjusting the volumes of jet fuels

and diesel in line with prevailing market circumstances. In view of the improving COVID-19 situation, one is witnessing soaring demand for petroleum products. Thailoil recognizes the value of product distribution to meet domestic demand and extends cooperation with the public policy in preparing Euro 5 diesel production's Hydrodesulphurization unit, the new standard in Thailand, as adopted as part of the government's action plan to drive the national agenda of "solving the problem of particulate pollution". The Euro 5 emission standards will undergo modifications to reduce sulphur content below 10 parts per million (ppm), which is environmentally friendly. Thailoil can distribute Euro 5 quality oil since the beginning of 2024. The costs of product distribution to major market regions is low due to the relatively short distances to such locations; and Thailoil commands several channels of product distribution and transportation: 1) a pipeline directly connected to the refinery, capable of distributing various products to depots in the Northeast to sustain each region's demand; 2) lorry product loading operating 24 hours a day to meet the demand of domestic and Indochinese customers; and 3) a jetty and conventional buoy mooring (CBM) supporting distribution of petroleum products by tankers of different sizes. The proportions of distribution and transport this year were 42%, 33%, and 25% of total sales, respectively.

Production Processes and Process Development

In 2024, Thailoil's throughput of crude oil and other feedstock accounted for 282,000 barrels per day, or 103% of its nameplate capacity, while Thai Lube Base Plc (TLB) and Thai Paraxylene Co., Ltd. (TPX) commanded 215,000 tons per year and 619,000 tons per year, or 80% and 74% of the nameplate capacities of lube base oil and aromatics respectively. LABIX Co., Ltd. produced 148,500 tons per year of Linear Alkyl Benzene (LAB), representing 124% of nameplate capacity.

Thailoil and Subsidiaries executed businesses and process operations in line with prevailing economic situations and domestic fuel demand; the 2024 refining capacity utilization was considered high. In addition, Thailoil and Subsidiaries were relentlessly focusing on developing High Value Products (HVP) to meet market demand. This is considered a part of the margin improvement measures

ranging from production management to hydrocarbon value addition to supply chain management, implemented together with cost saving by reducing financial costs amid high inflation rates under the ongoing Productivity Improvement Project. In 2024, Thailoil and Subsidiaries generated 1.94 USD per barrel or THB 7,649 million in total benefit. Our key activities are summarized below:

Thai Oil Plc (Thaioil)

- >> Collaborated with companies in PTT Group to procure the highest economic crude oil by comparing crude oil from existing sources with new sources. Also, managed logistics to achieve fully loaded tankers to save transportation costs per unit
- >> Efficiently managed maintenance activities at the Crude Distillation Unit-1, High Vacuum Unit-1, and Hydrotreating Unit-1, halving the shutdown period (from 24 to 12 days), thus producing sooner for higher yields
- >> Conducted Planned Maintenance Shutdown of the Fluidized Catalytic Cracking Unit concurrently with that for the High Vacuum Unit-3 while engaging in waxy feedstock optimization for the Hydrocracking Unit-2, thus maintaining high rates for diesel and jet fuel outputs.
- >> Launched production from the Hydrodesulfurization Unit-4, part of CFP, in February 2024, to maintain Thaioil's ability to produce EURO 5 diesel, adding to the output of an original and new Hydrodesulfurization Unit-2/3. As a result, Thaioil lowered its loss of opportunities to profit from catalyst replacement shutdowns every six months; it successfully managed uninterrupted operation for 36 months. Therefore, Thaioil managed to produce more such diesel to address market demand, thus raising profits
- >> Managed consumption of short residue with high sulfur and low value as a feed without causing undue impact on the environment and neighboring communities.
- >> Improved process of various manufacturing units for greater energy efficiency:
 - Maintenance shutdowns of the Crude Distillation Unit-3 and the High Vacuum Unit-3 trimmed the units'

energy consumption due to improved distillation efficiency.

- Improved and installed an air-preheater at the High Vacuum Unit-2, thus raising the air temperature before entering the furnace and lowering the furnace's feed consumption
- Heated the diesel fed into the Hydrodesulfurization Units 2/3 by temporarily turning off some ventilation fans at the Crude Distillation Unit-2, thus lowering the fuel and power consumption of the units
- Curbed the surplus air volume at the Hydrodesulfurization Unit-2/3, resulting in lower fuel consumption at the furnace
- Cleaned the heating furnace to raise heating efficiency without shutting down the Crude Distillation Units-2/3, thus lowering fuel consumption

These improvements successfully reduced about 156,000 gigajoules (GJ) in energy consumption, equivalent to THB 105 million.

Thai Lube Base Plc (TLB)

- >> Operated efficiently, resulting in as high as 100% of operational availability.
- >> Thanks to the developing feedstock databases with the Feedstock Selection Project, TLB successfully selected and processed imported long residue to add capacity while lowering the overall production cost.
- >> Procured and Imported from other producers the 500 Extract for TDAE feedstock, thus raising the TDAE capacity, and meeting the market's demand. Produced 150 Label Free Oil (150LFO), a high value product of the TDAE unit, to continually cater to customers' demand.
- >> The greater produced of the 40/50 special grade of bitumen, whose quality is superior to the 60/70 standard grade, to meet customers' greater needs.

- >> Used the low-value short residue from Thairoil as a feedstock for bitumen production to add value and production volume to bitumen
- >> Produced and distributed Topsol P200 by putting 500SN lube base oil for sale in drums for a high value product, which was produced and distributed for the first time in October 2024.
- >> Engaged in the following process improvements to raise energy efficiency:
 - Installed a sheet-type heat exchanger at the Propane Deasphalting Unit, thus enabling the reuse of excess heat in the unit and reducing process energy consumption
 - Lowered steam consumption for isolating products from extracts at the MP Refining Unit, resulting in less steam consumption by the process
 - Lowered the temperature for product isolation from extracts at the TDAE unit and MP Refining Unit, thus reducing fuel consumption without affecting product quality

These improvements successfully reduced about 72,000 gigajoules (GJ) in energy consumption, equivalent to THB 28 million.

Thai Paraxylene Co., Ltd. (TPX)

- >> Managed production efficiently, resulting in 99.9% of operational availability
- >> Modified various processes in line with market conditions to raise the outputs of cost-effective products, including reduction of toluene for blending with motor gasoline to raise toluene capacity during periods of higher toluene demand and market value
- >> Engaged in the following process improvements to raise energy efficiency:

- Lowered energy consumption for paraxylene production by adjusting parameters of the ACCS control system, adjusting water injection, and optimizing line flush at the Mixed Xylene (Parex Unit)
- Conducted technical study to bargain with the catalyst technology licensor of the Raffinate (Isomar Unit) for processing at a lower rate than that certified by the licensor, thus foregoing shutdowns during periods of low paraxylene demand-which would otherwise cause abnormally high energy consumption
- Reduced benzene loss in the raffinates at the Extractive Distillation Sulfolane Unit by leveraging Advanced Process Control to increase high-purity benzene, which is more cost-effective.
- Avoided repeated distillation of the Isomar Stripper Bottom in the Extractive Distillation Sulfolane Unit, thus lowering energy consumption without compromising the quality of downstream products

These modifications successfully reduced energy consumption by approximately 7,700 GJ, equivalent to THB 4 million.

LABIX Co., Ltd. (LABIX)

- >> Processed with efficiency, hence 99.9% operational availability.
- >> Reallocated the crude grades of Thairoil and Subsidiaries based on cost-effectiveness, which increased the paraffin in the kerosene from Thairoil. LABIX relies on this kerosene as paraffin feedstock, thus pre-empting paraffin imports from expensive sources while enhancing the overall energy efficiency of all sub-units of the Front End Unit.
- >> Developed high value products by adjusting processes for heat transfer oil production. This heat transfer oil serves as feedstock for the heat transfer medium industry. Such oil sale was distributed in October 2024.

>> Modified processes of various manufacturing units for greater energy efficiency:

- Duly reduced fuel consumption of the Kerosene Pre-Fractionation Unit in line with the actual flowrates of incoming substances and distillation tower conditions; this move successfully lowered excess fuels while controlling designed product quality.
- Reduced the circulation rates of desorbents per paraffin production at the Molex Unit while maintaining the efficiency and quality of paraffin production, thus lessening the energy required for paraffin production per unit
- Increased the temperature of desorbents at the exit of the air fan cooler heat exchanger of the Molex Unit to reduce heat loss with air, thus trimming the energy consumption for raising desorbent temperature before entering the absorption tower
- Cooled the exit benzene used in cleaning the catalyst of the Detal Plus Unit, thus lowering heat energy consumption for benzene circulation while maintaining catalyst cleaning efficiency
- Reduced the heat loss at the condenser by reducing the reflux rate to the final distillation unit of the Detal Plus Unit
- Reduced water loss from condensate duly changing the steam trap for actual conditions, thus enabling reuse of condensate in the steam production process and lowering process steam loss as a result of discharge to the atmosphere

These modifications successfully reduced energy consumption by approximately 33,000 GJ, equivalent to THB 15 million.

TOP SPP Co., Ltd. (TOP SPP)

>> Continuously executed plant optimization to achieve energy conservation and expense reduction goals, including

- Considered additional commissioning of gas turbine generators with lower fuel consumption as the first option, resulting in higher overall utilization of the first project while commanding cost savings
- Reduced the operation of low-efficiency condensing steam turbines during off-peak periods, replacing them with turbines with lower fuel consumption, thus raising the overall power and steam generation efficiency
- Increased the integrity operating window (IOW) by maintaining normal equipment operation under a higher operating window, thus adding supplementary firing of the power and steam capacity expansion project. TOP SPP could therefore produce ultra-high pressure steam with full efficiency, replacing fired boilers. In short, it yields lower fuel consumption per steam unit.
- Constantly operated the reverse osmosis unit to reuse water, resulting in a decrease in expense of water in the production process
- Continually operated the reverse osmosis unit, thus reusing water to lower process water expenses.

>> Increased the cycles of the demineralization unit of the boiler-feed water to lower the consumption of chemicals used to restore the unit's efficiency

>> Managed the maintenance of gas turbines of the power and steam capacity expansion project, thus reducing maintenance shutdown time and enabling the unit to resume work with full efficiency (in productivity and energy efficiency).

Efficient process and constant control and audit resulted in higher Primary Energy Saving (PES) indices of power production unit than that indicated in the PPA, thus achieving the highest rate of fuel saving (FS).

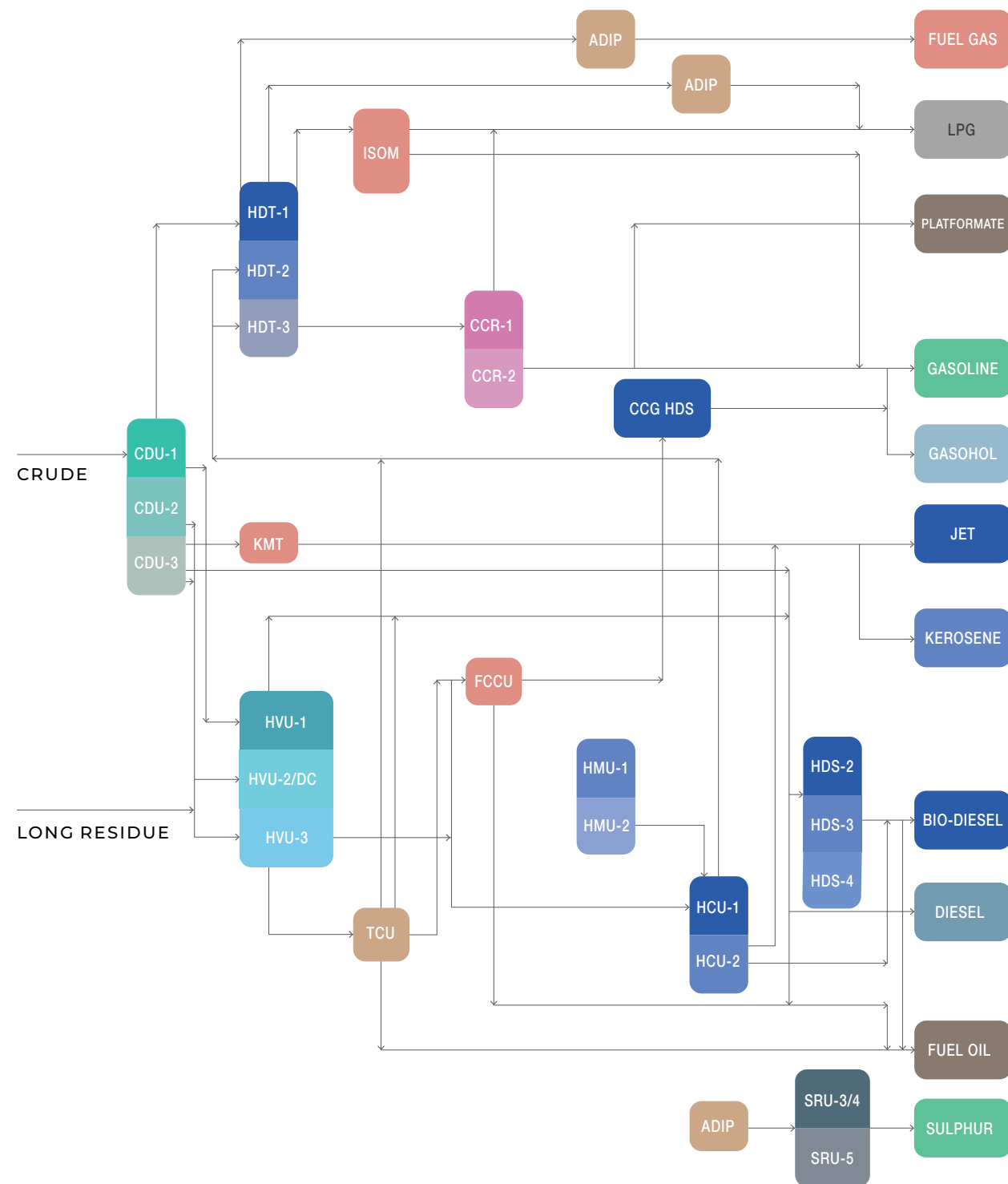
Refining Performance Assessment

Thaioil and Subsidiaries maintained excellent overall refining performances, due to efficient business management as well as processing operations in parallel with prompt responses to market demand through integrating the work of various parties. Thaioil also maintained the plant utilization exceeded the goals with excellent performance outcomes of the Productivity Improvement Project as well as sound ongoing development of energy efficiency. We relentlessly

engaged in successful energy efficiency projects as planned, thus raising the energy intensity indices of Thaioil, TLB and LABIX beyond goals. On the other hand, TPX's energy intensity index goal was met, due largely to lower capacity than the goal, as Thaioil and Subsidiaries planned outputs within the group to address market demand and maximize hydrocarbon values. As a result, petroleum production was higher, while aromatics production fell amid tame markets of paraxylene. Nonetheless, we earnestly and relentlessly maintained our energy conservation projects for maximum energy efficiency. In other words, Thaioil and Subsidiaries remain committed to constantly improving and developing petroleum refining operations, to maintain its Asia Pacific refinery leadership.



Crude And Feedstock Refining Processes



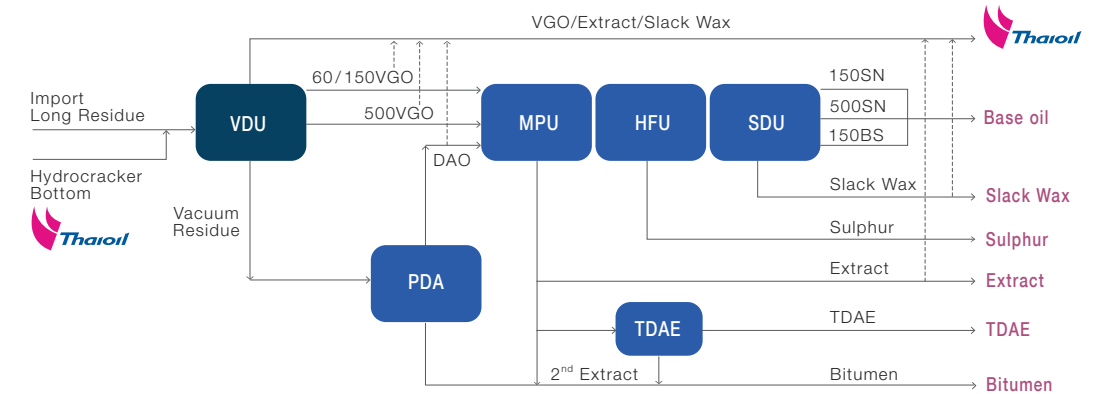
Flow Diagram of Thaioil Refinery



Petrochemical And Lube Base Oil Production Processes Of Thaioil And Subsidiaries

SIMPLIFIED LUBE CONFIGURATION

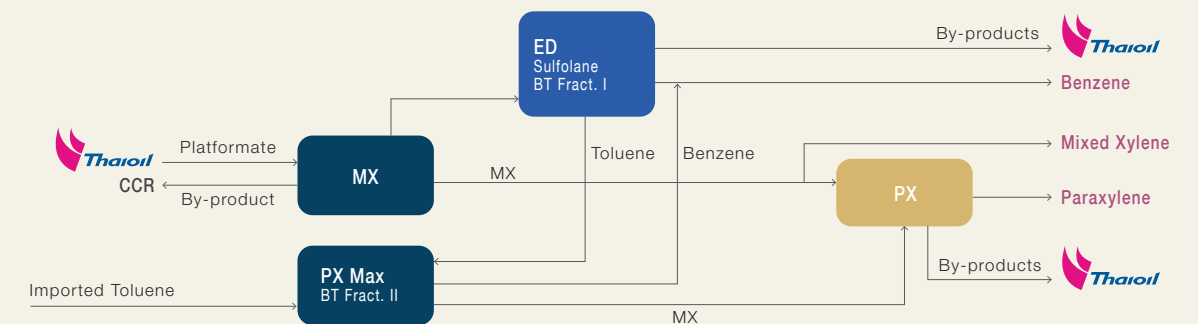
● DISTILLATION ● QUALITY IMPROVEMENT ● PRODUCT



Flow diagram of TLB, with lube base oil as products

SIMPLIFIED AROMATICS CONFIGURATION

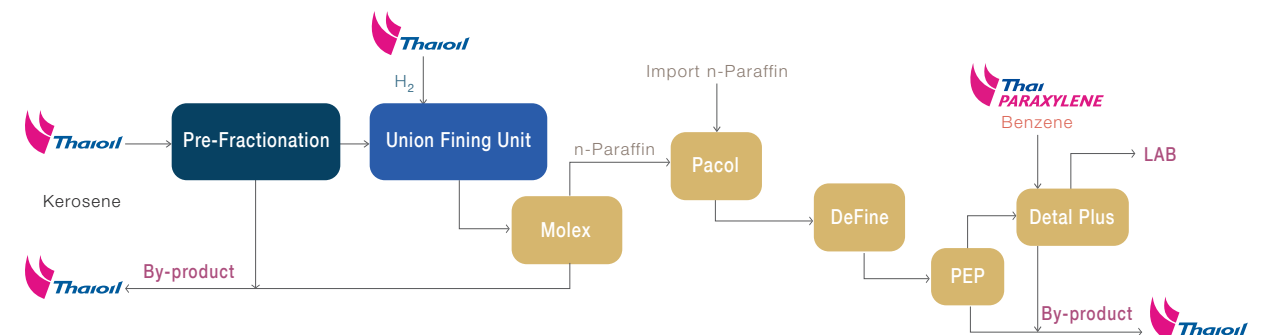
● DISTILLATION ● QUALITY IMPROVEMENT ● UPGRADING ● PRODUCT



Flow diagram of TPX, with aromatics outputs as downstream petrochemical feedstock

SIMPLIFIED LAB CONFIGURATION

● DISTILLATION ● QUALITY IMPROVEMENT ● UPGRADING ● PRODUCT



Flow diagram of LABIX, with Linear Alkyl Benzene (LAB) as products

Details related to the production processes of petroleum products from crude oil and other feedstock, including the production processes of lubricants and petrochemicals of Thaioil and Subsidiaries, are disclosed at the company's website (www.thaioilgroup.com) under "Thaioil and Subsidiaries' Businesses" under "Refining business, lube base oil business, petrochemical business, and other businesses".

Future Projects



To achieve the vision of enhancing quality of life through sustainable energy and chemicals, Thaioil and Subsidiaries are committed to driving sustainable growth by constantly executing a strategic plan as 3Vs for their greater competitiveness. To illustrate, the group focuses on fostering national energy security and drives strategies that nurture business flexibility and sustainable growth by venturing into emerging businesses with growth

potential together with high and prompt investment returns and businesses that support sustainable operation. Thaioil and Subsidiaries highly value investment planning consistent with global trends as well as volatile market situations. The underlying consideration is the optimal benefit to the organization and all stakeholders.

1. Ongoing Projects

Clean Fuel Project (CFP)

Thaioil and Subsidiaries have invested resources in the Clean Fuel Project (CFP) to expand the capacity from 275,000 to 400,000 barrels per day, resulting in diverse types of crude handling, achieving economies of scale, and improving product values, and producing more environmentally friendly. These would improve Thaioil and Subsidiaries' competitiveness, address the market demands, in both Thailand and Southeast Asia, and lay a foundation for feedstock production for future petrochemical products. Thaioil has achieved its first success with the trial run of the diesel Hydrodesulfurization Unit (HDS-4) in order to enhance the production of the Euro 5 diesel fuel standard since February 14, 2024. This increases production flexibility and aligns with government policies mandating the implementation of Euro 5 fuel standards. Meanwhile, the other units are currently under accelerated construction. The Board of Directors of Thaioil endorsed a rise in capital expenditure under CFP of about THB 63,028 million along with THB 17,922 million in interest incurred during construction. Such budget increments will go toward construction, procurement of remaining supplies and equipment, and other expenses like the consultancy fees for CFP completion and COD activities by Q3/2028. To this end, Thaioil and Subsidiaries have planned Extraordinary General Meeting (EGM) no. 1/2025 on February 21, 2025, to seek shareholders' approval of an increase in capital expenditure.

Support to New Businesses through Corporate Venture Capital (CVC)

Investment in the venture capital fund and startup through TOP Ventures Co., Ltd., (TVTH). Being a flagship investment arm of Thaioil, TVTH is searching for new innovative businesses with Thaioil's goal to create mutual value

between startups and Thaioil. TVTH continuously invests in 3 investment verticals; 1) Manufacturing Technology, 2) Technology for environmental sustainability and quality of life improvement and 3) Technology supporting the transition of petroleum business.

2. Projects under Feasibility Studies

High Value Business (HVB)

Thaioil and Subsidiaries' focus is on developing Disinfectants+Surfactants (D+S), which command high growth rates and are in line with the competitiveness of Thaioil and Subsidiaries. To accommodate such business venture, Thaioil and Subsidiaries are gearing up for commercial development, technical service/adaptive Research and Development (R&D), and R&D in collaboration with knowledgeable educational institutions in parallel with the investigation of the investment viability in suitable target companies that can serve as essential business platforms for Thaioil and Subsidiaries.

Integrated Value Chain Management (IVCM)

Thaioil and Subsidiaries strive to grow the proportion of commodity sales while growing the market to specialty businesses. Our target countries are Vietnam, Indonesia, and India. We intend to seek cooperation with alliance, including joint ventures and mergers and acquisitions (M&As), to support and accommodate Thaioil and Subsidiaries' product distribution.

Specialty Chemicals

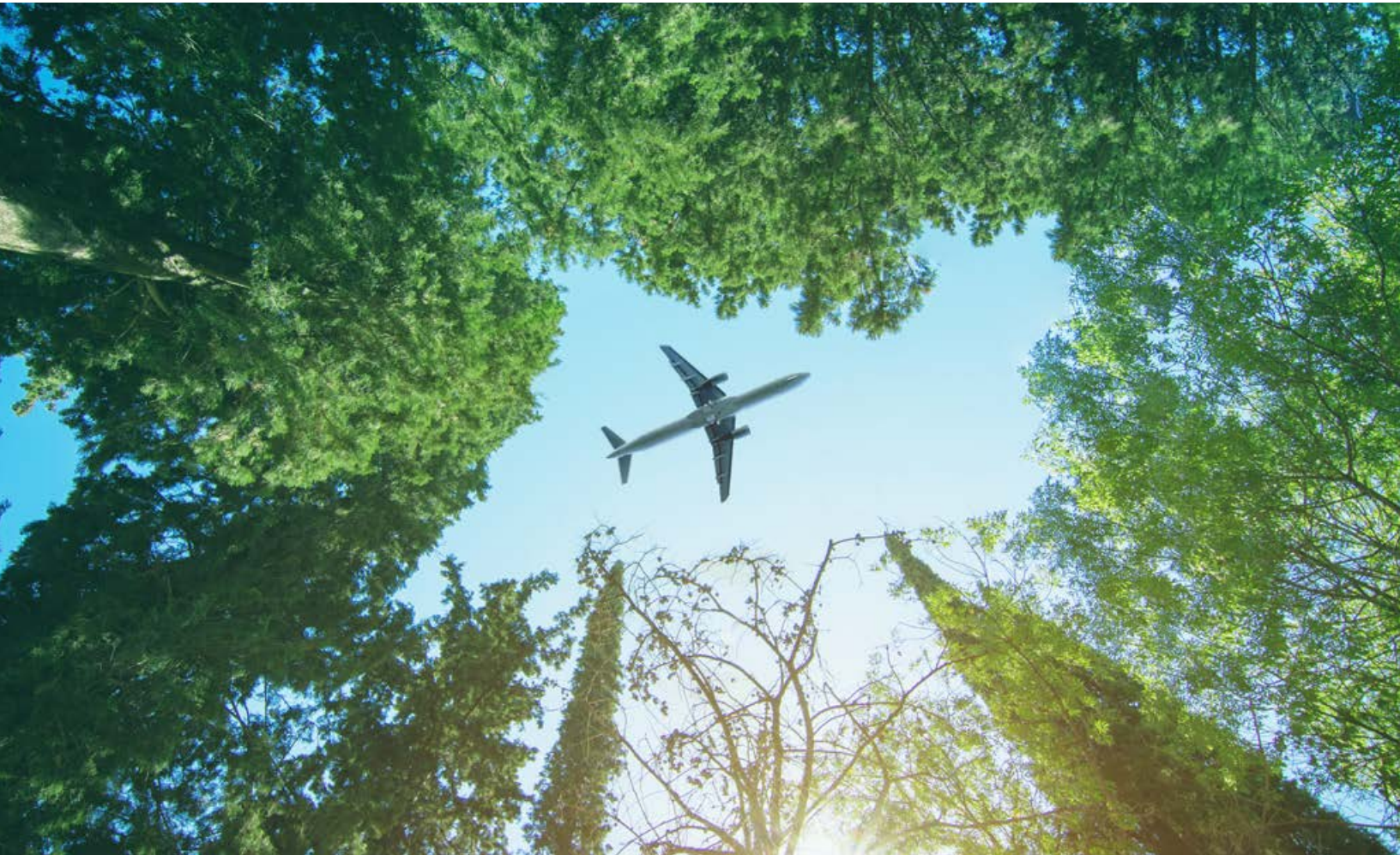
Thaioil and Subsidiaries are studying opportunities for investment extension to downstream petrochemical businesses, with a focus on developing products and technical services for specialty petrochemicals and chemicals. To this end, Thaioil shall modify the polymer grade to match customers' needs. Also, Thaioil shall

expedite the enhancement of employee competency and extend their special chemical experience by collaborating with PTT Group and alliance.

Investment Projects in Low-Carbon and Decarbonization Businesses

Thaioil and Subsidiaries' investment strategy for new businesses aligns with megatrends in support of the approach to Net Zero Greenhouse Gas Emissions.

Our investment focus is on three business groups: 1) Sustainable Aviation Fuels (SAF) through Hydroprocessed Esters and Fatty Acid (HEFA), Alcohol to Jet (ATJ) technology, and Co-Processing in current production processes, 2) New Energy, including Green Hydrogen and various derivatives, and 3) Decarbonization from current production processes; the focus is on Carbon Capture and Storage (CCS).



Risk Factors and Enterprise Risk Management

In 2024, the world continued to face emerging risk factors, namely the geopolitical risk especially conflicts in the Middle East (Israel and the Hamas group as well as Islamic Republic of Iran), political polarization shift in superpower countries, and domestic economic plight of each country. This resulted in economic slowdown around the world together with slower recovery of petroleum product demand than projected. In addition, a New Normal lifestyle has involved the digital technology and artificial intelligence (AI) for greater convenience as well as higher business efficiency. Unfortunately, it also brought more and more cyber attacks. Thailo has still closely monitored the theft of the Company's data and employees' personal data through ransomware, so that the company's reputation and other matters may remain intact. Since all these factors directly affect Thailo's business, they are elevated to key corporate risks.

To ensure efficient risk management and handling of potential impacts while sustainably maintaining business competitiveness in accordance with Thailo's strategies amid high uncertainty and volatility, Thailo and Subsidiaries applied the risk management approach under the model of The Committee of Sponsoring Organizations of the Treadway Commission Enterprise Risk Management 2017 (COSO ERM 2017) and ISO 31000:2018 (Risk Management Principles and Guidelines), regarded as universal practices. The risk management emphasizes integrated execution embracing Thailo and Subsidiaries' risk management and risk appetite, consisting of six elements: strategic, commercial/marketing, financial, operation, Environment Social and Governance (ESG), people and organization. The risk appetite framework was then connected to the process of mapping out the strategic plan, investment plan, and business plan to align with corporate objectives and goals. This was complemented by the identification of key risk factors, both internal and external, derived from stakeholders' expectations and environmental scanning, and brought to define measures and plans for each risk

factor. Risk Management is applied to scrutinize financial and non-financial factors to evaluate impacts and identify mitigation plans or suitable decisions. Finally, key risks were identified along with key risk indicators (KRIs) to closely monitor key risks and risk management outcomes. By revealing likelihood and potential impact of risks which were used to prioritize risks, the Risk Assessment Matrix is categorized into five risk levels together with six aspects of impacts, namely personal, environmental, property, reputation, asset, goal, and net profit of Thailo to set a mitigation plan and manage the stage of risk suitably. Including tracking progress every quarter, which is communicated by the Risk Coordinator. Furthermore, reports were then regularly reported to the Risk Management Steering Committee (RMSC), Risk Management Committee (RMC), and the Board of Directors (the Board) for efficient and effective steering of enterprise risk management. However, risk management processes and compliance to risk management standards are audited by internal and external auditors (Management System Certification Institute (Thailand), MASCI) annually.

Finally, Thailoil defined the risk management as one of the key performance indicators (KPIs) of Thailoil and Subsidiaries' executives.

Currently, the severity of threats tends to increase, as well as calamities and situations that could disrupt businesses are approaching; Thailoil, thus, has prepared to be ready by defining its business continuity plan (BCP) to comprehensively cover critical processes and key support processes under the ISO 22301:2019 Business Continuity Management. The simulation of disasters was designed as part of BCP drills in conjunction with continual emergency drills of the refinery. Also, Thailoil has developed the integrated system of good governance, risk management, internal control and integrated governance, risk&control, and compliance (GRC) approach to enable Thailoil to grow sustainably and command business ethics comply with corporate governance, conduct risk management systematically, and compliance with laws, regulations, and the company's articles of association.

Corporate Risk Management and Mitigation Plans

Thailoil has been encouraged to systematically monitor and review corporate risks as well as the effectiveness of mitigation plans by quarterly tabling Thailoil and Subsidiaries' risks, mitigation plans, and outcomes of KRI management monitoring for 2024 for RMSC and RMC's endorsement before tabling for the Board's approval. Thailoil and Subsidiaries have divided risks into 3 aspects with 14 key risks, and defined corresponding preventive measures or mitigation plans to achieve goals, as described below:

Business as Usual

1. Market/Commercial Risk

In 2024, the crude price and its spread of crude oil and petroleum products (both of which directly affect

Thailoil and Subsidiaries' profitability) highly fluctuated amid political conflicts between the Russia-Ukraine and Israel-the Hamas Group. Thailoil, therefore, proactively adjusted its margin hedging strategy, with the Hedging Steering Committee regularly screening and reviewing the strategic plan and setting hedging goals under the framework endorsed by RMC and the Board. Thailoil also engaged in productivity improvement and cost management to minimize impacts from such risks. In 2024, the margin hedging reports were monthly made to the RMC for up-to-date risk management.

As for commercial risks, Thailoil prioritized risk management of the reliance on major customers by selling petroleum products to PTT Oil and Retail Business Plc (OR) under the Product Offtake and Crude Oil Supply Agreement (POCSA) enabling Thailoil to know in advance the volumes of petroleum products required by the our customers so that Thailoil could plan the production volumes to accurately match customers' demand. Thailoil also sold petroleum products to other traders both domestic and international, and sold them as feedstock to Thai Paraxylene Co., Ltd., and Thai Lube Base Plc, as well as expanding our business into petrochemical business and to Indonesia and to other countries in Asia, which is considered a major step to diversify our investment to mitigate commercial risks to meet risk appetite.

2. Business Disruption Risk

Geopolitical conflicts, which could lead to international wars, the aggravating cost of living, labor protests, and domestic political situations, including dissatisfaction with election outcomes, are regarded as potential Black Swan events that could bring civil unrest hurting Thailoil's business.

Thus, Thailoil closely monitored the Russia-Ukraine conflicts as well as the war between Israel and the Hamas

group. In the meantime, Thailoil was also on alert for an unsatisfied election outcome protest or political problems, as well as the rising cost of living and additional energy costs which could result in public dissatisfaction, thus leading to unrest. Aware of such unrest situations, Thailoil drafted a BCP and constantly drilled the plans to be better prepared for emergencies, including contractor protest, cyber attacks, terrorist attacks as well as unplanned shutdown. Constantly, Thailoil engaged in the drill of BCP with related units and agencies to ensure that the company was prepared and ready for emergencies, and to uplift Thailoil's business continuity management as well.

3. Major Incidents

Major incidents could post impacts on business operations; the cause of which is possibly from both external and internal factors. Apart from affecting business operations, these risks affect our reputation, communities, society, and the environment. Thailoil, thus, came up with preventive measures and mitigation plans by adding measures for security, safety, occupational health, and the operation environment for employees and those related. Thailoil stressed process safety management and risk assessment for site activities; advocated safety activities of operators and contractors by ensuring the incorporation into every work process and intensive adherence; advocated inspection, maintenance, and assurance that all equipment works efficiently and reliably including analyzed performance and incidents to identify mitigation plan preventing the recurrence, coordinated with nearby communities, local government agencies, and industry groups to form collaboration on equipment and resources for safe and ongoing operations. In addition, BCP was regularly revised, improved, and rehearsed. Thailoil and Subsidiaries have engaged in applicable insurance: namely, physical loss or damage and business interruption insurance, third party liability insurance,

miscellaneous insurance, and environmental liability insurance to safeguard Thailoil's assets or properties under Thailoil's responsibility, including the refinery, depots, supplies and equipment, and others; and insure against losses of life and properties of third parties, including public liability, pollution liability, and product liability in addition to protection against potential loss to the environment and rehabilitation expenses.

Since water supplies for future projects are considered a key risk, Thailoil has executed a strategic plan for water management for sustainable consumption while ceaselessly tracking the water management situation of all related parties, along with proper planning and properly allocation of water consumption. Additional sources of water supply were also acquired.

4. Cybersecurity Resilience

Continuing after COVID-19 pandemic, the workplace trend has changed and relied more on technology, including work-from-home and digital workplaces where staff connect, communicate, and collaborate through multiple channels. There are more and more electronic meetings via Microsoft Team (MS Team) as well as the application of AI for business efficiency-these exemplify a major source of cyber risks of data leaks and infrastructure attacks along with cyber attacks (ransomware or malware). Thailoil has therefore elevated security measures for its information system to protect itself from external threats, including formulation of a digital policy for Thailoil and Subsidiaries complying with ISO 27001; relentless system monitoring and inspection; communication of measures and guidelines with applicable parties; and regular testing of protection systems by third-party experts to examine defects and seek additional protective approaches, as well as enhancing zero trust architecture measures. Moreover, Thailoil has also conducted security maturity

level assessment against international standards and stayed vigilant about abnormal events and cyberthreats from the Security Operating Center (SOC); both are conducted around the clock. Thaioil improved various digital systems and application obsolescence to stay up to date, as well as complying with the Cyber Security Policy. Thaioil commissioned a third-party expert for vulnerability assessment. Especially, Thaioil have built awareness for employees on cyber-threats and tested employees' knowledge and understanding by conducting phishing mail exercises every quarter. Thaioil have conducted a cyber drill as BCP so that the business may proceed seamlessly and constantly meet customers' and stakeholders' needs.

5. Water shortage

Based on the analysis of Thailand's water situation, notably in the East, a water shortage was expected in 2024, which could impact production processes and business in general. Thaioil, therefore, prepared measures for such shortage by reducing water consumption with the Recycle Reduce Reuse (3R) concept, planned additional water reserve in reservoirs, acquired technology and water-producing equipment, and identified new water sources to meet the needs and prevented interruptions to core processes. Thaioil also collaborated with PTT Group and government agencies to collectively drive a water management policy.

Strategic Initiatives

6. CFP Execution and Readiness for Startup&Operation

Clean Fuel Project (CFP) is a mega project underlying Thaioil's growth and sustainability. Together with the our contractors and related stakeholders in all sectors, Thaioil therefore prioritized this project's risks management spanning six aspects: occupational health and safety, management of communities around the refinery, project

period, capital management, quality, and preparedness of current and future process units. This is to ensure that CFP can proceed commercially as planned. Although CFP was affected by COVID-19 pandemic, the project management team has devised mitigation plans, including the proper prioritization of engineering and procurement work under the situation and compliance with the COVID-19 control measures.

7. CAP Project Execution Risk

Thaioil has been continuously monitoring investment outcomes in PT Chandra Asri Pacific Tbk (CAP), since the investment in CAP marks a milestone business step in the olefins petrochemical industry. Thaioil emphasizes and takes serious risk management of CAP performance profit and overall operations before deciding to invest in CAP's capacity expansion. This is to ensure that CAP would perform as planned and could lower potential risks despite new external risk factors affecting the plans.

8. Long-Term Business Disruption Risks

As the world turns, new risk factors have constantly emerged. This was caused by climate change and natural disasters, leading to greater public interest in environmental matters. The global warming seems to intensify sooner than expected, so there is an exponential interest in EV cars, replacing conventional combustion automobiles. Despite the slow growth of EV demand in 2024, the development of EV batteries needs to be closely monitored further, since such development affects demand in the automotive market. The EV growth rate may well accelerate peak oil consumption as well as the enforced Net Zero Greenhouse Gas Emissions, which could hasten a plunge in fossil fuel demand, thereby hurting Thaioil's long-term business. Thaioil has therefore extended to the olefins business by joining investment in CAP in Indonesia to sustain the growing olefins demand

there, as well as support Thailoil and Subsidiaries' business structural growth spanning petroleum and petrochemical businesses. Thailoil and Subsidiaries have also engaged in long-term planning and implementation of various strategic plans to be prepared for a low-carbon society as pledged by Thailand to Conference of the Parties 26 (COP26). This includes increasing process efficiency to curb and lower GHG emissions by 2060 and investigating investment in the eco-friendly business.

Strategic Enablers&Sustainability

9. Funding and Financial Resilience

Since the volatile Thai economy has inhibited a petroleum product demand, Thailoil has developed new financial tools to add diversity and flexibility for securing loans through money and capital markets. Also, Thailoil has restructured the investment capital to secure future growth, as well as been striving to maintain its financial credibility at the Investment Grade in parallel with preparation of capital sources for additional flexibility and investment support consistent with strategic plans. To this end, Thailoil has not only closely monitored the movement of money and capital markets, but have also strictly maintained financial discipline.

10. Staff Readiness

To enable CFP and New S-Curve Business growth to proceed seamlessly and be prepared for change, Thailoil has restructured the workforce and modified strategies for recruiting and developing potentials for employees to keep up with business needs and align with the New Normal. This includes proactive recruitment focusing on internal as well as external coordination for accessing more human resources through various channels, upgraded the corporate image, planned staff development that satisfies future needs by designing essential expertise

and enhancing knowhow among related employees, and introduction of technology to support personnel development. Moreover, Thailoil has also created learning media, added communication channels, strengthened internal relations to address the needs of all age, and modified the work format for job flexibility, as well as enhance the welfare diversity to meet employees' needs. Thailoil has also modified the plan and conducted activities to enhance engagement with Thailoil, consistent with employees' needs and expectations. Finally, Thailoil has modified employee administration practices for greater agility to address corporate needs while supporting compliance with a human-rights code in the workplace.

11. Community Complaints including Social Concerns

It has been 63 years that Thailoil has demonstrated its commitment to operating its business with responsibility for communities, society, and the environment for sustainable development. Thailoil values business operation in parallel with community development for a better quality of life through Corporate Social Responsibility (CSR) projects in the area surrounding the refinery as well as in remote areas covering the quality of life, education, environmental conservation, energy, and natural resources to become an admired, accepted, and trusted organization among communities and society. Thailoil supports and organizes regular activities with communities around the refinery to foster good relationship with the communities, Thailoil's virtual family members. The Health and Learning Center was established by Thailoil and Subsidiaries to achieve such good relationship. Thailoil also provides opportunities for various groups of stakeholders to engage in the operation management through three coordinates involving Thailoil and Subsidiaries, communities, and local authorities, and five participates in together thinking, acting, resolving,

learning, and developing. This would ensure all sectors' participation in operation for public benefit and with the same goal. Thailoil complies with the environmental whistleblowing process should our operations affect community living. The company also engages in community administration through our CFP Support Center, set up to coordinate and receive complaints from community members affected by CFP to ensure that Thailoil commands necessary actions to ease environmental impacts on communities. Finally, Thailoil is committed to operating businesses with fair treatment to all stakeholders for sustainable mutual benefit.

12. Single Buoy Mooring 2 (SBM-2) Recovery Plan

On September 3, 2023, crude oil leaked from an oil tanker during transfer loading near SBM-2 of Thailoil Refinery, Sriracha, Chonburi. Thailoil did its best to control and mitigate impacts, while notifying related agencies, tracking the situation, handling complaints, and looking after all those affected by the incident. Thailoil also constantly monitored impacts on natural resources for one year after the incident under a plan formulated with the public sector to ensure that natural resources and sensitive areas are not unduly affected, with measures laid down to prevent recurrences. Currently, Thailoil is speeding up the request made to government agencies to continue the operation of SBM-2 to enable crude offloading management to promptly resume.

13. Failure to Comply with Laws and Regulations

Amendments made to public laws, regulations, or requirements, as well as a new legislation, are meant to bring modernity and clarity to such laws, regulations, or requirements. However, such amendments could impact business and project investment schemes under Thailoil's strategic plans. Without close monitoring, Thailoil runs the risk of non-compliance. Therefore, Thailoil shall monitor and inspect various laws, regulations, and requirements to ensure compliance with them as well as state directives with binding obligation on the business. To this end, in place is systematic monitoring of public policy and emerging laws to enable prompt handling of changes. Employees and operators are encouraged to establish an awareness of the significance of compliance, which is achieved through various channels, including online, e-Learning, and e-mail newsletters. Also, in place is self-assessment to verify the efficiency and effectiveness of alignment between Thailoil's business with public policy, regulations, requirements, and laws applicable. Finally, Thailoil has defined a sufficient compliance policy as guidelines for its business.

14. Government Policy Risk

A change in political power or government could bring about changes in policies related to economic, financial, social, environmental, technology, and other aspects in Thailand. For Thailoil to operate its business and expand investment in various projects as planned, we have been

well aware of the significance of government policy changes in order to cope with them efficiently. Not only track and examine laws, regulations, and various requirements, but Thailoil also tracks changes of public policies closely and systematically to ensure that the operation strictly abides by such laws and public policies.



Emerging Risks

Thaioil has compiled changes of political, economic, social, environmental, legal, and technological factors from many sources including Global Risk Report, issued by the World Economic Forum, analyses of leading financial institutions, and those of related business groups which could impact business operation and tend to post emerging risks to Thaioil as follows:

Risk name	Risk level	Period	Explanation	Potential impact on Thaioil	Mitigation
1. AI application to business development	High	Medium term (in 3-6 years)	Generative Artificial Intelligence (Generative AI/Gen AI), a tool for deep learning that automatically creates new contents without human involvement, is revolutionizing the business world. While this could bring businesses countless benefits, it accompanies various risks. If Thaioil wishes to optimize its AI application, the company must recognize and be prepared to efficiently handle these risks. Examples of risks to Thaioil's businesses by adopting Gen AI are >> Cybersecurity gaps and cyber attacks in various forms through AI, including malware and assorted phishing that are AI-generated	>> Cyber attacks and data breach >> Legal impact: Breach of PDPA or GDPR could cause Thaioil financial, reputation, and credibility losses >> Criminals' deception with AI through Deepfakes or Voice Cloning could lead to financial liability >> Impact on customers' trust: Breach of privacy could deprive customers' or service users' trust in our business >> Impact on Thaioil's reputation	Therefore, Thaioil has added safety measures to its communication system to ward off external threats, including >> A policy for efficiently overseeing Gen AI application and development under the scope of the law and social ethics. Thaioil has defined dos and don'ts for applications in the company, enforceable on executives, employees, contractors, or third parties with access to key systems, or all of them. >> Compliance with ISO 27001:2002, with constant review, amendment, and audit of the cybersecurity system. >> Cyber Security Policy

Risk name	Risk level	Period	Explanation	Potential impact on Thaioil	Mitigation
1. AI application to business development (continue)	High	Medium term (in 3-6 years)	<p>>> Threats from the Deepfakes program, applied to trick those inside or outside the company through video clips or Voice Cloning to make up false data, leading to harm against the company</p> <p>>> Risks against data privacy and data security. Gen AI application could result in personal data being improperly collected and compiled in violation of PDPA. Then there is the issue of laws and regulations and AI-related legal risks under development</p> <p>>> Ethical and fairness risks: Gen AI could contain unfair choice of data compilation, such as discrimination based on biased data or improper outcomes</p>		<p>>> 24/7 vigilance about assorted abnormality and cybersecurity incidents by the Security Operating Center (SOC).</p> <p>>> Improvement made to various digital system and application obsolescence for modernity and update, which enhance confidence in the prevention of cyber-risk due to gaps.</p> <p>>> Nurturing of awareness of cyberthreats and testing employees' mastery of cyberthreats through quarterly phishing mail exercises.</p> <p>>> Preparedness for cyber attacks and routine performance reporting to executives, together with reports to the Risk Management Committee on risk management for data security and cybersecurity.</p>

Risk name	Risk level	Period	Explanation	Potential impact on Thaioil	Mitigation
1. AI application to business development (continue)	High	Medium term (in 3-6 years)	<p>>> In applying Gen AI, the accuracy of outcomes must be verified, since Gen AI could provide data hallucinations, copyrighted data, or biased data, particularly when Gen AI is applied to support decision-making or analyze data. Unverified use of Gen AI outcomes could be hazardous to Thaioil's reputation.</p> <p>>> Risks arising from a third party applying data or developing Gen AI without authorization.</p>		

Risk name	Risk level	Period	Explanation	Potential impact on Thaioil	Mitigation
2. Talent war	High	Medium term (in 3-6 years)	<p>>> Thaioil's strategy for strengthening existing businesses and expanding investment calls for capable personnel with diverse competency. Nowadays, the behavior and expectations of the Millennial and Gen Z groups differ from the current business culture, so Thaioil needs to adapt itself to fit these needs while fostering confidence and its image to attract target groups to support its secure and sustainable growth.</p> <p>>> A desirable personnel trend is for those with technology skills, including data engineers and data analytics to develop Thaioil's business processes, develop their own capability, and open up employees' learning avenues.</p>	<p>>> Shortage of capable employees to sustain existing and future businesses</p> <p>>> Business and innovation expansion do not conform to strategies.</p>	<p>Thaioil has fostered confidence and its corporate image to attract new personnel by engaging in</p> <p>>> Collaboration with leading recruitment companies to establish awareness of Thaioil's company information and employee stewardship to attract external target groups (students and workers).</p> <p>>> Growth in recruitment channels in collaboration with various recruitment agencies and leading academic institutions.</p> <p>>> Organization of the Open House activity to publicize Thaioil's business and employee stewardship to establish awareness of employer branding.</p> <p>>> Proper benefit and welfare for employees</p>

Risk name	Risk level	Period	Explanation	Potential impact on Thailoil	Mitigation
2. Talent war (continue)	High	Medium term (in 3-6 years)			<p>In addition, Thailoil has mapped out a personnel development plan to enhance its capability for addressing social and business changes:</p> <ul style="list-style-type: none"> >> Strategic workforce planning, which incorporates personnel capacity development in line with business goals so that they may securely grow in their careers >> Recruitment planning for new employee with capability of technology skills, together with a skill development plan for current employees >> Personnel training planning to promote continuing learning via a digital platform >> Organization of activities to advocate innovation and its application in Thailoil >> Management of employees' living conditions via various programs to look after their quality of life conducive to their work and capacity building

Internal Controls

Thaioil recognizes the value of the internal control system under the international framework of the Committee of Sponsoring Organizations of Treadway Commission 2013 (COSO 2013) for attaining all three aspects of internal control goals, namely efficient and effective operations, credibility of financial and other reports, and full compliance with laws and regulations. The Board of Directors (the Board) assigned the Audit Committee to review results of internal control assessment. Meanwhile, the Operational Risk Management Division takes charge of monitoring and reviewing the adequacy of the internal control system annually.

In 2024, the Board examined the assessment outcomes of the Securities and Exchange Commission of Thailand (SEC) form, prepared by Thaioil's executives and subsequently reviewed by the Audit Committee, and concluded that Thaioil's internal control system proved adequate and suitable for its business operations to accomplish goals, with the five elements of operations and system development to support internal control under COSO as follows:

1. Control Environment

The Board and executives of Thaioil support the corporate culture that stresses integrity and business ethics, consistent with Thaioil's vision and mission by managing a sound and suitable control environment as detailed below:

- >> Formulation and review of the Corporate Governance Policy and Code of Conduct which include anti-fraud and are approved and enforced as operating guidelines for the Board, executives, and employees. Conflicts of interest are electronically reported each year. No gifts policy is enforced emphasizing on no giving and receiving gifts, assets, or other benefits. Executives and employees are required to comply with such policies and guidelines as well as the Personal Data Protection Act (PDPA). This earned Thaioil multiple awards at national and international levels in 2024.
- >> Independence of the Board from executives is evident in clearly defined roles and responsibilities of the Board. The Board is responsible for reviewing and endorsing key strategies and policies as well as financial objectives, goals, risks, work plans, and budgets. The Board is to also uphold compliance with laws while ensuring that the executives pursue business policies and strategies efficiently and effectively.
- >> The organization is structured with emphasis on efficient internal control, equipped with checks and balances through different functions whose authorities, duties, and responsibilities are independent of each other. Each function has its own top executive. The organization structure is regularly reviewed in line with business strategies and plans.
- >> Thaioil devises Human Resource Development Plans to enhance employees' competency and capability systematically, duly embracing personnel attraction, development, retention and engagement along with a succession plan of key positions. Thaioil has also defined a process for fair performance management that reflects the ability to perform against Key Performance Indicators (KPIs). A long-term personnel recruitment strategy was identified, addressing the changing environment and prevailing business needs.
- >> Thaioil operates based on Integrated Governance, Risk & Control, and Compliance (GRC), and is equipped with ethics and good governance as well as systematic risk management in key processes, with Thaioil and Subsidiaries' GRC Integration Working Team established

to drive GRC and ensure continuous operation development in an efficient and systematic manner while enhancing the awareness and understanding of GRC to employees at all levels.

2. Risk Assessment

Thaioil values and incorporates risk management into the entire organization to drive the business towards both short-term and long-term goals with confidence. The Risk Management Committee (RMC) oversees policy formulation, identifies risk appetite, and support of resources and tools, as well as supervises, monitors, and reviews key risk management reports while providing advises to ensure efficient risk management within its risk appetite. Meanwhile, the Risk Management Steering Committee (RMSC) supports, promotes, and encourages the implementation of a risk management at all levels of the organization, and ensures that it is suitably implemented in compliance with the Policy and Risk Management Manual under prevailing business circumstances.

To this end, Thaioil has devised a risk management plan embracing risk assessment, analysis, and review in line with its strategies and business plans as well as Thaioil's objectives and goals. The plan takes into account external and internal factors relating to both current and future business, as well as corruption probability. Thaioil identifies Risk Appetite Statement and Key Risk Indicator (KRI) to facilitate performance monitoring and reporting, details of which can be found in the 'Risk Factors and Corporate Risk Management' section. Thaioil has also mapped out measures and guidelines for cyber security management, sustainable organization development focusing on environment social and governance (ESG) and net zero as well as recruitment measures amid talent war in the labor market.

Each year, those parties responsible for business processes must assess changes in circumstances potentially affecting internal control to define plans and ensure that their improvement and validity are in line with prevailing situations.

3. Control Activities

Efficient and effective control activities help Thaioil mitigate risks within its risk appetite. Key control measures are as follows:

- >> The internal control measures are based on good control principles, including segregation of duties, Corporate Authorization Procedures (CAP) (under revision for update), reviewing process, and document filing. The Governance, Risk Management & Internal Control, and Compliance Self-Assessment (GRCSA) form is sent out for applicable units to assess the efficiency and effectiveness of the internal control of key process and activity control. The Operational Risk Management Section shall review the assessment and monitor additional control improvement plans within a given timeframe to ensure that Thaioil is well equipped with adequate, suitable, and updated internal control.
- >> Preventive and monitoring control activities, both manual and automatic, are inherent in work processes. All executives are responsible for supervising and inspecting their respective units' work processes to ensure efficiency and propriety under work regulations with suitable, concise, and auditable internal control. Also, the Continuous Control and Monitoring System (CCMS) has been continually implemented to automatically monitor control activities under the SAP system.
- >> Control process of the information technology (IT) system security was identified following the standard defined by the National Institute of Standards of Technology (NIST). IT service management was reviewed and improved to be updated to keep pace with the changing situation, particularly the work-from-home practice. The Two-Factor Authentication system was upgraded for higher security using the One Time Password (OTP) code together with a log-in system designed to register personal electronic devices to allow access to the work systems. In 2024, Distributed Denial-of-Service (DDOS) Protection was additionally implemented to prevent unusual data access in Thaioil's system, which could cause a system failure.

4. Information and Communication

Thaioil values IT and communication systems that systematically support business execution, operation, management, and financial reports to accommodate the Board's and executives' decision making and ensure the efficiency and effectiveness of internal control. Policies and protocols for IT and communication are appropriately devised.

To maintain proper internal communication, Thaioil has developed an internal-communication manual as well as guidelines for efficiently managing contents and communication channels. Employees shall therefore receive prompt, complete, and accurate information. To this end, responsible parties have been appointed for each internal-communication channel, including the intranet, e-Mail, e-Newspaper, and internal bulletin (Akanee). Notably, the CEO Townhall supports continual communication between high-level executives and employees to ensure goal attainment. To accommodate the Board's decision-making, critical information such as meeting papers are properly communicated and sent to the Board at least five business days before and the minutes of the meeting within 14 days from the meeting date according to best practice.

As for external communication, Thaioil provides accurate and sufficient business information updates through public relations and advertising channels, including printed media, website, and social media such as Facebook. Moreover, performance outcomes and other related information that benefit investors' decision-making are provided at analyst meetings, while a crisis communication shall be executed to provide accurate, appropriate, and timely information.

In addition, Thaioil has laid down measures for filing complaints and whistle-blowing in writing. The process starts from receiving complaints, factfinding, to concluding cases. Channels for lodging complaints are clearly specified along with protection provided for whistleblowers and other parties concerned to encourage employees and third parties to report or provide information about non-compliance, fraud, or any action seeking unlawful benefits.

5. Monitoring Activities

Thaioil requires all executives to supervise and audit their respective work systems to ensure efficiency and compliance to policies, requirements, and work regulations under a concise internal control system. Thaioil equally values the management of Security, Safety, Occupational Health and Environment (SSHE), in which energy management and social responsibility are currently included, by requiring employees to undergo annual self-assessment and revise their operation as required by regulations. This prevents and minimizes losses concerning the safety and occupational health of employees and contractors as well as process safety. More details appear under "Risk Factors and Corporate Risk Management" section.

Thaioil annually monitors results of internal control, at corporate level with executives conducting the assessment using the SEC's internal control adequacy assessment form, and at the process level with process owners using the GRCSA form. Should any change in tasks or work processes occur during the year, the Operational Risk Management Section is to duly update and improve work procedures and control measures. Monitoring is also carried out through the CCMS system that can detect real-time non-compliance, with a report regularly submitted to process owners and executives' meetings. The approach ensures that all parties recognize the importance of compliance with business processes and internal control mechanisms. At the same time, Corporate Internal Audit Department formulates annual audit plans based on key risks, changes or increases in work processes or systems, and requests by management and the Audit Committee (if any). In 2024, a Corporate Internal Audit Department developed an Assurance Map to aid decision making on the adequacy, suitability, and improvement in supervising risk management to thoroughly cover significant matters and reduce the redundancy of auditing activities.

Sustainability



Thaioil and Subsidiaries' sustainable management and development performance report, covering Environment, Social, and Governance (ESG) aspects, has been incorporated in the 2024 Integrated Report.

For more information






Sustainability Management Policy and Goals

Thaioil and Subsidiaries are determined to operate and grow a sustainable business with attention to Environment, Social, and Governance (ESG) aspects as well as impacts on stakeholders throughout the value chain. The Sustainability Management Policy was, thus, identified and launched to drive the sustainable development in the same direction as sustainable business.

In support of the corporate vision and business strategies as well as United Nations Sustainable Development Goals (UN SDGs) while responding to the global trends involving ESG issues, which have become more and more vital to stakeholders and business operations, in 2024, Thaioil reviewed its sustainability management strategy implemented within Thaioil and Subsidiaries, and identified a sustainability strategic plan and goals regarding ESG operations, detailed as follows:

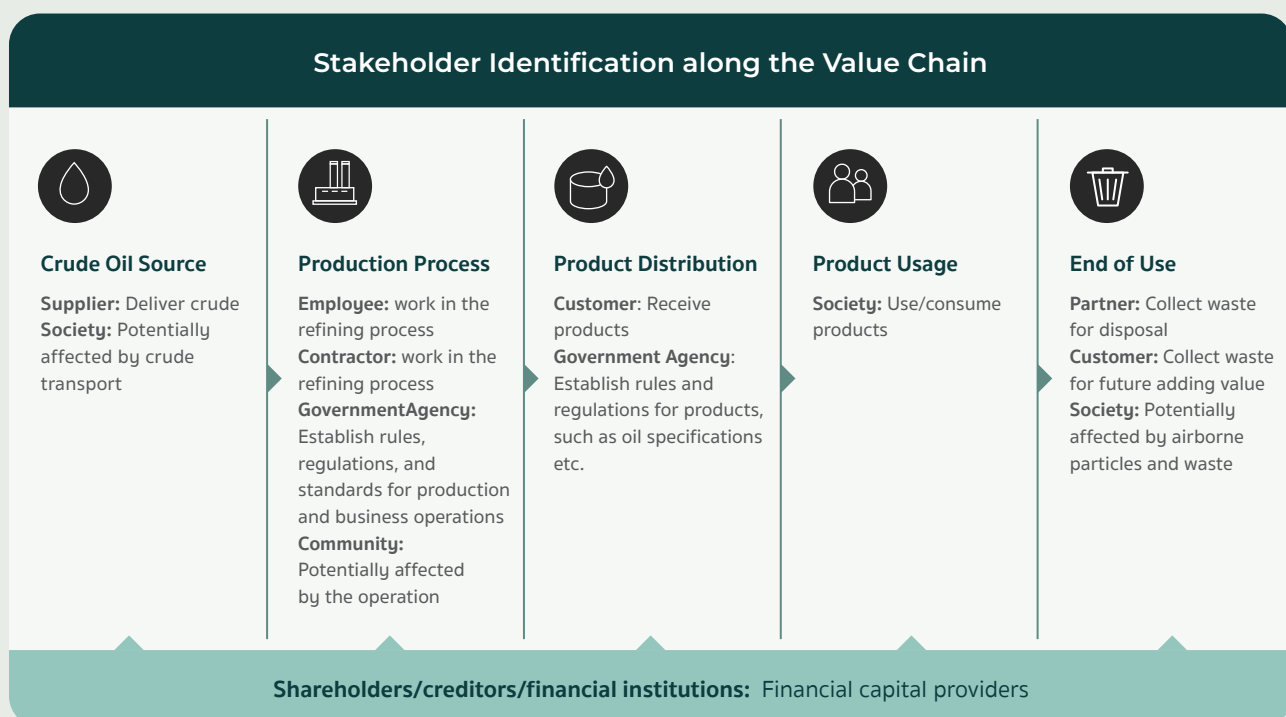


Additional information on Thaioil and Subsidiaries' sustainability Management Policy is available on Thaioil's website under 'Sustainability/ Sustainability Management/ Thaioil Group Sustainability Management Policy'.

Sustainability aspect	 E: Environment	 S: Social	 G: Governance
Strategy	Enhance Clean Environment Enhancing environmental management in line with the global direction	Engage Society Bonding with while creating value for communities and society to achieve long-term mutual growth	Ensure Good Governance Fostering confidence in corporate governance (CG) and organizational transparency
Success Indicators	Net Zero GHG Reduction: Reducing GHG emissions by 15% from the base year 2026 by 2035 to achieve Carbon Neutrality by 2050 and Net Zero Greenhouse Gas Emissions by 2060 through implementation of the Net Zero GHG Emissions Strategy	Creating Social Value: Upgrading people's quality of life and society with the C.A.R.E. strategy	Zero Case of Non - Compliance and Fraud Incidents: Achieving zero violation of laws and corporate rules
		Strengthen Community Engagement: Maintaining community engagement at 90% score	Good Governance Recognition: Being recognized as a business entity with good CG

Management of Impacts on Stakeholders along the Business Value Chain

Thaioil and Subsidiaries have identified stakeholders by analyzing their involvement along the supply chain, ranging from crude procurement, production, to waste disposal after product consumption. Impacts between one another were analyzed as shown in the diagram below:



As a result of such analysis of the value chain, stakeholders were divided into six main groups. An internal unit was established to take charge of continual communication and exchange information with each group of stakeholders to understand their expectations and points of view about the business. (More information is available in the 2024 Integrated Report under 'Stakeholders and Sustainability Issues')

Sustainability Management in Environmental Aspect

Thaioil and Subsidiaries developed an environmental management system by devising a policy on Quality, Security, Safety, Occupational Health, the Environment, and Energy Management as a framework. In addition, Thaioil and Subsidiaries have adopted the ISO 14001: 2015 environmental management system and established a systematic environmental database to control and minimize impacts while conserving a good environment in parallel with driving sustainable business growth. The following environmental impact management is included in the database.



Additional information on the policy on quality, security, safety, occupational health, environment, and energy management is available on Thaioil's website under 'Sustainability/Environment/Environmental Impact Management'.



Environmental Management

Thaioil and Subsidiaries have systematically applied ISO 14001: 2015 to business operations with regular reviews for continuous improvement. The Five-Year Environmental Master Plan has now been upgraded as a framework for the operations and for driving environmental sustainability management. Also, the Compliance Unit was established as the core unit to drive the assessment of compliance with laws and regulations. Meanwhile, management tools and systems have been developed to support higher operating efficiency. In 2024, following an examination by the Management System Certification Institute (Thailand), Thaioil and Subsidiaries were found to engage in no major non-compliance with laws and regulations concerning the environment. (More information is available in the 2024 Integrated Report on the topic "Environmental Impact Management".)



Water Management

Thaioil and Subsidiaries boast an efficient and systematic water management under the project 'Thaioil Circular Economy - WE GO Theme' (Thaioil CE WE GO), initiated to minimize risks from shortage of water required for processes while preventing conflicts with neighboring communities. Volumes of water consumed are accurately and clearly disclosed to the public and are open to examination. A business continuity plan has also been developed and reviewed, taking into consideration the shortage of water needed for processes to reduce water consumption and raise water management efficiency in the long run. In 2024, Thaioil and Subsidiaries could replace 33% of freshwater with sea water. (More information is available in the 2024 Integrated Report on the topic "Sustainability/Environment Dimension/Circular Economy".)



Waste and Hazardous Goods Management

Thaioil and Subsidiaries command systemic industrial waste management by developing a waste inventory, minimizing industrial waste from the beginning of operation using the Circular Economy principle coupled with the 3Rs strategy (Reduce, Reuse, and Recycle), and applying them for waste management, collection control, transport, and safe disposal as suggested by laws and technical principles. In 2024, Thaioil and Subsidiaries achieved the goal of zero landfill. (More information is available on Thaioil website topic “Sustainability/Environment Dimension/Circular Economy”.)



Energy Management

Thaioil and Subsidiaries keep on executing the energy conservation project to achieve energy efficiency at various levels of production. In 2024, there were a total of 39 projects involving energy conservation, capable of reducing 494,794 gigajoules of energy or 28,985 tons of carbon dioxide equivalent per year. The attempt resulted in cost saving of around THB 223 million. (More information is available on Thaioil website topic “Sustainability/Environment Dimension/Circular Economy”.)



Biodiversity Management

In addition to doing business with strict and continuous adherence to measures entailed in the Environmental Impact Assessment (EIA), Thaioil and Subsidiaries have joined PTT Group Biodiversity and Ecosystem Service in reviewing the manual on biodiversity and ecosystem management. The manual provides guidelines for managing responsibilities for habitats and natural resources surrounding the refinery to ensure that the operations of Thaioil and Subsidiaries will not cause negative impact on the ecosystem. No deforestation nor encroachment on reserved forest areas was caused by Thaioil and Subsidiaries during 2024. (More information is available on Thaioil website topic “Sustainability/Environment Dimension/Biodiversity”.)



Climate Change Management

To achieve the Net Zero GHG Emissions target by 2060, Thaioil and Subsidiaries have continuously executed projects to reduce GHG emissions in production processes. Risks were assessed and opportunities were analyzed to support production control planning while systematically monitoring climate change actions taken to support Thaioil and Subsidiaries' attempt to reduce GHG and the country's GHG reduction goal. In 2024, direct emissions of GHG (Scope 1) from the operations of Thaioil and Subsidiaries amounted to 3.45 million tons of carbon dioxide equivalent, better than the target of no more than 3.67 million tons of carbon dioxide equivalent. (More information is available in the 2024 Integrated Report on the topic “Climate Change Actions”.)



Air Quality Management

Air quality management at Thaioil and Subsidiaries' operations is reflected in process design, maintenance planning, control of the sulphur content in fuels, greater use of fuels with low emissions than those with high emissions, application of clean production equipment and processes, application of technology with efficient combustion that releases low nitrogen oxides, and implementation of projects to minimize impacts on the environment and communities. All these attempts are to reduce environmental impacts at sources. (More information is available in the 2024 Integrated Report on the topic “Environmental Impact Management”.)

Sustainability Management in Social Aspect

To become a sustainable organization, Thaioil and Subsidiaries have been committed to operating businesses with responsibility for society as well as safety and occupational health. Potential impacts on all stakeholders have also been taken into consideration. Stakeholders are treated equally and fairly with respect to their rights in a systematic manner using the Plan-Do Check-Act approach. This could be witnessed in, for example, the policy announcement the risk assessment, the measure formulation to control and minimize impacts together with result monitoring and reporting for further improvement, as well as implementation of various activities and projects to promote the corporate culture and awareness of integrity, perseverance, patience, and social responsibility to create a balanced society with upgraded living.



Safety and Occupational Health Management

Thaoil and Subsidiaries have followed the five-year master plan on safety, occupational health, and emergency and crisis management, with determination to achieve the corporate safety goal of 'No Harm, No Leak, Goal Zero' stated in the strategic plan that aims for 'Operational Excellence to Business Excellence' (O2Bx), and drives toward the world-leading refinery. To this end, safety is a major factor to be improved and upgraded. Thaioil and Subsidiaries adopt the principle "All Safe White Green" to develop and reinforce awareness and leadership in work safety among all staff and contractors. The plan has been implemented through the GEMBA Management Walk and Talk activity held by senior executives, and the QSHE Roll-Out activity, alternately held at various construction sites and operating sites of various projects, particularly during the annual maintenance shutdown period. This is the campaign supporting safety awareness, and enhance participation of the operators in the process area. In 2024, Thaioil Group's Total Recordable Injury Frequency Rate (IRIFR) of employees and contractors was on par within the top 10% of companies in oil and gas industry by the International Association of Oil&Gas Producers (IOGP) criteria. (More information is available in the 2024 Integrated Report on the topic "Occupational Health and Safety".)



Human Rights Management

Thaoil and Subsidiaries are strongly determined to drive the business strictly based on human rights throughout the value chain. The organization stands firm on principles of international organizations advocating human rights, including the United Nations Global Compact (UNGC), Universal Declaration of Human Rights (UDHR), United Nations Guiding Principles on Business and Human Rights (UNGPs), Core Conventions of the international Labour Organization (ILO), International Finance Corporation (IFC), and National Action Plan on Business and Human Rights (NAP). Two policies on human rights were launched in 2015 with amendments made in 2021, namely: **Thaoil Group Human Rights Policy in the Workplace**-to protect employees' human rights and **Thaoil Group Business and Human Rights Policy** together with guidelines on human rights for suppliers - to support human rights and prevent risks for Thaioil and suppliers from activities which may violate human rights.

These two policies address sexual harassment and other forms of harassment as well as illegal labor, both child labor and forced labor, in domestic business operations and compliance with international regulations for overseas businesses.

In 2024, 100% of Thaipol and Subsidiaries' business activities, covering activities in Thaipol's core business and those in partnership with others, were assessed against Human Rights Due Diligence (HRDD). No complaints were lodged by staff and partners about human rights violation by any internal or external stakeholders under corporate risk management principles that are systematically aligned with those of the United Nations. (More information is available on Thaipol website topic "Sustainability/Social Dimension/Human Rights".)



Additional information on policies and principles on human rights of Thaipol and Subsidiaries is available on Thaipol's website, under 'Sustainability/Society/Human Rights'.



Social Responsibility Management

Thaipol and Subsidiaries are confident that organizational sustainability thrives from the balanced coexistence between business operations and communities and society. The Board of Directors has made a Thaipol Group Corporate Social Responsibility Policy together with guidelines for policy implementation and continuous monitoring. Management and the unit responsible for social and community development were assigned to formulate a strategic plan and a long-term development plan, and to visit neighboring and remote communities to foster relationships. The results of which would regularly be reported to the Corporate Governance and Sustainability Committee to ensure goal attainment regarding the enhancement of community and social potential to increase the engagement and long-term mutual growth.



Additional information on policies on social responsibility of Thaipol and Subsidiaries is available on Thaipol's website, under 'Sustainability/Social Dimension/Corporate Social Responsibility'.

At present, Thaipol and Subsidiaries conduct social responsibility operations for communities around the refinery and remote communities with a focus on shared value and co-benefit for communities and society along with sustainability through supporting educational, public health and environmental projects, as well as promoting the Circular Economy in Chonburi. There are also activities to support the achievement of Thaipol's target of Net Zero Greenhouse Gas Emissions, with the main foundation of continuous promotion of social responsibility values for employees and contractors through the "You Initiate...We Fulfill" volunteer project.

The 2024 Community Engagement Index, prepared by an independent consultant to measure relationships between communities and Thaipol and Subsidiaries, was at 95.54%, which was better than the minimum target of 85%. (More information is available in on Thaipol website topic "Sustainability/Social Dimension/Corporate Social Responsibility".)

Sustainability Management in Corporate Governance Aspect

Thaioil and Subsidiaries are determined to conduct a fair, honest, transparent, and auditable business, complying with the corporate governance principles and code of conduct, which form a strong foundation for fostering confidence among investors and all stakeholders, raising business competitiveness, and supporting sustainable growth. Policies, manuals, and guidelines concerning corporate governance of Thaioil and Subsidiaries were drawn up in line with the 2017 Corporate Governance Code (CG Code 2017) for listed companies as well as measures for corporate governance and anti-corruption assessment, laid down by renowned and recognized organizations, such as the Corporate Governance Report of Thai Listed Companies (CGR), Thai Private Sector Collective Action against Corruption (CAC) organized by the Thai Institute of Directors (IOD), NACC Integrity Awards organized by Thailand's National Anti-Corruption Commission, and Dow Jones Sustainability Indices (DJSI) organized by S&P Global, internationally-renowned indices for sustainability assessment.



Corporate Governance and Code of Conduct

Directors, executives, and employees of Thaioil and Subsidiaries are required to strictly observe code of conduct concerning procurement, intellectual property, money laundering prevention, application of information technology and communication, among others. Thaioil and Subsidiaries stand firm against all forms of fraud, anti-corruption included. The Anti-Fraud Policy was identified and launched for organization-wide implementation. Board directors and executives must act as leaders and role models in performing their duties with honesty, integrity, fairness, transparency, and auditability to make corporate governance a sustainable corporate culture. In 2024, no violation of the good corporate governance principles or code of business conduct was detected among employees of Thaioil and Subsidiaries. (More information is available on Thaioil website topic “Sustainability/ Governance and Economics Dimension/Fight Against Corruption”).



Additional information on policies and principles concerning CG of Thaioil and Subsidiaries is available on Thaioil's website, under 'Corporate Governance/Policies'.

Research and Development of Thailoil and Subsidiaries

The year 2024 was filled with implementation of Thailoil and Subsidiaries' research and development (R&D) plans in manpower management as well as R&D management. The R&D strategic plan structure is divided into 6 pillars:



Excellence Center

01

Crude
Excellence Center

02

Catalyst & Adsorbent
Excellence Center

03

AI/Robotics
Solution Provider

04

High Value Product/
High Value Business

05

Polymer &
Olefin Derivatives

06

Sustainability &
New Business

All these pillars focus on evolving new research work with academic and business partners to cater to current and new customers' needs through efficient cross-functioning teams. This year, there are 14 R&D projects, with five research projects completed.

This year marked a milestone where Thailoil completed construction and inspection of the Residue Hydro-Cracking Unit (RHCU) Pilot Plant under the Clean Fuel Project (CFP). The plant tests and selects crude for the RHCU unit, a first in Southeast Asia. Crude testing and selecting is scheduled to operate in 2025 onwards.

In 2024, Thailoil and Subsidiaries incurred THB 42 million in R&D expenses, inclusive of the RHCU Pilot Plant Project expense.

R&D performance

This 2024 notable R&D performance is described below.

High Value Business

In conjunction with High Value Business Development and Commercial departments, the R&D unit has developed new disinfectant+surfactant (D+S) products with the market's desired properties. The prototypes of such products that have undergone test production are as follows:

1. Hydrocarbon Decontamination Chemicals These chemicals consist of industrial-care surfactants designed to remove hydrocarbon stains or oil spills and Volatile Organic Compounds (VOCs) stains from oil tanks or refinery and petrochemical plant equipment to below 500 ppm (parts per million) before equipment commissioning and internal inspection as required by law. This research represents collaboration with the Petroleum and Petrochemical College (PPC), Chulalongkorn University, from selection of surfactant structures and types, formulation, tests of cleaning efficiency, corrosion, toxicity, and environmental effects as well as treatment. Test outcomes of prototypes spanning aromatics (benzene, toluene, and xylenes) in the laboratory and storage tanks for benzene compounds of Thai Paraxylene Co., Ltd., showed that these prototypes are highly efficient in cleaning stains and VOCs alike in terms of chemical volumes used, waste generated, and time consumption in comparison with imported chemicals for industrial application. Also, there is no impact on equipment corrosion and workers' health. Thaioil has planned the marketing of these products in 2025 together with development extension of these cleaning products, which eliminate VOCs derived from gasoline and crude oil.

2. Waterless Hand Cleaner This product consists of personal-care surfactants designed to remove stains, including oil or hydrocarbon compounds, grease, printer ink, and oily paint marks on body parts like palms and arms. This project features collaboration with companies experienced in product design and formulation together with testing of cleaning efficiency to obtain product formulas that prove efficient in cleaning. Thaioil's proprietary formula causes no skin irritation, attested and certified by dermatologists of prestigious institutions. The R&D unit has come up with prototypes, which have undergone tests on operators

in the maintenance, engineering, and production units, among others. Excellent results were confirmed, with positive feedback from these operators. Today the project is under the prototype preparation stage for data collection from external customers and product development extension before getting ready to market this research product in 2025.

3. Mild Surfactant Ingredient for Personal Care Products

This effort develops transparent, mild, and foamy surfactants for sensitive skin, with applications in a wide range of personal care products, including facial cleansing, body soap, and hand-cleansing products. The research is undertaken with a Thai university well-versed in personal care product R&D and operating a cosmetic factory of the Good Manufacturing Practice (GMP) standard. To elaborate, the research begins with selection of mild surfactants and determination of the right formulation. Currently, the project has identified prototypes undergone and passed tests of foam volumes, detergency, skin irritation, transparency, and stability. These prototypes can now serve as feedstock for personal care products that require mildness, be easy to use for formulating finished products, and simplify blending procedure. Today, Thaioil has filed for petty patents of sensitive-skin surfactants and is preparing these surfactants for collecting customers' requirements. Thaioil is poised to market this research product in 2025.

R&D projects

In 2024, Thaioil and Subsidiaries' notable R&D project work outcomes are:

1. Euro 5 catalyst testing and selection This collaboration with PPC, Chulalongkorn University, tests Euro 5 low-sulfur diesel catalyst efficiency for application in a prototype reaction simulation kit. To elaborate, testing takes place under actual process conditions

to gain data for specifications assessment and choice of the best catalysts for refinery conditions.

- 2. Service for testing catalyst efficiency with external parties** This also features collaboration with PPC, Chulalongkorn University, in providing pilot test units under process conditions for results specified by users. This project verifies the precision and reliability of catalyst test outcomes as well as optimized asset management.

- 3. Application of AI to compare PDF drawing diagrams** This project applies algorithm knowledge by coding that defines comparison functions of drawing diagrams. more than one pair can be compared each time (each pair consists of two PDF files). Comparison outcomes are shown in shades and density of color.

- 4. Conversion of carbon dioxide to carbon materials** This research collaboration with NANOTEC of National Science and Technology Development Agency (NSTDA) concerns the conversion of gaseous carbon dioxide to high-value carbon materials instead of flaring and venting it. To elaborate, carbon dioxide is derived from hydrogen production from natural gas that has undergone pure-hydrogen isolation. By using this method, the carbon dioxide-trapping process can be disregarded and carbon dioxide can directly be converted to carbon products. Preliminary studies have shown that liquid-metal technology is ideal for such production under least-energy production conditions. The resulting products also command targeted quality. Initial test results should be obtained in 2025.

- 5. New Formulated Surfactant Ingredient(s) with New Delivery System for Personal Care Products: (1) Cleansing Product and (2) Leave on Product** This proof-of-concept research is in collaboration with Nabsolute Co., Ltd., a start-up under the Faculty of Pharmacy, Chulalongkorn

University, with proficiency in synthesis and technology owner of a distinct Delivery System with high efficiency in skin absorption. The project introduced a Delivery System test to improve the efficiency of active substances in products containing surfactants, namely cleansing products and leave-on products. Both represent preliminary tests that yield trends and outcomes for product development in response to personal-care customers' needs.

- 6. Development of bio-preservatives derived from bacteria for application to paint and coating solutions.** This proof-of-concept research in collaboration with the Faculty of Pharmacy, Chulalongkorn University, strives to identify the proper bacteriocin for bio-preservatives that are ultra-safe and likely to have substantial demand. The research focuses on testing target bacteriocin with various bacteria, fungi, and yeast to test their antibacterial activity, antifungal activity and anti-yeast activity in paint and coating solutions in comparison with current bio-preservatives (comparative test). Still in the stage of comparative testing, the project is poised to proceed to the next stage of research.

- 7. Value addition to micro-organisms remains in Biological Wastewater Treatment** Another proof-of-concept research project in collaboration with BIOTEC, NSTDA, seeks to add value to micro-organism remains in biological wastewater treatment systems instead of plain combustion. This project supports decarbonization, thus addressing Thail's sustainability strategy. To elaborate, one starts by studying enzyme extraction and isolating micro-organisms capable of enzyme production for twin uses in digesting micro-organism remains and turning to enzymes. The study found that certain micro-organism species can disintegrate and convert micro-organism remains into the lipase enzyme.

8. RHCU Pilot Plant. This simulation production unit of the RHCU Unit under the CFP boasts process design by the R&D unit of Thaiphoil and Subsidiaries and the technology licensor. Its objective is to test and procure a crude oil blend compatibility for the RHCU refining process under various parameters. The outcome will aid production planning for maximum efficiency. In 2024 the project construction was complete and the main equipment with designed efficiency was inspected. The operating efficiency is as design in evidence of the crude oil desalination unit, crude distillation unit, and the Mini Ebulated Bed Unit (MEBU). The RHCU Pilot Plant shall start operating and test crude as planned from 2025 onward.

level 4 and level 5 contain possible benefits from project implementation, obtain revenue 100 million and 200 million baht per year. The goals for corporate innovation were cascaded to all 35 Thaiphoil departments. The focus was on converting ideas into prototypes and testing these ideas with users or customers to gather feedback from actual users and lead to ongoing development, resulting in products or services that truly cater to users' requirements.

The outcomes in 2024 were 53 completed prototypes in 35 departments, equivalent to 233 million baht per year in potential benefits. As such, level 5 KPI was achieved.

Innovation Management

Since 2022, Thaiphoil and Subsidiaries have increasingly valued corporate innovations, evident in the addition of Innovation to the corporate values. The Corporate Innovation Maturity Model (IMM) yielded a '3' (Challenger) level out of five levels. In 2024 an IMM development of the past two years found that Thaiphoil and Subsidiaries had scored 11 marks higher, yet still at level '3' (Challenger); note that Thaiphoil is approaching level '4' (Practitioner). This success was the fruit of employees commitment to innovation. Thaiphoil and Subsidiaries are committed to raising the innovation ranking from level 3 to level 4 by 2026, thus approaching parity with leading corporations in Thailand and abroad.

In addition, in 2024 Thaiphoil defined the innovation corporate KPI to strengthen business in a sustainable manner. To elaborate, level 1 contains creative ideas for prototype projects, numbering 20 projects; level 2, also creative ideas, numbering 30 projects. Level 3 contains production of prototype projects, numbering 30. Finally,



Project to Promote Innovation Knowledge

Thaioil and Subsidiaries actively encourage employees to be quality innovators and cultivate awareness of the significance of innovation and knowledge for scaling up development and nurturing inspiration through the following activities.



TOP Innovation e - Newsletters

Satisfaction Score

97 / 100

Thaioil and Subsidiaries send a weekly e-Mail to all employees. Designed to promote creativity, encourage thinking outside the box, and instill a growth mindset, this newsletter cultivates various qualities of innovators. Additionally, it emphasizes the significance of innovation at present while providing valuable insights into modern technology. The TOP Innovation e-Newsletter has garnered significant momentum, eliciting remarkable feedback. In 2024, a total of 33 issues reached over 20,904 readers. The overall satisfaction scores for the newsletter were exceptionally high, registering 97 out of 100.



TOP BCG Updates

Satisfaction Score

97 / 100

The TOP BCG Updates serve as a monthly medium delivered through e-Mail to enhance understanding of the BCG economic model. This model, initiated by the Thai government, promotes three key economic systems: Bio Economy, Circular Economy, and Green Economy. The content covers various aspects including electric vehicles, hydrogen energy, and innovations to reduce global warming. In 2024, the overall satisfaction level reached an impressive 97 out of 100.



Innovation Talks

Satisfaction Score

94 / 100

The Innovation Talks series involves the invitation of external speakers with expertise in innovation to share knowledge with employees. Renowned speakers such as Mr. Thongchai Rojkangsadan (Instructor, Faculty of Engineering, Chulalongkorn University), Mr. Thana Saranwatephan (General Manager, AI & Robotics Ventures Co., Ltd.), Mr. Natthaphat Thanesworakul (Corporate Innovation Level Measurement Advisor, RISE ACCEL Co., Ltd.), and Mr. C.K. Cheng (CEO, Fastwork Technologies, Co., Ltd.). In 2024, four activities were organized, witnessing a 15% increase in employee participation over the previous year. Overall satisfaction also rose from 93 to 94 out of 100. Each activity received active employee participation, thus a highly positive response.

Prototype Awards Project 2024

Thaioil and Subsidiaries have compiled the 62 project outcomes of innovation prototypes from all departments, each assessed by a panel, which awarded 11 outstanding projects with Prototype Awards. Out of these, six categories of awards were granted; there were 2 Best Innovative Prototype Awards, 2 Most Benefit Awards, and 3 Best New Product Development Awards. There were the two Best Innovative Prototype Awards which was the greatest prize. Firstly, the Robotic Cleaning for Fire Heater Application Project, submitted by EOSC, ENTS, and RHRD, features joint development of robots for fire heater cleaning to raise cleaning efficiency as opposed to staff cleaning,

since the project eliminates scaffolding, thus cutting more than 50% of the time required. Another project is Oil Mist Generator Controller Upgrading, submitted by ENIM and ENMM, which features an improved oil mist generator by adding a diagnostic function and log trend to enable immediate machinery diagnosis.

On November 7, 2024, Thaioil hosted an Innovation and Learning Day 2024, where multiple learning activities were organized alongside corporate innovation activities. The CEO presented 11 Prototype Awards to outstanding innovation projects to boost everyone's morale for innovation.

Human Resource and Organization Development

Convinced that employees are the key driver of Thailoil and Subsidiaries toward the vision and a steady as well as sustainable growth, Thailoil has prepared the human resources (HR) and organization to cover 3 aspects including Organization and People Capacity, People Capability, and People Way of Work. Below are the actions taken:

1. Organization and People Capacity focuses on designing an organization structure to support the three main strategies to grow and become a sustainable organization, planning manpower to be in line with the strategic plans for each period of the year, and accelerating recruitment to fill the workforce according to goals, as well as designing an employee

management system to support overseas business expansion.

1.1 Strategic Recruitment involves enhancement of staff recruitment caliber through Thailoil Energy Service Co., Ltd., by pursuing efficient channels to recruit more employees, including the use of digital

technology to improve recruitment and the selection process to become more concise and more rapid.

1.2 People & Organization System creates a new career path management approach, consistent with the business direction and the nature of work that requires rapid results while focusing on employee growth according to their potential to motivate, attract, and retain high-potential employees.

2. People Capability develops employees to ensure sufficient knowledge and skills to drive current and future businesses, including preparation of employees to grow on a secure career path.

2.1 Extensive Business Growth Development develops the main group of employees who efficiently drive the implementation of the organization's three strategic aspects, acquiring skills, knowledge, and ability according to the 70-20-10 principle by focusing on application of knowledge to increase business value added.

2.2 Leadership Development develops leadership skills through the concept of Inclusive Leadership, which focuses on leaders' understanding of others so that they can lead the team with empathy and compassion, and leaders' role as a reinforcement for the team, supporting and motivating the team to forge better bonding and higher performance. Further more, Thailoil and Subsidiaries focus on developing employees according to the succession plan to prepare them as future executives.

3. People Way of Work ensures fair treatment of employees, providing them with fair and competitive benefits and pays as well as work safety, while promoting a good corporate culture for staff contentment and working together for Thailoil's goal attainment.

3.1 Good Labor Practice: Labor Right and Equality
Commitment to the respect of human rights in the workplace and at all our operating sites is clearly reflected through the Human Rights Policy and

guidelines for Thailoil and Subsidiaries' Human Rights Impact Assessment Procedure, posted on Thailoil's website (www.thailoilgroup.com) under 'Sustainability/I: Social Dimension/Human Rights.' Thailoil does recognize duties and responsibility to practice and respect human rights while playing an important role in driving Thailoil Group Value Chain and respecting and complying with human rights. To this end, a Human Rights Due Diligence process has been developed for all business activities undertaken by Thailoil and Subsidiaries and suppliers in the value chain annually along with risk assessment carried out every three years. The tool was developed in line with the Human Rights Due Diligence Handbook of the International Finance Corporation (IFC), United Nations Guiding Principles, National Action Plans on Business and Human Rights (NAP 1 and NAP 2), and corporate risk management. This accounted for 'Thailoil Group Human Rights Impact Assessment and Management Procedure'.

In 2024, Thailoil and Subsidiaries focused on organizing activities to promote human rights to ensure that executives, employees, and stakeholders clearly understand the policies and regulations. This is to prevent human rights violations in the Thailoil workplace. The '3 Parts for Fulfilling Human Rights' guidelines, carried out for the fourth consecutive year, consist of 1) Communication with all sectors to ensure awareness of human rights, 2) Improvement of employees' physical and mental health, and 3) Putting 'people' first, through various activities, covering all stakeholders of Thailoil.

To achieve sustainable business operation to retain capable personnel within the organization, Thailoil and Subsidiaries annually consider attractive pays and welfare for employees to be able to compete with peer industries and leading companies in Thailand. This includes refraining from discrimination and allowing freedom of association to negotiate

as a group. Thaioil recorded no labor dispute as of December 31, 2024, and registered 390 members to the Labor Union of Thai Oil Refinery, representing 75% of the workforce. There has been no protest or strikes, and 100% of business transactions have been audited accordingly.

3.2 Employees' Remuneration (Excluding Executives)

Employees of Thaioil and Subsidiaries receive benefits such as salary, allowance, overtime payment bonus, and other welfare such as medical expenses, housing allowance, children's education support, funeral allowance, including various leave rights, such as annual leave, military service leave, personal leave, and maternity leave. In addition, Thaioil has contributed to the provident fund for employees. Thaioil is also aware that each employee needs financial security upon retirement, and therefore a gratuity scheme/pension project is organized whereby a lump sum of money will be awarded to employees, depending on their respective service periods. Employees are entitled to request a pension in advance every ten years, and each month Thaioil provides contribution to this project.

Remuneration for employees in the accounting period ending December 31, 2024, is as follows:

Total remuneration for Thaioil employees

Type of Remuneration	Remuneration (THB Million)	
	2024	2023
Salary and allowance	703.23	757.23
Bonus	280.75	345.07
Contribution to Provident Fund	69.89	75.54
Retirement (Gratuity) Fund	69.12	71.41
Overtime	96.25	73.61
Miscellaneous	415.04	358.52
Total	1,634.28	1,681.38

Total Remuneration of Employees of Thaioil Energy Service Co., Ltd. (TES)

Type of Remuneration	Remuneration (THB Million)	
	2024	2023
Salary and allowance	1,271.99	1,165.40
Bonus	372.52	413.52
Contribution to Provident Fund	83.56	72.28
Overtime	132.17	87.82
Miscellaneous	247.62	219.04
Total	2,107.86	1,958.06

In addition to the remuneration described above, Thaioil set up a Provident Fund in 1990 under the Provident Fund Act B.E. 2530 (1987) and has contributed 15% of employees' salary to the fund. Employees may contribute 5-15% of their salaries. As of December 31, 2024, 492 Thaioil employees were participating in the fund, representing 95%, and 1,441 TES employees were participating in the fund, representing 93%.

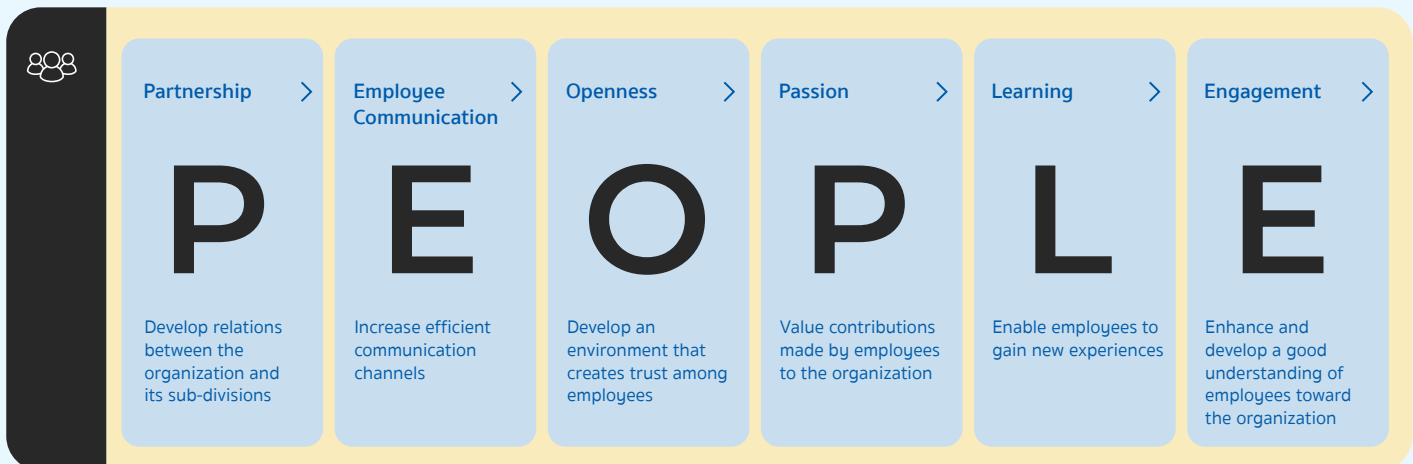
The management and investment of the employees' Thai Oil Group-Registered Provident Fund is key to stable and sustainable growth. As a result, selection of a fund management company is a crucial duty that the Provident Fund Committee must carefully and prudently consider. A fund management company with past records of administrative systems that are appropriate, secure, and beneficial for members will be selected. Consideration is based on 1) The administrative system of the fund company which should consist of an investment decision-making process, data used for investment decision, and various service systems, and 2) The stability of the fund management company, based on past performance, experience, expertise, operating policies, operation, and insurance against possible damages. The committee gives equal weight to both criteria but appropriate and necessary adjustments can be made. If a new fund management

company has been selected, the committee will follow Thailoil and Subsidiaries' hiring and procurement policy.

3.3 Employee Satisfaction and Engagement Enhancement

Thailoil and Subsidiaries conduct employee engagement surveys annually. Findings from the

survey are analyzed to formulate strategies and activities to enhance engagement. All line managers are encouraged to organize suitable activities for employees in their respective functions by using the PEOPLE Model.



In 2024, Thailoil and Subsidiaries drastically raised the level of employee engagement under the concept of “Happy Employee, Happy Company”, focusing on creating a happy work experience for employees in all aspects, both work life and personal life, so that they may deliver their work with maximum efficiency. To this end, key projects include the Employee Hackathon project or “JoyFinity” by providing employees with the opportunity to present ideas to create happiness and help improve engagement among themselves and their colleagues, etc. Under this project, there were 200 employees participating with more than 50 new ideas.

Thailoil and Subsidiaries also organized a Mental Rejuvenation project which aims to enhance the mental well-being of employees by organizing a Health Day with an emphasis on mental well-being, knowledge-based activities by external experts, and a special mental healthcare program for the target group. The project attracted more than 600 participants.

Thailoil also continuously organized activities that help create a positive working ambience, including activities that promote a culture of appreciation (Whale done), using whale-figured trophies as a medium to convey words of appreciation and encouragement to each other.

Employee Data

Number of employees (excluding executives) of Thailoil and TES.

Key Function	Number of Employees			
	As of December 31, 2024		As of December 31, 2023	
	Thailoil	TES	Thailoil	TES
Corporate Strategic Risk Department	2	8	2	9
Movement Marine and Logistic Department	39	83	42	76
Technology Department	7	50	8	45
Refinery Department	117	197	118	173
Treasury Department	3	26	3	24
Commercial Department	7	39	8	42
Corporate Affairs Department	13	25	11	27
Procurement and Contract Department	5	28	5	25
Quality Management Department	8	32	9	25
Supply Chain Optimization Department	2	25	3	23
Accounting Department	8	42	9	39
Petrochemical and Lube Base Department	3	140	5	133
Business Development Department	1	12	2	14
Asset Development Department	10	28	10	27
Financial Planning Department	4	18	3	17
Commercial Planning Department	5	18	4	12
Engineering Department	67	253	74	235
Efficient Operations Support Department	24	102	24	97
New S-Curve Business Development Department	2	13	1	7
Corporate Resources and Transformation Management Department	3	5	3	6
Digitalization Department	4	26	7	20
Clean Fuel Project	78	167	87	160
Corporate Governance, Compliance, and Legal Department	1	8	2	7
Group Company Secretary and Sustainability Department	6	21	7	21
Corporate Internal Audit Department	2	11	2	9
People and Organization Management Department	15	38	17	34

Key Function	Number of Employees			
	As of December 31, 2024		As of December 31, 2023	
	Thaioil	TES	Thaioil	TES
People and Organization Excellence Department	1	13	1	11
Strategic Planning Function	-	18	-	16
Finance and Accounting Function	6	8	6	7
Manufacturing Function	30	9	31	5
TOPNEXT International Co., Ltd.	3	55	5	38
Research & Development/High Value Product	-	-	3	21
Innovation, Research & Development and High Value Business	3	26	-	-
Petrochemical Business Function	3	2	3	4
Chief Executive Officer and President	1	2	1	2
TOP SPP Co., Ltd.	1	-	1	-
Consumers Co-Operative	-	1	-	-
Total	484	1,549	517	1,411

Remarks:

Under the above structure, employees fall into two groups:

1. Non-Executives consist of juniors, supervisors, seniors, and managers
2. Executives consist of Vice Presidents, Executive Vice Presidents, Senior Executive Vice President, and the CEO and President.

Significant changes in the number of employees in the past three years (excluding executives)

Thaioil

- >> As of year-end 2024, a total of 484 employees
- >> As of year-end 2023, a total of 517 employees
- >> As of year-end 2022, a total of 551 employees

TES

- >> As of year-end 2024, a total of 1,549 employees
- >> As of year-end 2023, a total of 1,411 employees
- >> As of year-end 2022, a total of 1,283 employees

Corporate Governance Policy

Committed to conducting business with adherence to the Corporate Governance (CG) Code and the Code of Conduct, with integrity, transparency, and accountability, Thaioil strives to maintain its CG standard on a par with international practices. To this end, the Board of Directors (the Board) has defined the “Corporate Governance Policy” as an integral part of business and assigned the Corporate Governance and Sustainability Committee (CG Committee) to oversee, monitor, and maintain international best practices.

The CG Committee reviewed and revised the Corporate Governance Code for Listed Companies 2017 (CG Code 2017) prepared by the Securities and Exchange Commission (SEC) for suitable adaptation to Thaioil’s business context, thus leading to outcomes with sustainable value generation for the organization. In 2024 the Board approved amendments to the Anti-Fraud Policy and the Corporate Governance and Code of Conduct Manual for consistency with the criteria as well as greater clarity and completeness. Our CG Policy and compliance are detailed below.

Policy and Guidelines for the Board

Nomination and Appointment of Directors

Nomination Criteria

The composition of the Board is vital to the efficiency and effectiveness of Thaioil directors’ performances. Criteria for Board member (director) nomination were therefore developed in compliance with applicable laws and regulations, as described in the CG Manual and Code of Conduct, published on the Thaioil website. Our nomination criteria stipulate that directors must command qualifications that comply with laws and regulations. A policy was defined on the diversity of directors, with consideration of experience, knowledge, and skills that would benefit Thaioil’s business. Thaioil disregards gender, race, ethnicity, nationality, or country of origin as a restriction on qualifications. In addition, the diversity of overall expertise is considered so as to allow a truly

wide range of expertise among the Board and align with Thaioil’s business strategy. To this end, a Board Skill Matrix has been developed. Names of qualified persons are also searched from the State Enterprise Policy Office’s (SEPO) Directors’ Pool and the Thai Institute of Directors’ list of professional directors (IOD Chartered Directors). As of January 1, 2025, 12 out of 15 Board directors were from SEPO’s Director’s Pool and one Board director was from IOD Chartered Directors.

Independent Directors’ Qualifications

Independent directors shall be independent from major shareholders or groups of major shareholders, or Thaioil executives, including the terms of office as specified in the CG Manual, which requires an independent director to serve not exceed nine consecutive years from the first date of the appointment. To date, none of the independent directors have held the position for longer than nine years.

Roles, Duties, and Responsibilities of the Board, Chairman of the Board, and the Chief Executive Officer (CEO) and President

Thaioil has defined the roles, duties, and responsibilities of the Board, Chairman of the Board, and CEO and President in order to segregate between the responsibilities of the Board and those of the Company’s executives, as shown in the CG manual, which can be summarized as follows. The Board of Directors’ key roles and responsibilities are to define the business vision, review and endorse

key strategies and policies, oversee executives' performance, and provide suggestions and advice to ensure that operations comply with the laws and regulations and are transparent, fair, and in the best interests of the Company. The key roles, duties, and responsibilities of the Chairman of the Board are to support directors' duty execution within the scopes of authority and responsibility while ensuring efficient meetings and strengthening cordial relations among directors and among directors and management. The CEO and President is assigned by the Board to perform duties concerning the Company's day-to-day business operations. The CEO and President's key roles, duties, and responsibilities are to prepare and present business plans and strategies to the Board, while managing work under these plans and strategies, including the budget approved by the Board, among others.

Also, in order for Thailoil to benefit most from the directors' time dedicated to efficiently perform their duties, the Board has established a policy that specified a limit of three listed companies on the Stock Exchange of Thailand (SET). Today, no director serves more than three listed companies.

Board's Approval Authority

The Board is authorized to grant approvals for various operations within the extent of laws, the Company's Articles of Association (AOA), and resolutions of shareholders' meetings. The Board's main authorization includes:

>> Authorization concerning Thailoil's businesses: such as considering and granting approvals for the vision, mission, values, strategies, financial goals, as well as budget and plans. The vision, mission, and strategies are to be reviewed at the annual Strategic Thinking Session (STS) meeting, so as to closely follow up progress on strategies. To this end, the Board requires management to regularly update it on strategic plan implementation so that they may monitor progress and consider due strategic plan revision.



- >> Authorization concerning shareholders: such as consideration of and agreement on dividend payment and shareholders' meeting invitation.
- >> Authorization concerning the Board and high-level executives: such as making consideration and agreement on the replacement of directors for cases other than term completion and with over two months remaining before term completion, appointment of Board-Committee (standing committee) members, consideration and appointment of the CEO and high-level executives (executive vice presidents and above), and assessment of the CEO's performance.

Directors' Remuneration

At the Board's instruction, the Nomination and Remuneration Committee (NRC) considers director's annual remuneration by considering factors such as operating results, the

Board's and specific committee members' achievements and responsibilities, nature and complexity of business, and overall economic circumstances. The NRC will then propose its findings to the Board for endorsement before submitting it to the Annual General Meeting of Shareholders (AGM) for consideration and approval.

For 2024, in consideration of the suitability of various factors mentioned above, it was found that the criterion structure and remuneration for directors were still suitable. Therefore, the remuneration of the same rates as those of 2023 was proposed together with a bonus of 50 million baht for their 2023 performance, which accounts for 0.26% of the net profit and does not exceed the annual limit of 50 million baht. The package has already received approval from the 2024 AGM and was disclosed on the topic '2024 Directors' Remuneration' on page 101.

Remuneration Structure

Remuneration for directors ⁽¹⁾

Retainer fee	50,000 Baht/Month
Per-Attendance Fee (for directors who attend the meeting)	40,000 Baht/Meeting

Remuneration for Board-committee members ⁽¹⁾

Per-Attendance Fee (for directors who attend the meeting)	45,000 Baht/Meeting
---	---------------------

Special Bonus for the Board	THB 50 million ⁽²⁾
-----------------------------	-------------------------------

Other remunerations	-None-
---------------------	--------

Remarks:

⁽¹⁾ The Chairman of the Board and the Chairmen of Board-committees received remuneration of 25% than other directors.

⁽²⁾ Bonuses for the 2023 company performance were paid to those holding directorship in 2023, which included prorated payment for committee members who completed their terms or resigned in 2023. The Chairman of the Board receive a bonus of 25% higher than other directors.

Directors' Remuneration for 2024

(THB)

No.	Name-Surname	Board of Directors			Board-Committees (Per-Attendance Fee)				Annual Bonus for 2023 Performance ⁽¹⁾ (Paid in April 2024)
		Retainer Fee	Per-Attendance Fee	Audit Committee	Corporate Governance and Sustainability Committee	Nomination and Remuneration Committee	Risk Management Committee	Total Remunerations	
1	ACM Charoon Mungthanya	700,000.00	539,583.33	-	-	-	-	1,239,583.33	-
2	Lt. Gen. Apichat Chaiyadar	720,000.00	600,000.00	506,250.00	-	270,000.00	-	2,096,250.00	2,483,482.50
3	Pol. Lt. Gen. Thiti Sangsawang	400,000.00	350,000.00	-	90,000.00	225,000.00	-	1,065,000.00	-
4	Pol. Capt. Piya Raksakul	720,000.00	600,000.00	405,000.00	247,500.00	-	-	1,972,500.00	2,483,482.50
5	Ms. Paritip Sripimol	560,000.00	431,666.67	180,000.00	-	-	-	1,171,666.67	-
6	Assoc. Prof. Dr. Sittidaj Pongkijvorasin	640,000.00	500,000.00	-	-	135,000.00	-	1,275,000.00	-
7	Mr. Goanpot Asvinichit	200,000.00	150,000.00	-	90,000.00	-	-	440,000.00	-
8	Mr. Prajuck Boonyoung	520,000.00	431,666.67	-	90,000.00	-	-	1,041,666.67	-
9	Ms. Peangpanor Boonklum	240,000.00	200,000.00	-	90,000.00	-	-	530,000.00	-
10	Ms. Phenrasmi Bhuritthalert	200,000.00	150,000.00	-	-	-	90,000.00	440,000.00	-
11	Dr. Sompop Patananyankool	720,000.00	600,000.00	-	90,000.00	-	135,000.00	1,545,000.00	3,420,645.71
12	Mr. Prasong Itanarongpal	240,000.00	200,000.00	-	-	-	90,000.00	530,000.00	-
13	Mr. Kris Insang	160,000.00	100,000.00	-	-	-	112,500.00	372,500.00	-
14	Ms. Pattaralada Sangasang	160,000.00	100,000.00	-	-	-	90,000.00	350,000.00	-
15	Mr. Bandhit Thamprajamchit	720,000.00	600,000.00	-	-	-	225,000.00	1,545,000.00	3,420,645.71
Directors who Complete the Term in 2024 AGM/Resign during the Year 2024									
1	Dr. Veerapat Kiattunglo	-	4,838.71	-	-	-	-	4,838.71	3,130,125.11
2	Dr. Nattapon Nattasomboon	120,000.00	122,580.65	-	-	-	45,000.00	287,580.65	2,483,482.50
3	Prof. Dr. Supot Teachavasinakun	200,000.00	210,416.67	-	-	-	-	410,416.67	4,275,807.13
4	Assoc. Prof. Dr. Pasu Decharin	160,000.00	168,333.33	135,000.00	-	112,500.00	-	575,833.33	3,420,645.71
5	Mr. Disitai Hoirakitya	480,000.00	398,387.10	-	168,750.00	-	-	1,047,137.10	2,483,482.50
6	Mr. Plakorn Wanglee	480,000.00	400,000.00	270,000.00	135,000.00	-	-	1,285,000.00	3,420,645.71
7	Mr. Terdkiat Promnool	440,000.00	385,483.87	-	-	135,000.00	-	960,483.87	3,420,645.71
8	Mr. Suchat Ramarch	440,000.00	385,483.87	-	135,000.00	-	-	960,483.87	3,420,645.71
9	Dr. Buranin Rattanasombat	440,000.00	385,483.87	-	-	-	90,000.00	915,483.87	3,420,645.71
10	Ms. Pannalin Mahawongkul	520,000.00	450,000.00	-	-	-	168,750.00	1,138,750.00	3,420,645.71
Directors who Complete the Term in 2023 AGM/Resign during the Year 2023									
1	Gen. Kukiat Srinaka	-	-	-	-	-	-	-	1,546,319.28
2	Mr. Praphaisith Tankeyura	-	-	-	-	-	-	-	937,163.20
3	ACM Sutitpong Inseepong	-	-	-	-	-	-	-	937,163.20
4	Dr. Palin Chuchottavorn	-	-	-	-	-	-	-	937,163.20
5	Pol. Gen. Aek Angsananon	-	-	-	-	-	-	-	937,163.20
Total		10,180,000.00	8,463,924.73	1,496,250.00	1,136,250.00	877,500.00	1,046,250.00	23,200,174.73	50,000,000.00

Remark:

⁽¹⁾ Special Bonus for 2023 Company Performance as resolved by the 2024 Annual General Meeting of Shareholders (AGM) on April 11, 2024 paid to the directors on April 26, 2024.

Board Meetings

Each year, Board meetings are scheduled in advance. The 2023 Board meeting schedule was sent to directors in October 2023. In 2024, a total of 18 Board meetings were held, one Strategic Thinking Session (STS) included. One non-executive directors' meeting and one independent directors' meeting were also held in the absence of management to allow such directors to exchange views freely and to suggest various approaches to manage Thail. The outcomes were passed on to management by the Company Secretary for further actions. Detailed meeting attendances of individual directors are disclosed

under the topic 'Meeting Attendances of the Board of Directors, Board-Committees, and Shareholders' Meeting in 2024 on page 103. According to best practices, a meeting invitation together with supporting documents is delivered by the Company Secretary to all directors at least five business days before each scheduled meeting date, except for urgent matters. To vote, the presence of at least two-thirds of all directors is required for a quorum. An exception is made for urgent cases potentially harming Thail's operations, or an urgent call for meeting, or other cases as seen fit by the Board.



Meeting Attendance of the Board of Directors, Board-Committees, and Shareholders' Meeting in 2024

Name-Surname	Board of Directors Meeting		Audit Committee Meeting	Nomination and Remuneration Committee Meeting	Corporate Governance and Sustainability Committee Meeting	Risk Management Committee Meeting	Annual General Meeting of Shareholders (AGM)	Independent Directors Meeting	Non-Executive Directors Meeting
	(18 times) ^{(3), (4)}								
	Total	Physical							
1 ACM Chanon Munghanya ⁽¹⁾	14/14	14/14	0/14					1/1	1/1
2 Lt. Gen. Apichat Chaiyadar	18/18	15/18	3/18	6/6			1/1	1/1	1/1
3 Pol. Lt. Gen. Thiti Sangsawang ⁽²⁾	10/10	7/10	3/10	4/4	2/2			1/1	1/1
4 Pol. Capt. Piya Raksakul	18/18	11/18	7/18	9/9	5/5		1/1	1/1	1/1
5 Mr. Kris Imsang ⁽²⁾	4/4	4/4	0/4			2/2			
6 Mrs. Pantip Srpimol ⁽¹⁾	14/14	14/14	0/14	4/4				1/1	1/1
7 Assoc. Prof. Dr. Sittidaj Pongkijvorasin	15/15	14/15	1/15	3/3			1/1	1/1	1/1
8 Mr. Goanpot Asvinvichit ⁽²⁾	5/5	5/5	0/5		2/2				1/1
9 Mr. Prejuck Boonyoung ⁽¹⁾	13/14	13/14	0/14		2/2				1/1
10 Ms. Peangpanor Boonklum ⁽²⁾	6/6	5/6	1/6		2/2				1/1
11 Ms. Phenrasmi Bhuritdhanalert ⁽²⁾	5/5	5/5	0/5			2/2			1/1
12 Dr. Sompop Pattanariyankool	18/18	14/18	4/18		2/2	3/3	1/1		1/1
13 Mr. Prasong Intaranongpal ⁽²⁾	6/6	5/6	1/6			2/2			1/1
14 Ms. Pattaralada Sa-ngasang ⁽²⁾	4/4	3/4	1/4			2/2			
15 Mr. Bandhit Thamprajamchit	18/18	18/18	0/18			5/5	1/1		
Directors who Completed the Term in 2024 AGM/Resigned during the Year 2024									
1 Dr. Nattapon Nattasomboon	3/3	2/3	1/3			1/1			
2 Prof. Dr. Supot Teachavorasinskun	4/4	4/4	0/4				1/1		
3 Assoc. Prof. Dr. Pasu Decharin	4/4	4/4	0/4	2/2			1/1		
4 Dr. Buranin Rattanasombat	11/11	11/11	0/11			2/2	1/1		
5 Mr. Terdkiat Prommool	11/11	11/11	0/11	3/3			1/1		
6 Mr. Suchat Ramarch	11/11	6/11	5/11		3/3		1/1		
7 Mr. Distat Hotrakitya	12/12	11/12	1/12		3/3		1/1	1/1	
8 Mr. Plakorn Wanglee	12/12	12/12	0/12	6/6	3/3		1/1	1/1	
9 Ms. Pannalin Mahawongtikul	13/13	9/13	4/13		3/3	3/3	1/1		
Average Meeting Attendance of Board of Directors (Percent)	99.60			100	100	100			

Remarks:

⁽¹⁾ Appointed to the director at the 2024 Annual General Meeting of Shareholders on April 11, 2024.

⁽²⁾ Appointed to the director after 2024 Annual General Meeting of Shareholders

⁽³⁾ In 2024, Thai Oil Plc arranged the total of 18 meetings, 12 of which were scheduled meetings, and 6 of which were extras to the scheduled meetings. The meetings were organized both physically and online (E-Meeting).

⁽⁴⁾ The reason for absence from meetings was due to directors' urgent and necessary assignments or the Company's urgent calls for extra meetings. Directors would submit absence letter prior to the meeting.

Board's Performance Assessment

Consistent with the CG code, Thailoil schedules annual performance assessment of the Board. The 2024 assessment divided into four types:

1. Board of Directors Assessment.
2. Individual Director Assessment (Self-Assessment).
3. Individual Director Assessment (Peer-Assessment).
4. Board-Committee Assessment (Board-Committee members evaluate the work of the committee relevant to their positions only).

Board's Performance Assessment Criteria and Process

The CG Committee agreed on the 2024 Board's performance assessment forms. The forms were sent to each director for assessment and then returned to Thailoil for analysis. Thailoil then raised the assessment results together with comments to the CG Committee and the Board respectively for acknowledgment. Suggestions and recommendations

arising from the assessment are used to identify guidelines to develop and enhance the Board's efficiency, for example, a proposal to broaden the Board Skill Matrix to essential skills for current businesses and director encouragement to undergo training.

All forms of performance assessment are divided into 1) Roles, duties, and responsibilities, 2) Structure and qualifications of the board, 3) Meeting preparation, 4) Training and self-development. All four forms are calculated in percent from the full score of each point. The criteria are:

90-100	means excellent
80-89	means very good
70-79	means good
60-69	means satisfactory
50-59	means pass
Less than 50	means improvement needed.

The 2024 Board's Performance Assessment can be summarized below:

2024 Assessment Results

Percentage

Criteria

Board of Directors Assessment	92.44	Excellent
Individual Directors Assessment (Self-Assessment)	95.41	Excellent
Individual Directors Assessment (Peer-Assessment)	96.48	Excellent
Board-Committees Assessment		
- Audit Committee	91.75	Excellent
- Nomination and Remuneration Committee	91.93	Excellent
- Corporate Governance and Sustainability Committee	93.78	Excellent
- Risk Management Committee	98.59	Excellent

Directors' development

To stay updated on key projects and the operations, the Board encourages all directors to acquire additional education and training. In 2024 a Risk Expert Session seminar was staged to further their awareness of risk / probability / and challenges posed by Generative AI (entitled Generative AI: opportunities, risks, and challenges). An annual visit to the refinery was also arranged. The list of directors' training courses in 2024 appears on page 106.

For new directors, Thailoil has arranged orientation sessions facilitated by top management, featuring knowledge about the business and business directions, as well as related laws, regulations, and other information required for performing their duties. A Welcome Package for TOP's New Director, containing all the information required, is prepared for each before assuming office.



Director's Training Course in the year 2024 (As of December 31, 2024)

No.	Name-Surname	Training Courses in the year 2024
1	ACM. Chanon Mungthanya	<ul style="list-style-type: none"> >> STS Expert Session 2024: >> "Outlook and Trends in Net Zero Transition", ADL >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG) >> Seminar: Risk Expert Session 2024 "Generative AI : Opportunities, Risks and Challenges", AFON Precious Co., Ltd.
2	Lt. Gen. Apichat Chaiyadar	<ul style="list-style-type: none"> >> Seminar: National Director Conference 2024 "Sustainable Future: The Board as a Catalyst for Value", Thai Institute of Directors (IOD) >> Seminar: PTT Group AC Forum 2024 "Watch Out the Signs" >> Climate Action Leaders Forum 3/2024, Thailand Greenhouse Gas Management Organization (Public Organization) >> The Executive Program in Energy Literacy for a Sustainable Future, Class 19, Thailand Energy Academy
3	Pol.Lt.Gen. Thiti Sangsawang	<ul style="list-style-type: none"> >> Director Certification Program (DCP 370/2024) >> Director Accreditation Program (DAP 220/2024)
4	Pol. Capt. Piya Raksakul	<ul style="list-style-type: none"> >> The Executive Program in Energy Literacy for a Sustainable Future, Class 19, Thailand Energy Academy >> Advanced Audit Committee Program (AACP 53/2024) >> STS Expert Session 2024: >> "Outlook and Trends in Net Zero Transition", ADL >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG) >> Seminar: PTT Group AC Forum 2024 "Watch Out the Signs" >> Lecture: PTT Group CG Day 2024 "Transformative CG for Net Zero", Mr. Kulvech Janvatanavit, Executive Director, Thai Institute of Directors (IOD)
5	Mr. Kris Imsang	<ul style="list-style-type: none"> >> Climate Action Leaders Forum Class 3/2024, Thailand Greenhouse Gas Management Organization (Public Organization)
6	Mrs. Pantip Sripimol	<ul style="list-style-type: none"> >> STS Expert Session 2024: >> "Outlook and Trends in Net Zero Transition", ADL
7	Assoc. Prof. Dr. Sittidaj Pongkijvorasin	<ul style="list-style-type: none"> >> Director Accreditation Program (DAP 220/2024)
8	Ms. Phenrasmi Bhuritdhanalert	<ul style="list-style-type: none"> >> Director Accreditation Program (DAP 224/2024)
9	Mr. Prajuck Boonyoung	<ul style="list-style-type: none"> >> Director Certification Program (DCP 365/2024) >> Seminar: Risk Expert Session 2024 "Generative AI : Opportunities, Risks and Challenges", AFON Precious Co., Ltd. >> Lecture: PTT Group CG Day 2024 "Transformative CG for Net Zero", Mr. Kulvech Janvatanavit, Executive Director, Thai Institute of Directors (IOD)

No.	Name-Surname	Training Courses in the year 2024
10	Ms. Peangpanor Boonklum	>> RoLD Xcelerate: Investing in the Rule of Law for a Sustainable Future, Thailand Institute of Justice (Public Organization) >> Corporate Governance (Online), Columbia Business School Executive Education
11	Mr. Prasong Intaranongpai	>> The Executive Program in Energy Literacy for a Sustainable Future, Class 20, Thailand Energy Academy >> Subsidiary Governance Program (SGP 8/2024)
12	Ms. Pattaralada Sa-ngasang	>> Insurance Leadership Program, Class 12, OIC Advanced Insurance Institute >> The Program for Senior Executives on Justice Administration, Batch 29, Judicial Training Institute, National Justice Academy
13	Mr. Bandhit Thamprajamchit	>> Financial Statements for Directors (FSD 53/2024) >> STS Expert Session 2024: >> "Outlook and Trends in Net Zero Transition", ADL >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG) >> "Global & Thailand Economic Outlook", The Siam Commercial Bank Plc (SCB) >> Seminar: Risk Expert Session 2024 "Generative AI : Opportunities, Risks and Challenges", AFON Precious Co., Ltd.

Directors who completed their terms and resigned during the year 2024

No.	Name-Surname	Training Courses in the year 2024
1	Mr. Plakorn Wanglee	>> STS Expert Session 2024: >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG) >> Seminar: PTT Group AC Forum 2024 "Watch Out the Signs"
2	Dr. Buranin Rattanasombat	>> Seminar: Risk Expert Session 2024 "Generative AI : Opportunities, Risks and Challenges", AFON Precious Co., Ltd.
3	Ms. Pannalin Mahawongtikul	>> STS Expert Session 2024: >> "Outlook and Trends in Net Zero Transition", ADL >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG) >> "Global & Thailand Economic Outlook", The Siam Commercial Bank Plc (SCB)

Remarks:

- Dr. Buranin Rattanasombat resigned from directorship on August 23, 2024
- Mr. Plakorn Wanglee resigned from directorship on September 1, 2024
- Ms. Pannalin Mahawongtikul resigned from directorship on October 1, 2024

Policies and Guidelines Relating for Stakeholders

Thaioil operates a fair business with due regard for the impact on stakeholders while treating all stakeholders equally. Guidelines for such treatment have been established in the CG Manual, as summarized below:

Shareholders, Investors, and Analysts

Valuing shareholder protection and promoting their exercise of rights, the Board treats shareholders equally, whether as major or minor shareholders or institutional investors.

The 2024 Annual General Meeting of Shareholders (AGM)

Organizing the 2024 AGM on Thursday, April 11, 2024 at 9:00 a.m. in the form of E-AGM, Thaioil commissioned Inventech Systems (Thailand) Co., Ltd. The meeting leveraged the Inventech Connect system for attendance and e-Voting, adopted as a standard aligning with the terms and means prescribed by the E-Meeting Act of 2020 and the 2020 Announcement of the Ministry of Digital Economy and Society. These concern the E-meeting security standard and the compliance self-assessment standard of Electronic Transactions Development Agency (ETDA). Inventech also commanded the ISO27001:2022 information security standard.

Adhering to the AGM Checklist of the Investors Association of Thailand, for the 2024 AGM, Thaioil earned full 100 marks for meeting arrangement for the ninth straight year, echoing its determination to hold an AGM of the required standard and the CG code, including

>> **Allowing the shareholders to propose agenda items and nominate qualified directors** from September 29-December 31, 2023. The criteria and process were announced on the websites of SET and Thaioil. **The Company welcomed questions from the shareholders before the meeting date** stated in the meeting notice. For the 2024 AGM, none of the shareholders proposed an agenda or nominated any director, which Thaioil disclosed in the AGM meeting notice.

As for the 2025 AGM, scheduled for April 2025, Thaioil invited the shareholders to propose agenda items and nominate directors from October 3, 2024-January 2, 2025.

- >> **Allowing the shareholders to volunteer as witnesses in the ballot counting and arranging for an independent legal consultant to audit ballot counting to ensure voting and ballot counting transparency.**
- >> Technology was applied to the AGM, namely E-voting for registration and ballot counting to ensure accuracy, convenience, and speed.

Apart from organizing the AGM, Thaioil held online activities to communicate with shareholders, investors, and analysts, as detailed under the topic 'Investor Relations' on page 110.

Customers

Thaioil strives to develop quality processes to meet customers' standards concerning safety and quality, details of which appear on page 55 on 'Production Process and Development'. This includes innovation for product development to better respond to customers' demand. Details of such innovation appear in the 2024 Integrated Report on 'Innovation and Customer Stewardship'. In addition to making quality products, Thaioil values communication with customers while maintaining cordial and sustainable relationship with them. The Voice of Customer system has been initiated to field customers' opinions. Thaioil also values privacy and strives to protect customers' personal data while complying with the Personal Data Protection Act B.E. 2562 by announcing privacy notices for customers and all stakeholders on its website. Moreover, a customer satisfaction survey is held every year for work development and raising customer satisfaction levels. The 2024 customer engagement survey showed Thaioil's average score of 93%. Details of customer treatment are available in the 2024 Integrated Report under the topic 'Innovation and Customer Stewardship'.

Business Partners/Suppliers

Treating business partners/suppliers as a key business ally, Thailoil has established procurement procedures and strictly complies to treat all of them fairly, equally, and transparently. In place is a selection process that requires them to meet certain qualifications. Criteria for assessing their capability have also been clearly defined. Thailoil also values good relationships and development of business partners to raise their caliber through various activities, details of which are disclosed on Thailoil's website on the topic Sustainability/Governance and Economics Dimension/Sustainable Supply Chain Management. Thailoil also promotes green procurement, with details shown on the website under the topic Sustainability/Environment Dimension/Circular Economy.

Employees

Valuing employee stewardship, Thailoil nurtures a corporate culture and provides fair compensation while adhering to the human rights code, which is underlined by equality. These are evident in the following practices:

>> **Basing treatment for employees by the human rights code:** We do this at both national and international levels, while strictly observing labor laws and other related regulations. Each employee is hired under conditions of related laws and local practices, with a compensation package offered without any discrimination. All employees receive training that suits their respective nature of work. Thailoil has launched a **'Human Rights Policy in the Workplace'** that addresses key issues, including fair treatment, equal pay policy, safety and occupational health at work policy, union freedom support and negotiation outcome approval, among others. Also, Thailoil has engaged itself in the improvement of life for the handicapped, consistent with public policy concerning the promotion and development of the quality of life of the handicapped (Section 35). Information on our compliance with the human rights code appears on

the website under the topic 'Sustainability/Social Dimension/Human Rights'.

>> **Introducing a policy on fair compensation and welfare,** comparable to peer organizations and linked to the performance of each executive and employee: The pay structure is reviewed every year to ensure that our packages are in the top-quartile companies in the industry and **align the pay scheme with both short-term and long-term corporate performance.** Thailoil has adopted annual salary adjustment for executives and employees using the 'Balanced Scorecard', which features 1) business as usual, 2) strategic initiatives, and 3) strategic enablers and sustainability. The scorecard defines corporate KPIs, cascaded down to individual KPIs for measuring an individual's current performance (short-term) and ability to respond to long-term strategies.

More details about human resource management can be found under 'Information about Employees' page 96 and appear on the website under the topic Sustainability/Social Dimension/Human and Organization Development.

Creditors

Thailoil strictly treats creditors responsibly under conditions and guarantee terms, while remaining responsible for various guarantee conditions and making full, timely repayment of loans and interests. Should there be any failure to comply with payment terms and conditions, Thailoil informs creditors in advance and together with creditors finds ways to solve problems, thus preventing potential damage.

Competitors

Thailoil treats all business competitors equally under laws concerning trade competition and within the extent of liberalized international competition. We observe fair competition and do not engage in seeking competitors' confidential information, slanders, or engagement in any agreement with competitors or any party that may lead to

reduction or limitation of competition. No litigation arose between Thailoil and competitors in 2024.

Communities, Society, and the Environment

Thailoil has defined the **Corporate Social Responsibility Policy**, while striving to reduce risks and impacts on communities arising from business. We foster good relationship and raise the quality of life for people in neighboring and distant communities under the Corporate Social Responsibility (CSR) framework, which covers education, energy and natural resources, environmental conservation, and quality of life. Details about operations and CSR appear on our website under the topic Sustainability/Social Dimension/Corporate Social Responsibility.

Disclosure and Transparency

Information Disclosure

In compliance with various regulations, Thailoil discloses financial and general information to stakeholders in Thai and English. The information is regularly posted on the electronic system of SET, our website, and social media channels, such as Facebook and LINE Official. In addition to these channels, Thailoil regularly organizes press conferences, interviews by executives for the media on various issues of interest, and issues publications on various operation outcomes through public media in electronic and printed forms.

Investor Relations

Thailoil has established the Investor Relations unit to facilitate communication with shareholders, investors, and interested parties (including analysts and regulating agencies) and ensure adequate, accurate, complete, transparent, and equitable information received. Investors Relations can be reached by e-Mail at ir@thailoilgroup.com or by phone number 0-2797-2961 (direct).

Thailoil's financial status and other key information are communicated through assorted channels to shareholders, analysts and investors, including virtual and conference calls made with local and foreign investors, and quarterly analysts' meetings. Shareholder activities enable them to visit the business during 2024, including activities organized with SET, namely as the quarterly SET Opportunity Day, SET Digital Roadshow, and Thailand Focus 2024 events.

Review of Policies, Code, and Guidelines for Corporate Governance

Thailoil reviews policies, code, and guidelines for CG annually, consistent with regulations, announcements, and CG guidelines of SEC and SET, as well as CG codes and assessment criteria for various institutes, such as G20/OECD Principles of Corporate Governance 2023. However, in some cases, we do favor guidelines that better match the business environment, such as **the Cumulative Voting**, which by Thailoil's Article of Association, director nomination relies on the majority votes by shareholders whose votes equal the number of shares they are holding. Nevertheless, Thailoil always values stewardship of minor shareholders, who are invited to nominate directors in advance. As for **the number of directors on the Board**, SEC's CG Code requires that a board should consist of 5-12 directors. As of January 1, 2025, our Board of Directors consisted of 15 directors, consistent with our Articles of Association, which requires 5-15 directors in line with the business size and complexity, among others.

Corporate Governance Report

The Corporate Governance and Code of Conduct Manual (CG Manual)

The Board of Directors approved the first CG Manual since 2004, requiring it to be revised annually. In 2024 the CG manual was amended on the Anti-Fraud Policy and Complaint Filing and/or Whistle-Blowing Measures for more consistency with criteria, more clarity, and more completeness. The CG manual consists of the Corporate Governance Policy, Corporate Governance Code (CG Code), Code of Conduct, and the Anti-Fraud Policy.

The CG Manual provides detailed guidelines for directors, executives, and employees for managing ethical business operations. All are required to study the manual and acknowledge it on the electronics CG Reporting system annually. In 2024 all executives, and employees conformed. The CG manual has also been posted on Thailoil's website for easy access by all stakeholders.

Communication and Advocacy of Compliance

Containing the CG Code and Code of Conduct, the CG Manual was sent to all newly appointed directors. Meanwhile, compliance with business ethics, such as the use of inside information, vested interests, and conflicts of interest, are relentlessly communicated and stressed at Board meetings.

As for executives and employees, Thailoil nurtures concepts of CG, the code of conduct, use of inside information, conflicts of interest, and anti-fraud from their first day of employment. The concepts are incorporated into each orientation session organized for new employees, while the CG Manual is distributed through the CG Reporting system, resulting in all new employees being duly informed

and trained. In addition, to continually remind them and thus raise awareness, various activities and communication means were organized this year. These included **four episodes of "GRC The Series" short clips**, each dealing with an aspect of GRC knowledge; including training on Sanction and Anti-money Laundering, training on GRC work practices, and a workshop on the No Gift Policy, conflicts of interest, and the whistleblowing process; **GRC in Action activities** at PR booths and quiz games at Thailoil and Subsidiaries' major events, including the CEO Townhalls (Q2-Q4), Thailoil Innovation and Learning Day 2024, and Thailoil and Subsidiaries' Supplier Seminar 2004; and, finally, **PTT Group CG Day 2004** under the "CG CITIZEN SUSTAINABILITY CONNECT" Wide-open, Connect, Transparent theme. Messages regarding CG, code of conduct, use of inside information, conflicts of interest, and anti-fraud were communicated 10 times this year via Akahee Magazine (Thailoil's internal magazine), and GRC Newsletters were sent directly by e-Mail to all executives and employees. More details appear on Thailoil's website under the topic of Sustainability/Governance and Economics/Fight Against Corruption.

Monitoring Compliance with CG and Code of Conduct

At Thailoil, all directors, executives, and employees are responsible for acknowledgment and compliance with the policies and requirements prescribed by the CG Manual. Monitoring of compliance with the Code of Conduct and that of dubious acts were carried out through whistleblowing measures as well as the internal-audit process. For any non-compliance or dubious act discovered, directors, executives, or employees are to face strict disciplinary punishment. If it is suspected that they have violated any

law, regulation, rule, and requirement laid down by the public sector, they will also be handed to public officials for prosecution. In 2024 there was no case of Code of Conduct violation or corruption by directors, executives, and employees.

Supervision of Subsidiaries' Operations

Thaioil has formulated a "TOP Way of Conduct" to govern operation of Thaioil's subsidiaries. The TOP Way of Conduct contains 27 major policies, such as accounting, corporate governance, anti-fraud, and internal-control policies. To this end, subsidiary representatives along with policy owners assess compliance with respective policies with the Apply & Explain basis principle annually. In addition, Thaioil assigns qualified personnel to supervise a given affiliate to ensure business direction alignment. To govern subsidiaries*, Thaioil centralizes shared services whereby the Accounting Department oversees subsidiaries' financial reports and their connected transactions, and Investor Relations ensures that subsidiaries disclose all material information (financial standing, operating results, transactions between each subsidiary with connected parties, and acquisition and disposal of assets) accurately and timely as required by SET. To ensure that subsidiaries command appropriate and efficient internal control, Thaioil has developed a self-assessment form for core business processes to assess levels of respective risks before the implementation of control measures, followed by assessment of such measures' efficiency and actions taken under their improvement plans. After evaluation, the results along with recommendations are compiled and presented to the managing director of the subsidiary in question. Simultaneously, the managing directors of the subsidiaries and the Executive Committee (EXCOM) will also be informed of the findings.

Remarks: * A subsidiary means a company in which Thaioil directly or indirectly holds more than 50% of the paid-up registered capital.

Connected Transactions, Acquisition or Disposal of Assets

Thaioil has established its Connected Transaction Policy, under which all transactions must be engaged in on a fair and at arm's length basis under the rules of regulators as well as with accounting and tax standards. The Audit Committee is to provide opinions on the suitability of such connected transactions. For any matters or connected transactions requiring specific expertise, Thaioil will secure opinions from a qualified party. These opinions will be proposed to the Board or the AGM, as applicable.

Use of Inside Information

Thaioil has defined its Code of Conduct on Maintaining Confidential Information and Use of Inside Information, as seen in the CG Manual, and reminded directors, executives, and employees to recognize and comply with the prohibition on publicizing inside information for personal or others' gain. To this end, the actions taken appear below.

>> Issuing a policy to prevent insider trading. "Directors, executives, and their close contacts are prohibited from buying, selling, or transferring Thaioil shares or engaging in futures contracts concerning Thaioil shares ahead of Thaioil's performance report filing to SET or until the inside information potentially affecting Thaioil's share price has been publicized, for at least 30-45 days (for quarterly financial statements and other significant documents) and 45-60 days (for annual financial statements), and at least one day after the information is publicized."

>> Requiring directors and executives, as defined by SEC, to notify their intention to trade Thaioil shares, either the shares of their own, spouses, unmarried partners, or minors, to the Company Secretary at least one workday in advance. They are also required to report their shareholding status to SEC upon assuming office and within three workdays with each change (purchase,

sale, or transfer) in their shareholding. The shareholding of directors and executives are to be disclosed in the Annual Report (Form 56-1 One Report).

- >> Sending an e-Mail to directors, executives, and employees, to remind them and their close contacts that they are prohibited from buying, selling, or transferring Thailoil shares at least one month before the submission of the quarterly performance report to SET.
- >> Regularly reminding directors, executives, and employees of regulations and policies involving the use of inside information through various channels, such as the agenda on matters to be informed by the Chairman at each Board meeting, in Akanee Magazine (Thailoil's internal magazine), and via e-Mail (e-Newsletter)

to all executives and employees. This was carried out year-round as well as on Thailoil's intranet, among other channels. The attempt has resulted in directors, executives, and employees being fully educated about the careful use of inside information.

By making these moves, Thailoil has monitored strict use of inside information and has disclosed a report on the change in securities holding of directors and top management in 2024 (including spouses, unmarried partners, and minors) on page 114. During 2024 Thailoil found no abuse of inside information that had not been publicized. Further, no directors or executives engaged in securities trading during the embargoed periods.

Shareholding Report of the Board of Directors in 2024
(Inclusive of Spouse, Unmarried Partner, and Minor)
as of January 1, 2025

No.	Name-Surname	No. of Share (Shares)			Remark
		as of January 1, 2025	as of January 31, 2024	Addition/(Reduction) During the Year (Shares)	
1	ACM. Chanon Mungthanya	-None-	-None- ⁽¹⁾	-No Change-	Effective on April 11, 2024
2	Lt. Gen. Apichat Chaiyadar	-None-	-None-	-No Change-	-
3	Pol. Lt. Gen. Thiti Sangsawang	-None-	-None- ⁽¹⁾	-No Change-	Effective on June 1, 2024
4	Pol. Capt. Piya Raksakul	-None-	-None-	-No Change-	-
5	Mr. Kris Imsang	-None-	-None- ⁽¹⁾	-No Change-	Effective on November 1, 2024
6	Mrs. Pantip Sripimol	-None-	-None- ⁽¹⁾	-No Change-	Effective on April 11, 2024
7	Assoc. Prof. Dr. Sittidaj Pongkijvorasin	-None-	-None- ⁽¹⁾	-No Change-	Effective on March 1, 2024
8	Mr. Goanpot Asvinvichit	-None-	-None- ⁽¹⁾	-No Change-	Effective on October 1, 2024
9	Mr. Prajuck Boonyoung	-None-	-None- ⁽¹⁾	-No Change-	Effective on April 11, 2024
10	Ms. Peangpanor Boonklum	-None-	-None- ⁽¹⁾	-No Change-	Effective on September 1, 2024
11	Ms. Phenrasmi Bhuritdhanalert	-None-	-None- ⁽¹⁾	-No Change-	Effective on October 1, 2024
12	Dr. Sompop Pattanariyankool	-None-	-None-	-No Change-	-
13	Mr. Prasong Intaranongpai	-None-	-None- ⁽¹⁾	-No Change-	Effective on September 1, 2024
	By Spouse, Unmarried Partner, and Minor	5,000	5,000	-No Change-	-
14	Ms. Pattaralada Sa-ngasang	-None-	-None- ⁽¹⁾	-No Change-	Effective on November 1, 2024
15	Mr. Bandhit Thamprajamchit	2,400	2,400	-No Change-	-
	By Spouse, Unmarried Partner, and Minor	40,000	-None-	40,000	-

Remark: ⁽¹⁾ As of the effective date

Directors who Resigned during the Year 2024

No.	Name-Surname	No. of Share (Shares)			Remark
		as of Date of Resignation/ Term Completed	as of January 31, 2024	Addition/(Reduction) During the Year (Shares)	
1	Dr. Nattapon Nattasomboon	-None-	-None-	-No Change-	Resigned on March 15, 2024 (Not holding any share of the Company during his directorship in year 2024)
2	Prof. Dr. Supot Teachavorasinskun	-None-	-None-	-No Change-	Completed the Term in the 2024 Annual General Meeting of Shareholders (Not holding any share of the Company during his directorship in year 2024)
3	Assoc. Prof. Dr. Pasu Decharin	-None-	-None-	-No Change-	Completed the Term in the 2024 Annual General Meeting of Shareholders (Not holding any share of the Company during his directorship in year 2024)
4	Dr. Buranin Rattanasombat	-None-	-None-	-No Change-	Resigned on August 23, 2024 (Not holding any share of the Company during his directorship in year 2024)
5	Mr. Terdkiat Prommool	-None-	-None-	-No Change-	Resigned on August 23, 2024 (Not holding any share of the Company during his directorship in year 2024)
6	Mr. Suchat Ramarch	-None-	-None-	-No Change-	Resigned on August 23, 2024 (Not holding any share of the Company during his directorship in year 2024)
7	Mr. Distat Hotrakitya	-None-	-None-	-No Change-	Resigned on August 31, 2024 (Not holding any share of the Company during his directorship in year 2024)
8	Mr. Plakorn Wanglee	-None-	-None-	-No Change-	Resigned on September 1, 2024 (Not holding any share of the Company during his directorship in year 2024)
9	Ms. Pannalin Mahawongtikul	-None-	-None-	-No Change-	Resigned on October 1, 2024 (Not holding any share of the Company during his directorship in year 2024)

Shareholding Report of Company's High-Level Executives (as defined by SEC) in 2024
(Inclusive of Spouse, Unmarried Partner, and Minor)
Information as of January 1, 2025

No.	Name-Surname of High-Level Executives, and Finance & Accounting Executive	No. of Share (Shares)			Remark
		as of January 1, 2025	as of January 31, 2024	Addition/(Reduction) During the Year (Shares)	
1	Mr. Bandhit Thamprajamchit	2,400	2,400	-No Change-	-
	By Spouse, Unmarried Partner, and Minor	40,000	-	40,000	-
2	Mr. Surachai Saengsamran	107,000	107,000	-No Change-	-
3	Mr. Jeerawat Pattanasomsit	-None-	-None-	-No Change-	-
4	Mr. Chatapong Wungtanagorn	105,676	105,676	-No Change-	-
5	Mr. Charlee Balmongkol	-None-	-None-	-No Change-	-
6	Mr. Nuttapon Meerit	1,000	1,000 ⁽¹⁾	-No Change-	Effective on January 1, 2025
7	Mrs. Runnapa Janchookiat	-None-	-None-	-No Change-	-
	By Spouse, Unmarried Partner, and Minor	100	100	-No Change-	-
8	Mrs. Wanida Boonpiraks	6,585	6,585 ⁽¹⁾	-No Change-	Effective on October 1, 2024
9	Miss Somporn Bunluesriruang	58,800	58,800 ⁽¹⁾	-No Change-	Effective on October 1, 2024
10	Mr. Santi Wasanasiri	10,976	10,976	-No Change-	-
	By Spouse, Unmarried Partner, and Minor	55,600	55,600	-No Change-	-
11	Miss Torsang Chaipravat	-None-	-None-	-No Change-	-
12	Mrs. Tarika Devahastin	-None-	-None-	-No Change-	-
13	Miss Wanwisa Yanchinda	5,424	5,424	-No Change-	-

Remark: ⁽¹⁾ As of the effective date

High-Level Executives who Ended Their Duties in Year 2024

No.	Name-Surname of High-Level Executives, and Finance & Accounting Executive	No. of Share (Shares)			Remark
		as of Date of Ended their Duties	as of January 31, 2024	Addition/(Reduction) During the Year (Shares)	
1	Mrs. Chanamas Sasnanand	-None-	-None-	-No Change-	Ended Their Duties on September 30, 2024
2	Mr. Rathakorn Kampanathsanyakorn	-None-	-None-	-No Change-	Ended Their Duties on September 30, 2024
3	Mr. Viroj Wongsathirayakhun	23,600	23,600	-No Change-	Retired on December 31, 2024

Prevention of Conflicts of Interest

To prevent conflicts between personal interests and those of Thaiphoil, the Company has introduced a “Code of Conduct on Conflicts of Interest” and included it with the CG Manual as guidelines for its personnel. Actions taken include:

- >> Developing a vested-interest report form for directors and executives under specified criteria. A director or an executive is required to submit this report upon taking up a position, as well as on a quarterly and an annual basis. The requirement was fulfilled by all directors and executives this year.
- >> Developing a Conflict of Interest Report form in the electronic format. All Thaiphoil employees are required to report their conflicts of interest via an electronic system on their day one at Thaiphoil, annually, or each time a suspected conflict exists. In 2024 Thaiphoil received 100% responses.
- >> Defining policies and guidelines for directors at Board meetings. Any director involved in matters with possible conflicts of interest must leave the meeting unless the Chairman allows him or her to stay to answer questions from other directors. However, the director in question must abstain from voting on the item.
- >> Educating executives and employees on conflicts of interest through articles in Akahee Magazine (Thaiphoil's internal magazine) and by e-Mail in the form of e-Newsletters throughout the year as well as on Thaiphoil's Intranet. Therefore, all Thaiphoil executives and employees have duly learned about conflicts of interest.

In 2024 Thaiphoil found no abuse concerning conflicts of interest.

Anti-Fraud

With the approval of the Board of Directors, the **Anti-Fraud Policy** was announced for company-wide enforcement, which directors, executives, and employees must

acknowledge and comply with. The policy is to be reviewed annually. The Board also approved amendment to the policy in 2024 for consistency with regulations, greater clarity, and more completeness.

Thaiphoil also values the enforcement of policies, guidelines, and anti-fraud measures. Corruption risk assessment is made for high-risk business processes, with appropriate internal-control measures laid down to prevent and minimize corruption risks. Performance is audited and monitored to duly review and improve plans. There is appropriate segregation of duties and organization structure as well as communication to educate all about anti-fraud and the “No Gift Policy” through e-Mail to everyone, with video clips and public relations signs installed at various spots. More details appear on the website at Sustainability/Governance and Economics/Fight Against Corruption.

Besides these internal moves, to demonstrate Thaiphoil's commitment to countering corruption, as a listed company it is our responsibility to foster confidence among shareholders and stakeholders. **Thaiphoil was certified as a member of the Thai Private Sector Collective Action Against Corruption (CAC-certified company) on April 4, 2014, valid for three years each time. Thaiphoil has so far been successful in every re-certification by CAC, including the latest re-certification in the first quarter of 2023.** Moreover, Thaiphoil encourages its suppliers to join CAC.

Complaint Filing and/or Whistle-Blowing Measures

Thaiphoil commands Complaint Filing and/or Whistle-Blowing measures, which form an integral part of the CG Manual and are posted on the website to allow stakeholders to monitor the performance of directors, executives, and employees of Thaiphoil and Subsidiaries to ensure their compliance with laws, regulations, the CG Code, and Code of Conduct while refraining from engagement in any action potentially leading to fraud.

In 2024 the Corporate Governance and Sustainability Committee (CG Committee) approved the amendment to the Whistleblowing Process for greater clarity and manageability.

Those who experience violation of their lawful rights and are affected by Thailoil and Subsidiaries' activities, stakeholders, employees, relevant authorities, and external parties confronting or are aware of such activities may file a complaint or report them through the following channels:



**Chairman of the Board/
Chairman of Corporate Governance
and Sustainability Committee/
Chairman of Audit Committee/
Chief Executive Officer and President/
Company Secretary**

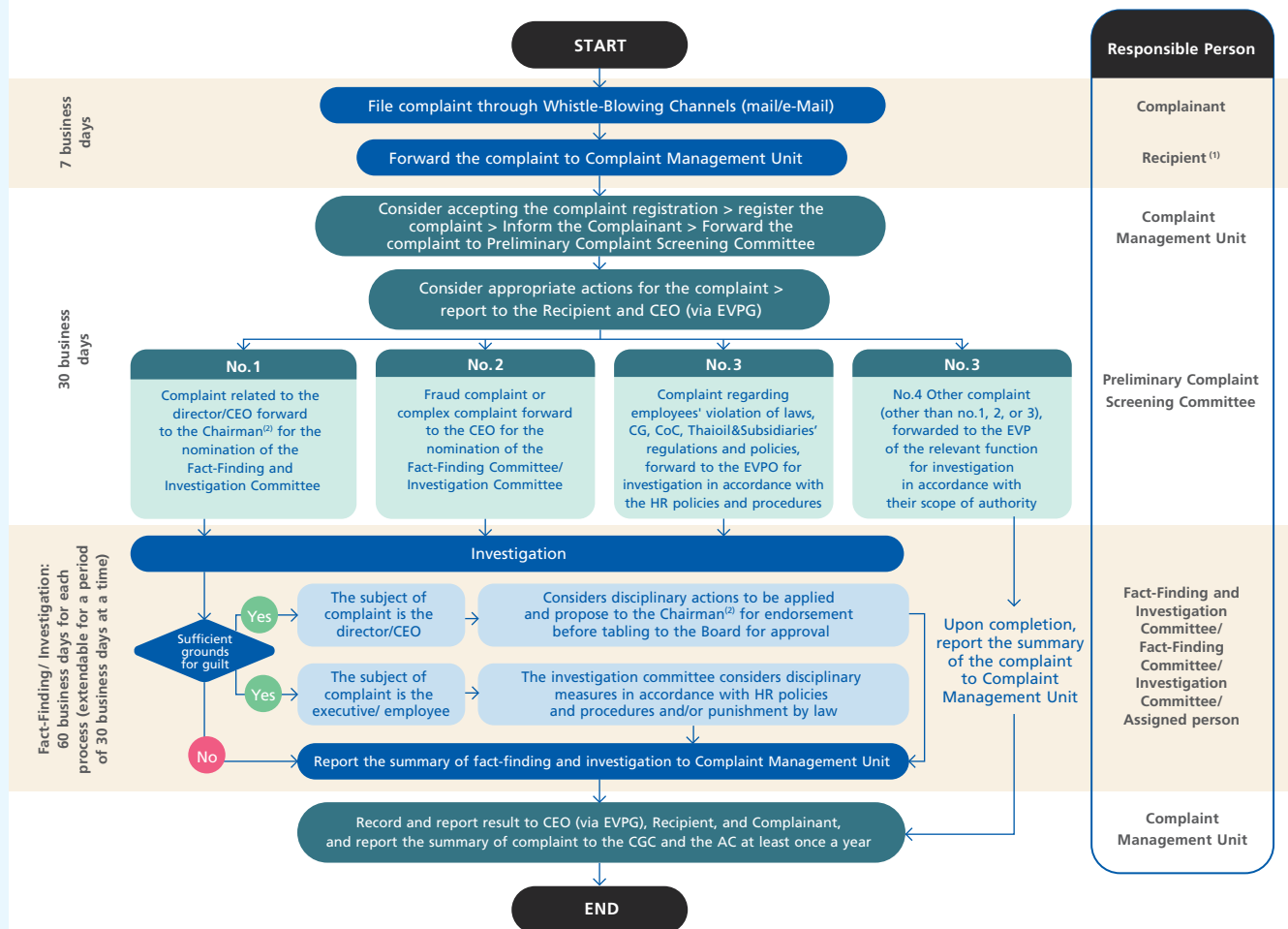
**Thailoil Public Company Limited
555/1 Energy Complex Building A, 11th Floor
Vibhavadi Rangsit Road, Chatuchak, Chatuchak,
Bangkok 10900**



whistleblower@thailoilgroup.com



Complaint Management Process



Remark: ⁽¹⁾ Chairman of the Board/Chairman of the Audit Committee/Chairman of Corporate Governance and Sustainability Committee/ CEO and President/Company Secretary

⁽²⁾ Complaint related to the Chairman, forward to the AC Chairman

Protection of Whistleblowers and Related Parties

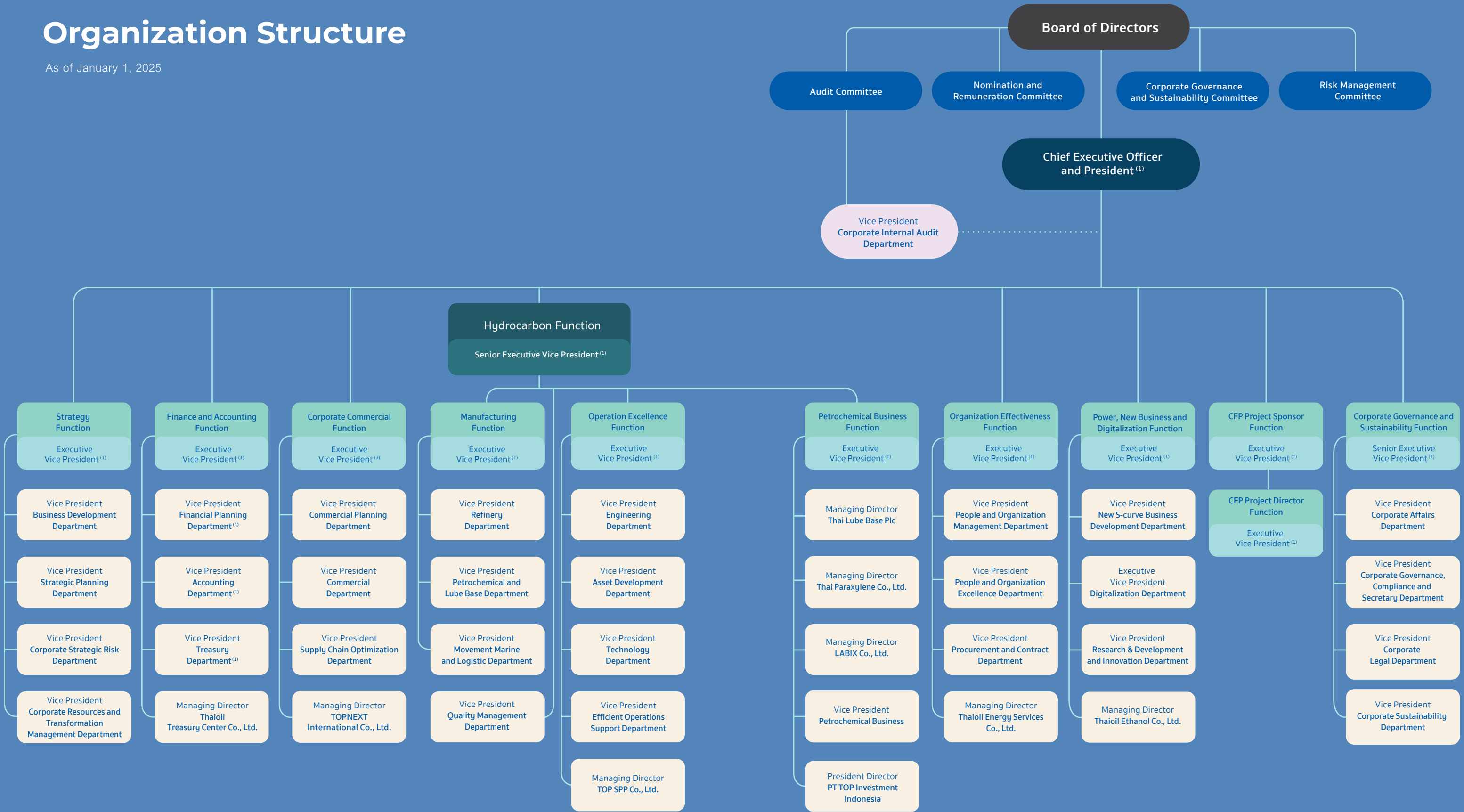
Complainants or whistleblowers of potential violation of laws or non-compliance are duly and fairly protected by Thairoil, which implies no change in job titles, threats, job interference, dismissal, or any unfair act. Thairoil will not only keep information about their complaints confidential, but will not disclose it to unrelated parties, except when required by law.

In 2024, Thairoil received two complaints through whistleblowing channels, which are currently being investigated. Investigation strictly under the whistleblowing process followed, with both complaints found valid. The first was found to contain no fraud or breach of company rules; the findings were then communicated to the complainant. The second is still under investigation. Summaries of whistleblowing are given at least annually to the CG Committee.



Organization Structure

As of January 1, 2025



Remark ⁽¹⁾The position is considered managerial executives as defined by SEC announcement.

Name	Subsidiaries							Indirect Subsidiaries										Associates				Related Companies			
	Thai Lube Base Pte Co., Ltd.	Thai Base Paraxylene Co., Ltd.	Thai Solvent Co., Ltd.	Thai Investment Indonesia ⁽¹⁾ Co., Ltd.	TOP SPP Co., Ltd.	Thai Energy Services Co., Ltd.	Thai Ethanol Co., Ltd.	Thai Treasury Center Co., Ltd.	LABIX Co., Ltd. ⁽²⁾	TOP Next International Co., Ltd. ⁽³⁾	Sak Chaisithi Co., Ltd. ⁽⁴⁾	TOP Solvent (Vietnam) LLC ⁽⁵⁾	PT Tria Surya Raya ⁽⁶⁾	JSiem Pte. Ltd. ⁽⁷⁾	Saphin Co., Ltd. ⁽⁸⁾	Saphin Green Energy Co., Ltd. ⁽⁹⁾	TOP Ventures Co., Ltd. ⁽¹⁰⁾	TOP Ventures Hong Kong Ltd. ⁽¹¹⁾	TOP Ventures America LLC ⁽¹²⁾	Global Power Synergy Pte. ⁽¹³⁾	Ubon Bo Ethanol Pte. ⁽¹⁴⁾	PTT Digital Solutions Co., Ltd. ⁽¹⁵⁾	PTT Energy Solutions Co., Ltd. ⁽¹⁶⁾	Thai Petroleum Pipeline Co., Ltd. ⁽¹⁷⁾	Sam Pung Social Enterprise Co., Ltd. ⁽¹⁸⁾
1. ACM Chanon Mungthanya	★																								
2. Lt. Gen. Apichat Chaiyadar	★																								
3. Pol. Lt. Gen. Thiti Sangsawang	★																								
4. Pol. Capt. Piya Raksakul	★																								
5. Mrs. Pantip Siripimol	★																								
6. Assoc. Prof. Dr. Sittidaj Pongkijvorasin	★																								
7. Mr. Goanpot Asvinichit	★																								
8. Mr. Prajuck Boonyoung	★																								
9. Ms. Peangpanor Boonklum	★																								
10. Ms. Phenrasmi Bhuritdhanalert	★																								
11. Dr. Sompop Pattanariyankool	★																								
12. Mr. Prasong Intaranongpai	★																								
13. Mr. Kris Imsang	★																			★					
14. Ms. Pattaralada Sa-ngesang	★																								
15. Mr. Bandhit Thampreajanchit	★	★							★						★					★					
16. Mr. Jeerawat Pattanasomsit	★								★						★			★							
17. Mr. Chatapong Wungtanagorn	★																								
18. Mr. Charlee Balmongkol	★																								
19. Mr. Nuttapon Meerit	★																								
20. Ms. Rungnapa Janchookiat	★																								★
21. Ms. Wanida Boonpiraks	★																								
22. Ms. Somporn Bunluesri Ruang	★																								
23. Mr. Santi Wasanasiri	★																								
24. Mr. Surachai Saengsamran	★																								
25. Ms. Korapat Limpaphayom	★																								
26. Mr. Khwanchai Chaiyarek	★																								
27. Ms. Kontarat Yamsiri				★																					
28. Ms. Janya Oonmeechai	★																								
29. Ms. Jidapa Soontaratpong	★																								
30. Mr. Jumpon Thapanapong	★																								
31. Mr. Chuanchai Laoteng	★																								
32. Mr. Chatchai Sriwit	★																								
33. Mr. Chet Prongchit	★																								
34. Mr. Narongsak Chaviengpob	★																								
35. Mr. Natthapong Tumsaraj	★																								

Information of Directors, Executive Officers and Control Executives as of January 1, 2025

Name	Subsidiaries										Indirect Subsidiaries										Associates			Related Companies	
	Thai Lube Base Plc	Thai Paraxylene Co., Ltd.	Thai Solvent Co., Ltd.	PT TOP Investment Indonesia ⁽¹⁾ Co., Ltd.	TOP SPP Co., Ltd.	Thaiol Energy Services Co., Ltd.	Thaiol Ethanol Co., Ltd.	Thaiol Treasury Center Co., Ltd.	LABIX Co., Ltd. ⁽²⁾	TOP Next International Co., Ltd. ⁽³⁾	Sak Chasidhi Co., Ltd. ⁽⁴⁾	TOP Solvent (Vietnam) LLC ⁽⁵⁾	PT. Surya Raya ⁽⁶⁾	JSKem Pte. Ltd. ⁽⁷⁾ Co., Ltd. ⁽⁸⁾	Saphip Green Energy Co., Ltd. ⁽⁹⁾	TOP Ventures Co., Ltd. ⁽¹⁰⁾	TOP Ventures Hong Kong Ltd. ⁽¹¹⁾	TOP Ventures America LLC ⁽¹²⁾	Global Power Synergy Plc ⁽¹³⁾	Ubon Bio Ethanol Plc ⁽¹⁴⁾	PTT Digital Solutions Co., Ltd. ⁽¹⁵⁾	PTT Energy Solutions Co., Ltd. ⁽¹⁶⁾	Thai Petroleum Pipeline Enterprise Co., Ltd. ⁽¹⁷⁾	San Pung Social Enterprise Co., Ltd. ⁽¹⁸⁾	
36 Mr. Nuttapol Nopparatwong	✳																								
37 Mr. Thirayoot Limanond	✳																							✳	
38 Ms. Torsang Chaipravat	✳				✳							✳													
39 Mr. Thanalarp Osathananda				✳								✳✳													
40 Ms. Tarika Devahastin	✳		✳					✳✳			✳														
41 Ms. Piyaphon Thakonpathanakun	✳																								
42 Mr. Preedayos Chutikomol															✳										
43 Ms. Pimchanok Sakolwaree	✳																								
44 Mr. Phuping Taweearp	✳																								
45 Mr. Phumchit Taisanaprasert	✳																								
46 Mr. Mongkol Janchookiat	✳																								
47 Ms. Rungtip Maneesarachun	✳																								
48 Mr. Luck Saraya																✳	✳	✳	✳						
49 Mr. Worachart Ruangtragool	✳																								
50 Ms. Warangkana Sukapinita	✳																								
51 Ms. Wanwisa Yanchinda	✳															✳	✳	✳							
52 Mr. Vivat Wongnirund	✳																								
53 Mr. Visit Thangpakorn													✳												
54 Mr. Sarunyu Limwongse	✳												✳												
55 Mr. Seksan Rojsirikulchai													✳												
56 Mr. Somboon Chuaykoblap	✳						✳✳							✳											
57 Ms. Suchada Deechaiya	✳																								
58 Mr. Semsak Nuntapong	✳																								
59 Mr. Anawat Chansaksoong	✳			✳✳✳																					
60 Ms. Arkhanin Ruang-Art	✳																✳								
61 Ms. Acharee Tiyahtorn	✳	✳																							
62 Mr. Udom Wongsirirnopphakhun	✳																								

Notes: ★ = Chairman ☆ = Director ⓘ = Chief Executive Officer or Managing Director ⓘ = Executive Officer

⁽¹⁾ PT TOP Investment Indonesia, founded on July 12 2021, is a subsidiary of Thai Oil P.C. (TOP), in which TOP holds 100% of shares.

⁽²⁾ LABX Co., Ltd. is a subsidiary of Thai Paraxylene Co., Ltd. (TPX), in which TPX holds 75% of shares.

⁽³⁾ TOP Next International Co., Ltd. (TX), previously TOP Solvent Co., Ltd. and name changed on October 3, 2022, is a subsidiary of Thaiol Solvent Co., Ltd. (TOS), in which TOS holds 100% of shares.

⁽⁴⁾ Sak Chasidhi Co., Ltd. is a subsidiary of TOP Next International Co., Ltd. (TX), in which TS holds 80.52% of shares.

⁽⁵⁾ TOP Solvent Vietnam LLC is a subsidiary of TOP Next International Co., Ltd. (TX), in which TS holds 77.7% of shares.

⁽⁶⁾ PT Tria Surya Raya is a subsidiary of TOP Next International Co., Ltd. (TX), in which TS holds 60% of shares.

⁽⁷⁾ JSKem Private Limited is a subsidiary of TOP Next International Co., Ltd. (TX), in which TS holds 50% of shares.

⁽⁸⁾ Saphip Co., Ltd. is a subsidiary of Thaiol Ethanol Co., Ltd. (TET), in which TET holds 100% of shares.

⁽⁹⁾ Saphip Green Energy Co., Ltd. is a subsidiary of Saphip Co., Ltd. (SAP), in which SAP holds 100% of shares.

⁽¹⁰⁾ TOP Ventures Co., Ltd. is a subsidiary of Thaiol Treasury Center Co., Ltd. (TTC), in which TTC holds 100% of shares.

⁽¹¹⁾ TOP Ventures Hong Kong Ltd. is a subsidiary of Thaiol Treasury Center Co., Ltd. (TTC), in which TTC holds 100% of shares.

⁽¹²⁾ TOP Ventures America LLC is a subsidiary of TOP Ventures Hong Kong Ltd. (TVHK), in which TVHK holds 100% of shares.

⁽¹³⁾ Global Power Synergy Pte. has become public company limited since 27 November 2014.

⁽¹⁴⁾ Ubon Bio Ethanol Pte. is an associate company of Thaiol Ethanol Co., Ltd. (TET) and become Pte. on April 23, 2018, in which TET holds 12.39% of shares.

⁽¹⁵⁾ PTT Digital Solutions Co., Ltd. is an associate company of Thai Oil P.C. (TOP), in which TOP holds 20% of shares.

⁽¹⁶⁾ PTT Energy Solutions Co., Ltd. is an associate company of Thai Oil P.C. (TOP), in which TOP holds 20% of shares.

The company, however, is on process of closing down business.

⁽¹⁷⁾ Thai Petroleum Pipeline Co., Ltd. is a related company of Thai Oil P.C. (TOP), in which TOP holds 9.19% of shares.

⁽¹⁸⁾ Sam Pung Social Enterprise Co., Ltd. is a related company of Thai Oil P.C. (TOP), in which TOP holds 15% of shares.

Board of Directors

As of January 1, 2025

Air Chief Marshal Chanon Mungthanya

Independent Director (Non-Executive)
and Chairman of the Board
Age 60 Yrs.



Director Term

- >> Independent Director (Non-Executive) (Appointed on April 11, 2024: 8 months)
- >> Chairman of the Board (Elected on April 11, 2024: 8 months)

Board-Committee Term

-None-

Education

- >> Bachelor of Science, Royal Thai Air Force Academy
- >> Squadron Officer School, Class 79, Royal Thai Air Force (RTAF)
- >> Air Command and Staff College, Class 41, Royal Thai Air Force (RTAF)

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 338/2023)

Other Trainings

- >> National Defect Course (NDC), Class 60, National Defence College
- >> Senior Budget Executive Program, Class 4, Bureau of the Budget
- >> Capital Market Academy Leader Program, Class 33, Capital Market Academy
- >> STS Expert Session 2024:
 - >> "Outlook and Trends in Net Zero Transition", ADL
 - >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG)
- >> Seminar: Risk Expert Session 2024 "Generative AI: Opportunities, Risks and Challenges", AFON Precious Co., Ltd.

Working Experience in the 5 Preceding Years

Oct 1, 2019-Mar 30, 2020	Director of Operations, Royal Thai Air Force
Apr 1, 2020-Sep 30, 2020	Deputy Chief of the Air Staff, Royal Thai Air Force
Oct 1, 2020-Sep 30, 2021	Chief of the Air Staff, Royal Thai Air Force
Oct 1, 2021-Sep 30, 2022	Assistant Commander-in-Chief, Royal Thai Air Force
Oct 1, 2022-Sep 30, 2023	Deputy Commander-in-Chief, Royal Thai Air Force
Oct 1, 2023-Sep 30, 2024	Deputy Chief of Defence Forces

Board Industry Experience & Expertise

Possesses experience, knowledge and understanding on public policies and security strategic plans, which benefit the company's business operation and strategic planning since the refinery is considered the critical stronghold which requires robust security administration.

Current Positions

1. Listed Company (2)

- >> Independent Director and Chairman of the Board, Thai Oil Plc
- >> Independent Director, Member of the Nominating Committee and Member of the Remuneration Committee, PTT Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions

-None-

5. State Enterprise

-None-

% of Shareholding in Thairoil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Lt. Gen. Apichat Chaiyadar

Independent Director (Non-Executive),
Chairman of the Audit Committee
and Member of the Nomination and Remuneration Committee
Age 56 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on April 10, 2023:
1 year 8 months)

Board-Committee Term

>> Member of the Audit Committee (Appointed on April 10, 2023)
>> Member of the Nomination and Remuneration Committee
(Appointed on April 10, 2023)
>> Chairman of the Audit Committee (Elected on May 10, 2023)

Education

>> Bachelor of Science, Chulachomkiao Royal Military Academy
>> Master of Arts (International Relations), Chulalongkorn University

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 249/2017)

Other Trainings

>> National Defence Course (NDC), Class 65, National Defence College
>> Diploma, Command and General Staff Office Course Command and
General Staff College, USA
>> Seminar: National Director Conference 2024 "Sustainable Future:
The Board as a Catalyst for Value", Thai Institute of Directors Association (IOD)
>> Seminar: PTT Group AC Forum 2024 "Watch Out the Signs"
>> Climate Action Leaders Forum 3/2024,
Thailand Greenhouse Gas Management Organization (Public Organization)
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 19,
Thailand Energy Academy

Working Experience in the 5 Preceding Years

2019-Sep 2020	Deputy Director-General, Defence Energy Department, Office of the Permanent Secretary for Defence, Ministry of Defence
2020-Sep 2022	Chief, Military Affairs Coordination Officers to the Ministry of Foreign Affairs, Officer of Policy and Planning, Office of the Permanent Secretary for Defence, Ministry of Defence
Oct 2022-Present	Director-General Defence Energy Department, Office of the Permanent Secretary for Defence, Ministry of Defence

Board Industry Experience & Expertise

Possesses knowledges and plenty of experiences on national security and energy field, which are directly related to the core business of the Company. Lt. Gen. Apichat will be able to provide opinions and suggestions which will be beneficial to the business operations of the Company.

Current Positions

1. Listed Company (1)

>> Independent Director, Chairman of the Audit Committee
and Member of the Nomination and Remuneration Committee, Thai Oil Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (1)

>> Director-General Defence Energy Department,
Office of the Permanent Secretary for Defence, Ministry of Defence

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Police Lieutenant General Thiti Sangsawang

Independent Director (Non-Executive),
Chairman of the Nomination and Remuneration Committee
and Member of the Corporate Governance
and Sustainability Committee
Age 59 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on June 1, 2024: 7 months)

Board-Committee Term

- >> Member of the Nomination and Remuneration Committee
(Appointed on June 1, 2024)
- >> Chairman of the Nomination and Remuneration Committee
(Elected on July 18, 2024)
- >> Member of the Corporate Governance and Sustainability Committee
(Appointed on October 1, 2024)

Education

- >> Bachelor of Public Administration (Police Science),
Royal Police Cadet Academy
- >> Master of Public Administration, Dhurakij Pundit University

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Accreditation Program (DAP 220/2024)
- >> Director Certification Program (DCP 370/2024)

Other Trainings

- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 15,
Thailand Energy Academy
- >> National Defence Course (NDC), Class 61, National Defence College
- >> Capital Market Academy Leader Program, Class 25, Capital Market Academy
- >> The Program for Senior Executives on Justice Administration,
Batch 20, Justice Training Institute

Working Experience in the 5 Preceding Years

Oct 1, 2020-Mar 31, 2021	Deputy Commissioner of the Provincial Police Region 1
Apr 1, 2021-Sep 30, 2021	Commissioner Attached to Office of the Commissioner General, Royal Thai Police
Oct 1, 2021-Sep 30, 2022	Commissioner of the Provincial Police Region 2
Oct 1, 2022-Nov 26, 2024	Commissioner of the Metropolitan Police Bureau
Nov 27, 2024-Dec 15, 2024	Acting Assistant Commissioner General of the Royal Thai Police
Dec 16, 2024-Present	Assistant Commissioner General of the Royal Thai Police

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise in unit management, personnel, leadership and legal field, which is one of the key qualifications of the Board of Directors, including strengthening and supporting business operations, especially in terms of corporate governance and legal implementation.

Current Positions

1. Listed Company (1)

- >> Independent Director, Chairman of the Nomination and Remuneration Committee and Member of the Corporate Governance and Sustainability Committee, Thai Oil Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (1)

- >> Assistant Commissioner General of the Royal Thai Police

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Police Captain Piya Raksakul

Independent Director (Non-Executive),
Chairman of the Corporate Governance
and Sustainability Committee
and Member of the Audit Committee
Age 56 Yrs.



Director Term

- >> Independent Director (Non-Executive) (Appointed on April 10, 2023:
1 year 8 months)

Board-Committee Term

- >> Member of the Audit Committee (Appointed on April 10, 2023)
- >> Member of Corporate Governance and Sustainability Committee
(Appointed on August 25, 2023)
- >> Chairman of the Corporate Governance and Sustainability Committee
(Elected on October 2, 2024)

Education

- >> Bachelor of Laws, Sripatum University
- >> Master of Arts (Political Science-Justice Administration), Kasetsart University

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 343/2023)
- >> Advanced Audit Committee Program (AACP 53/2024)

Other Trainings

- >> Advanced Certificate Course in Public Economic Management for Executives,
Class 5, King Prajadhipok's Institute
- >> Provincial Chief Prosecutor's Training Program, Class 34,
Office of the Attorney-General
- >> Advanced Police Management Course, Class 41, Police College
- >> Training Course on Environmental Governance for Executive Officers, Class 5,
Department of Environmental Quality Promotion
- >> Justice Administration Advanced Course, Class 10, Ministry of Justice
- >> Training Course on Advanced Politics and Election Development, Class 10,
Office of the Election Commission
- >> The Civil Service Executive Development Program:
Visionary and Moral Leadership, Class 92, Office of the Civil Service Commission
- >> Lecture: PTT Group CG Day 2023 "Great of Trust",
Asst. Prof. Dr. Torphas Yomanak, Director of the Center for Political Economy
Studies, Faculty of Economics, Chulalongkorn University
- >> Certificate in Rule of Law for Democracy, Class 11,
Office of the Constitutional Court
- >> 2021 PTIT Special Lecture by Khunying Thongtip Ratanarat:
"Thailand's New Government; Must Have A "New Think Through"
to Propel the Country's Economy Forward"
- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 19,
Thailand Energy Academy

>> STS Expert Session 2024:

- >> "Outlook and Trends in Net Zero Transition", ADL
- >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG)
- >> Seminar: PTT Group AC Forum 2024 "Watch Out the Signs"
- >> Lecture: PTT Group CG Day 2024 "Transformative CG for Net Zero",
Mr. Kulvech Janvatanavit, Executive Director,
Thai Institute of Directors Association (IOD)

Working Experience in the 5 Preceding Years

Nov 17, 2017-Dec 26, 2021	Director, Bureau of Special Case Management, Department of Special Investigation
Nov 27, 2021-Sep 22, 2022	Director, Bureau of Financial, Banking and Money Laundering Crime, Department of Special Investigation
Sep 23, 2022-Nov 16, 2024	Deputy Director-General, Department of Special Investigation
Nov 17, 2024-Present	Deputy Secretary General, Southern Border Provinces Administration Centre

Board Industry Experience & Expertise

Possesses knowledgeable, skillful and has long experience in legal field,
which is one of the key qualifications of the Board of Directors, which highly benefit
the company's risk management and corporate governance.

Current Positions

1. Listed Company (1)

- >> Independent Director, Chairman of the Corporate Governance
and Sustainability Committee and Member of the Audit Committee,
Thai Oil Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (1)

- >> Deputy Secretary General, Southern Border Provinces Administration Centre

5. State Enterprise (1)

- >> Director, Metropolitan Waterworks Authority

% of Shareholding in Thaioil	-None-
Conflict of Interest	-None-
Family Relation with Other Directors	-None-
Dispute in the 10 Preceding Years	-None-

Mr. Kris Imsang

Director (Non-Executive)
and Chairman of the Risk Management Committee
Age 59 Yrs.



Director Term

>> Director (Non-Executive) (Appointed on November 1, 2024: 2 months)

Board-Committee Term

>> Member of the Risk Management Committee (Appointed on November 1, 2024)
>> Chairman of the Risk Management Committee (Elected on November 21, 2024)

Education

>> Bachelor of Engineering (Civil Engineering), Chulalongkorn University

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 139/2010)
>> Director Refreshment Training Program (RFP 1/2021)
>> The Role of the Board in IT Governance 2020

Other Trainings

>> Climate Action Leaders Forum, Class 3/2024,
Thailand Greenhouse Gas Management Organization (Public Organization)
>> Certificate in Top Executives in the PoomPalungPandin Program, Class 3,
Chulalongkorn University
>> Leadership Development Program III, Class 2,
PTT Leadership and Learning Institute (PLLI)
>> Capital Market Academy Leader Program Class 23, Capital Market Academy
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 9,
Thailand Energy Academy
>> National Defence Course (NDC), Class 62, National Defence College
>> Certificate Course in Good Governance for Medical Executives, Class 9,
King Prajadhipok's Institute and the Medical Council of Thailand

Working Experience in the 5 Preceding Years

2019-2020	Senior Executive Vice President, Down Stream Business Group Alignment, PTT Plc
2020-2022	Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc
2022-Sep 2024	Chief Operating Officer reporting to Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc, secondment as Chief Executive Officer and President, IRPC Plc
Oct 2024-Present	Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on engineering, strategy, energy, petroleum and petrochemicals. Including the director has work experience working for PTT Plc and companies in PTT Group, resulting in the ability to provide useful advice and comments on the company's strategic planning and business directions through PTT Group overview.

Current Positions

1. Listed Company (3)

>> Director and Chairman of the Risk Management Committee, Thai Oil Plc
>> Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc
>> Director, Global Power Synergy Plc

2. Public Company

-None-

3. Limited Company (1)

>> Chairman of the Board, PTT Tank Terminal Co., Ltd

4. Other Organizations/Institutions (8)

>> Committee, Chulalongkorn University Alumni Association,
under the Royal Patronage of His Majesty King
>> Member of Vidyasirimedhi Institute of Science and Technology Council
for Short: Member of VISTEC Council
>> Director, Thailand Business Council for Sustainable Development
>> Member and Secretary-General, Industrial Development Foundation
>> Secretary General, The Federation of Thai Industries
>> Board of Trustees, Sirindhorn International Institute of Technology (SIIT)
>> Executive Director, Thailand Energy Academy
>> Honorary Board Member, Social Enterprise Promotion Board

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mrs. Pantip Sripimol

Independent Director (Non-Executive)
and Member of the Audit Committee
Age 62 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on April 11, 2024: 8 months)

Board-Committee Term

>> Member of the Audit Committee (Appointed on July 25, 2024)

Education

>> Bachelor of Law, Ramkhamhaeng University
>> Bachelor of Business Administration, Ramkhamhaeng University
>> Master of Public Administration, Chulalongkorn University

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 73/2006)
>> Audit Committee Program (ACP 40/2012)
>> Role of the Nomination and Governance Committee (RNG 5/2013)

Other Trainings

>> Certificate in Anti-Corruption Strategic Management for Senior Executives, Class 12, Office of the National Anti-Corruption Commission
>> Tourism Management Course for Senior Executives, Class 2
>> Capital Market Academy Leader Program, Class 25, Capital Market Academy
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 8, Thailand Energy Academy
>> Leadership Development Program (LDP) III, Class 2, PTT Leadership and Learning Institute (PLLI)
>> The Joint State-Private Sector Course, Class 26, National Defence College
>> Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, Class 15, King Prajadhipok's Institute
>> The Program for Senior Executives on Justice Administration, Batch 14, Judicial Training Institute
>> Advanced Certificate Course in Public Administration and Law for Executives, Class 7, King Prajadhipok's Institute
>> STS Expert Session 2024:
>> "Outlook and Trends in Net Zero Transition", ADL

Working Experience in the 5 Preceding Years

2019-2021 Deputy Permanent Secretary, Chief of The Revenue Cluster
2021-2023 Director, State Enterprise Policy Office (SEPO)
2023-Mar 2024 Member of the Screening Directors for State Enterprise Committee

Board Industry Experience & Expertise

Knowledgeable in the legal field. She also possesses experience in financial management and set state enterprise policy. Which highly benefit the Company's strategic planning and business direction.

Current Positions

1. **Listed Company (1)**
>> Independent Director and Member of the Audit Committee, Thai Oil Plc
2. **Public Company** -None-
3. **Limited Company** -None-
4. **Other Organizations/Institutions (1)**
>> Board of Commissioners, The Civil Aviation Authority of Thailand
5. **State Enterprise** -None-
% of Shareholding in Thailoil -None-
Conflict of Interest -None-
Family Relation with Other Directors -None-
Dispute in the 10 Preceding Years -None-

Associate Professor Dr. Sittidaj Pongkijvorasin

Independent Director (Non-Executive)
and Member of the Nomination and Remuneration Committee
Age 45 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on February 14, 2024 and effective from March 1, 2024: 10 months)

Board-Committee Term

>> Member of the Nomination and Remuneration Committee
(Appointed on 25 July, 2024)

Education

>> Bachelor of Economics (1st Class Honours, Gold Medal),
Chulalongkorn University
>> Master of Science (Environmental and Natural Resource Economics),
Chulalongkorn University
>> Doctor of Philosophy (Economic), University of Hawaii at Manoa, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Accreditation Program (DAP 220/2024)

Other Trainings

>> Ambiguity Experimental Method Course,
Economy and Environment Partnership for Southeast Asia (EEPSEA)
>> Certificate in the Postgraduate Course on "Health and Climate Change:
Impact and Adaptation Strategies", Heidelberg University
>> Certificate in Resource Management, University of Hawaii

Working Experience in the 5 Preceding Years

2019-2020	Deputy Director for Public Well-being Division, The Thailand Research Fund Deputy Director of Strategic Future Mission and Key Research and Innovation Initiatives, Thailand Science Research and Innovation (TSRI)
2002-Present	Lecturer, Faculty of Economics, Chulalongkorn University
2020-Mar 31, 2024	Dean, Faculty of Economics, Chulalongkorn University
Jun 2024-Oct 2024	Acting Vice President Property Management, Chulalongkorn University
Nov 2024-Present	Vice President Property Management, Chulalongkorn University

Board Industry Experience & Expertise

Possesses experience, knowledge and understanding on economics, corporate management and innovation, which are important knowledge in energy market analysis, future energy demand assessment and cost-benefit analysis, which are important tools to help in investment decision-making and business operations of the company.

Current Positions

1. Listed Company (1)

>> Independent Director and Member of the Nomination and Remuneration,
Thai Oil Plc

2. Public Company

-None-

3. Limited Company (1)

>> Director, Jivvit Jiiva International Co., Ltd.

4. Other Organizations/Institutions (1)

>> Lecturer, Faculty of Economics and Vice President Property Management,
Chulalongkorn University

5. State Enterprise

-None-

% of Shareholding in Thai oil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mr. Goanpot Asvinvichit

Director (Non-Executive)
and Member of the Corporate Governance
and Sustainability Committee
Age 68 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on October 1, 2024:
3 months)

Board-Committee Term

>> Member of the Corporate Governance and Sustainability Committee
(Appointed on October 1, 2024)

Education

>> Bachelor of Economic, Thammasat University
>> Master of Business Administration, University of Southern California, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 134/2010)
>> Director Accreditation Program (DAP 72/2008)
>> Role of the Compensation Committee (RCC 11/2010)

Other Trainings

>> Advanced Certificate Course in Politics and Governance in Democratic
Systems for Executives, Class 1, King Prajadhipok's Institute
>> National Defense Course (NDC), Class 39, National Defense College
>> The Programme for Senior Executives on Justice Administration, Batch 15,
Judicial Training Institute
>> Certificate in Rule of Law for Democracy, Class 4, Office of the Constitutional Court

Working Experience in the 5 Preceding Years

2020-Present Senior Consultant,
Lavida Advanced Fertility and Genetics Center Co., Ltd.
2022-Present Associate Judge,
Central Intellectual Property and International Trade Court

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on economics and corporate management, resulting in the ability to provide useful advice and comments which benefit the company's operations, enabling operations to respond to complex challenges effectively, grow sustainably, and cope with future challenges steadily.

Current Positions

1. Listed Company (2)

>> Independent Director and Member of the Corporate Governance
and Sustainability Committee, Thai Oil Plc
>> Director and Chairman of Executive Directors,
Bangkok Genomics Innovation Plc

2. Public Company

-None-

3. Limited Company (4)

>> Director, Thai Omics Co., Ltd.
>> Director, Seahorse Ferry Co., Ltd.
>> Director, Genomics Innovation Co., Ltd.
>> Senior Consultant, Lavida Advanced Fertility and Genetics Center Co., Ltd.

4. Other Organizations/Institutions (1)

>> Associate Judge, Central Intellectual Property and International Trade Court

5. State Enterprise

-None-

% of Shareholding in Thai Oil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mr. Prajuck Boonyoung

Director (Non-Executive)
and Member of the Corporate Governance
and Sustainability Committee
Age 63 Yrs.



Director Term

>> Director (Non-Executive) (Appointed on April 11, 2024: 8 months)

Board-Committee Term

>> Member of the Corporate Governance and Sustainability Committee
(Appointed on July 25, 2024)

Education

>> Bachelor of Economics (Economic Theory) (2nd Class Honours),
University of Thai Chamber of Commerce
>> Master of Economics (Financial Economic),
National Institute of Development Administration

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 365/2024)

Other Trainings

>> National Defense Course (NDC), Class 57, National Defence College
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 4,
Thailand Energy Academy
>> Certificate in Administrative Law for Executive, Class 1, Administrative Court
>> Certificate in Advanced State Audit for Executive, Class 1,
State Audit Office of the Kingdom of Thailand
>> Public Work Audit Course, Japan International Cooperation Agency (JICA),
Japan
>> Seminar: Risk Expert Session 2024 "Generative AI: Opportunities,
Risks and Challenges", AFON Precious Co., Ltd.
>> Lecture: PTT Group CG Day 2024 "Transformative CG for Net Zero",
Mr. Kulvech Janvatanavit, Executive Director,
Thai Institute of Directors Association (IOD)

Working Experience in the 5 Preceding Years

Jan 1, 2012-July 17, 2012	Director of Performance Audit Office No.1
July 18, 2012-Feb 3, 2013	Inspector General, Regional Audit Office No.2
Feb 4, 2013-Sep 30, 2015	Inspector General
Oct 1, 2015-Feb 26, 2018	Deputy Auditor General
Feb 27, 2018-Feb 26, 2024	Auditor General

Board Industry Experience & Expertise

Possesses experience, knowledge and understanding on economics, finance and auditing, which are the qualities of a director that the company needs, including helping to make project management more flexible and efficient, and being able to make strategic decisions in terms of investment, risk management and auditing.

Current Positions

1. Listed Company (1)

>> Director and Member of the Corporate Governance
and Sustainability Committee, Thai Oil Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions

-None-

5. State Enterprise

-None-

% of Shareholding in Thailoil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Ms. Peangpanor Boonklum

Director (Non-Executive)
and Member of the Corporate Governance
and Sustainability Committee
Authorized Director
Age 58 Yrs.



Director Term

>> Director (Non-Executive) (Appointed on September 1, 2024: 4 months)

Board-Committee Term

>> Member of the Corporate Governance and Sustainability Committee
(Appointed on October 1, 2024)

Education

>> Bachelor of Laws (2nd Class Honors), Chulalongkorn University
>> Master of Laws (Business Law), Chulalongkorn University
>> Master of Laws, Columbia University School of Law, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 7/2001)
>> Anti-Corruption: The Practical Guide (ACPG 38/2017)
>> Ethical Leadership Program (ELP 15/2019)
>> Risk Management Program for Corporate Leaders (RCL 18/2019)
>> Board Nomination and Compensation Program (BNCP 7/2019)

Other Trainings

>> RoLD Xcelerate: Investing in the Rule of Law for a Sustainable Future,
Thailand Institute of Justice (Public Organization)
>> Corporate Governance (Online), Columbia Business School Executive Education
>> Capital Market Academy Leader Program, Class 33, Capital Market Academy
>> The Cullinan: The Marking of the Digital Board, Class 2,
Thailand Management Association (TMA)
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 15,
Thailand Energy Academy
>> Leadership Development Program (LDP) III, Class 4,
PTT Leadership and Learning Institute (PLLI)
>> The TIJ Executive Program on the Rule of Law and Development (RoLD), Class 3,
Thailand Institute of Justice (Public Organization)
>> The TIJ Workshop for Emerging Leaders on the Rule of Law and Policy, Class 3,
Thailand Institute of Justice (Public Organization)
>> Certificate in Anti-Corruption Strategic Management for Senior Executives,
Class 9, Sanya Dharmasakti Anti-Corruption Institute (SDI),
Office of the National Anti-Corruption Commission
>> TLCA Executive Development Program, Class 1/2008,
Thai Listed Companies Association

Working Experience in the 5 Preceding Years

Dec12, 2018-Sept 12, 2022	Member, Governance Risk and Compliance Management Committee (GRMC), PTT Plc (Executive Level)
Sep 13, 2022 - Sept 30, 2024	Advisor, Governance Risk and Compliance Management Committee (GRMC), PTT Plc (Executive Level)
Oct 1, 2017-Present	Senior Executive Vice President, Office of General Counsel, PTT Plc

Board Industry Experience & Expertise

Possesses knowledgeable, skillful and has long experience in legal field, risk management and corporate governance, which is one of the key qualifications of the Board of Directors. Including the director has work experience working for PTT Plc, resulting in the ability to provide useful advice and comments on the company's strategic planning and business directions through PTT Group overview.

Current Positions

1. Listed Company (2)

>> Director and Member of the Corporate Governance and Sustainability Committee, Thai Oil Plc
>> Senior Executive Vice President, Office of General Counsel, PTT Plc

2. Public Company

-None-

3. Limited Company (3)

>> Director, CU Engineering Enterprise Co., Ltd.*
>> Director, Primates Enterprise Co., Ltd.**
>> Chairman, PTT Saving and Credit Cooperative Ltd.

4. Other Organizations/Institutions (2)

>> Director and Member of the Nomination and Compensation Committee, Thai Institute of Directors Association (IOD)
>> Member, Regulatory Reform Committee for Ease of Doing Business, Office of the Public Sector Development Commission, Office of the Prime Minister

5. State Enterprise

-None-

% of Shareholding in Thai Oil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Remark: *99.97% of its shares are held by CU Engineering Enterprise Co., Ltd. (CUEE) and 99.99% of CUEE shares are held by Chulalongkorn University
**99.99% of its shares are held by CU Engineering Enterprise Co., Ltd. (CUEE) and 99.99% of CUEE shares are held by Chulalongkorn University

Ms. Phenrasmi Bhuritdhanalert

Director (Non-Executive)
and Member of the Risk Management Committee
Age 53 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on October 1, 2024:
3 months)

Board-Committee Term

>> Member of the Risk Management Committee (Appointed on October 1, 2024)

Education

>> Bachelor of Business Administration, Personnel Administration,
Dhurakij Pundit University
>> Master of Public Administration, Public and Private Management,
National Institute of Development Administration (NIDA)

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Accreditation Program (DAP 224/2024)

Other Trainings

-None-

Working Experience in the 5 Preceding Years

2008-2022 Managing Director, C&N Business Consulting Co., Ltd.
2019-Present Deputy Managing Director, P1 Property Co., Ltd.
2022-Present Managing Director, Khun Fueangfu & Khun Fueangfung Co., Ltd.

Board Industry Experience & Expertise

Possessing experience, knowledge, and expertise on management, sales, marketing, human resource management and employee development, which can drive the company to compete and grow in the highly volatile and rapidly changing energy market. This contributes to strategic planning for market expansion, a key strategy for the company.

Current Positions

1. Listed Company (1)

>> Independent Director and Member of the Risk Management Committee,
Thai Oil Plc

2. Public Company

-None-

3. Limited Company (5)

>> Chairman of Director, Siam Fueng Fu Co., Ltd.
>> Managing Director, Khun Fueangfu & Khun Fueangfung Co., Ltd
>> Deputy Managing Director, P1 Property Co., Ltd.
>> Managing Director's Advisor, P1 Asset Co., Ltd.
>> Advisor, Chaisupong Company Limited

4. Other Organizations/Institutions

-None-

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Dr. Sompop Pattanariyankool

Director (Non-Executive)
and Member of the Risk Management Committee
Age 46 Yrs.



Director Term

- >> Director (Non-Executive) (Appointed on April 7, 2021: 3 years)
- >> Director (Non-Executive) (Re-elected on April 11, 2024: 8 months)

Board-Committee Term

- >> Member of the Corporate Governance and Sustainability Committee (Appointed on December 20, 2022 and completed the term in the 2024 Annual General Meeting of Shareholders)
- >> Member of the Risk Management Committee (Appointed on July 25, 2024)

Education

- >> Bachelor of Economics (1st Class Honors), Chulalongkorn University
- >> Master of Science in Economic and Policy, University of Surrey, UK.
- >> Ph. D. in Economics, Tepper School of Business, Carnegie Mellon University, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 309/2021)
- >> Financial Statements for Directors (FSD 45/2022)
- >> Director Accreditation Program (DAP 204/2023)
- >> Risk Management Program for Corporate Leaders (RCL 31/2023)

Other Trainings

- >> The Civil Service Executive Development Program: Visionary and Moral Leadership, Office of the Civil Service Commission
- >> Advance Certificate Course in Public Administration and Law for Executives, King Prajadhipok's Institute
- >> Course for Ministry Spokesman, The Government Public Relation Department
- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 16, Thailand Energy Academy
- >> Leadership Development Program (LDP) II, PTT Leadership and Learning Institute (PLLI)
- >> Advanced Training Course on Energy for Executives, Ministry of Energy
- >> IOD National Director Conference 2021: "Leadership Behind Closed Door"
- >> STS Expert Session 2022:
 - >> "Oil and Petrochemical Industry Outlook", Boston Consulting Group (BCG)
 - >> "Successful Thai Union's Business Transformation Pathway", Thai Union Group Plc
- >> STS Expert Session 2023:
 - >> "Successful SCGJWD Business Expansion Through Partnership", SCGJWD Logistics Plc
- >> Seminar: PTT Group CG Day 2023 "Great of Trust", Asst. Prof. Dr. Torphas Yomanak, Director of the Center for Political Economy Studies, Faculty of Economics, Chulalongkorn University

Working Experience in the 5 Preceding Years

2018-2020	Director, Strategy and Planning Division, Ministry of Energy
2020-Mar 17, 2023	Assistant Permanent Secretary, Ministry of Energy
Mar 18, 2023-Jan 2, 2024	Inspector-General, Office of the Permanent Secretary, Ministry of Energy
Jan 3, 2024-Present	Deputy Permanent Secretary, Office of the Permanent Secretary, Ministry of Energy

Board Industry Experience & Expertise

Possesses knowledge, expertise and experience on energy as well as strategic and energy business planning. The director also possesses knowledge and understanding on public policy which benefits the company's business operation.

Current Positions

1. Listed Company (1)	
>> Director and Member of the Risk Management Committee, Thai Oil Plc	
2. Public Company	-None-
3. Limited Company	-None-
4. Other Organizations/Institutions (1)	
>> Deputy Permanent Secretary, Office of the Permanent Secretary, Ministry of Energy	
5. State Enterprise	-None-
% of Shareholding in Thairoil	-None-
Conflict of Interest	-None-
Family Relation with Other Directors	-None-
Dispute in the 10 Preceding Years	-None-

Mr. Prasong Intaranongpai

Director (Non-Executive)
and Member of the Risk Management Committee
Authorized Director
Age 56 Yrs.



Director Term

>> Director (Non-Executive) (Appointed on September 1, 2024: 4 months)

Board-Committee Term

>> Member of the Risk Management Committee (Appointed on October 1, 2024)

Education

>> Bachelor of Engineering (Industrial Engineering), Chiang Mai University
>> Bachelor of Laws, Sukhothai Thammathirat Open University
>> Master of Business Administration (General management), Kasetsart University

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 287/2019)
>> Financial Statements for Directors (FSD 38/2019)
>> Subsidiary Governance Program (SGP 8/2024)

Other Trainings

>> Advanced Strategic Management (ASM)-Advanced SMCP, Class 1/2018
PTT Leadership and Learning Institute (PLLI)
>> Advanced Management Program (AMP3)-Business and People Management,
PTT Leadership and Learning Institute (PLLI)
>> Leadership Development Program (LDP) III, Class 4
PTT Leadership and Learning Institute (PLLI)
>> Director Development Program (DDP),
PTT Leadership and Learning Institute (PLLI)
>> Advanced Certificate Course in Politics and Governance in Democratic
Systems for Executives, Class 27, King Prajadhipok's Institute
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 20,
Thailand Energy Academy

Working Experience in the 5 Preceding Years

2017-2021	Executive Vice President, Strategy and Portfolio Management, PTT Plc Member and Secretary, Corporate Plan and Risk Management Committee (CPRC), PTT Plc (Executive Level)
2021-Sep 30, 2022	Executive Vice President, New Venture Development, PTT Plc, and assigned to work for Arun Plus Co., Ltd. Member, Corporate Plan and Risk Management Committee (CPRC), PTT Plc (Executive Level)
Oct 1, 2022-Dec 31, 2022	Executive Vice President Acting Senior Executive Vice President, Downstream Business Group Alignment, PTT Plc, and assigned to work for Arun Plus Co., Ltd.
Jan 1, 2023-Sep 30, 2023	Executive Vice President Acting Senior Executive Vice President, Downstream Business Group Alignment, PTT Plc
Oct 1, 2023-Present	Senior Executive Vice President, Downstream Business Group Alignment, PTT Plc

Board Industry Experience & Expertise

Possesses experience, knowledge, and expertise in energy, strategy, and risk management within the energy industry. The director has work experience working for PTT Plc, resulting in the ability to provide valuable advice and insights that significantly benefit the company's business operations.

Current Positions

1. Listed Company (2)

>> Director and Member of the Risk Management Committee, Thai Oil Plc
>> Senior Executive Vice President, Downstream Business Group Alignment,
PTT Plc

2. Public Company

-None-

3. Limited Company (2)

>> Director, GPC International Terminal Co., Ltd.
>> Director, PTT Tank Terminal Co., Ltd.

4. Other Organizations/Institutions

-None-

5. State Enterprise

-None-

% of Shareholding in Thaioil

5,000 shares
equivalent to 0.00022%
(By Spouse, Unmarried Partner,
and Minor)

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Ms. Pattaralada Sa-ngasang

Director (Non-Executive)
and Member of the Risk Management Committee
Age 58 Yrs.



Director Term

>> Director (Non-Executive) (Appointed on November 1, 2024 : 2 months)

Board-Committee Term

>> Member of the Risk Management Committee (Appointed on November 1, 2024)

Education

- >> Bachelor of Accounting (Commerce and Accountancy), Thammasat University
- >> Master of Business Administration (Commerce and Accountancy), Thammasat University

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Subsidiary Governance, Business and Legal Issues for Directors and Executives and Transformative Leadership for Global Enterprise 2022, Director's Legal Liabilities, Ethical Leadership for new Era and High Performing Board & Board Effectiveness 2021 (In-house Programs by PTT Global Chemical Plc)
- >> Strategic Board Master Class (SBM 1/2017)
- >> Role of the Chairman Program (RCP 38/2016)
- >> Director Certification Program (DCP 151/2011)

Other Trainings

- >> Mini Master of Business Administration, National Institute of Development Administration
- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 17, Thailand Energy Academy
- >> Advance International Trad Law (IT Bar), The Central Intellectual Property and International Trade Court
- >> National Defence Course (NDC), Class 61, National Defence College
- >> Capital Market Academy Leader Program, Class 22, Capital Market Academy
- >> PTT - HBS Leadership Development Program, Class 2, Harvard Business School, USA
- >> IMD - TLCA Leadership Development Program (LDP), Class 1, Thai Listed Companies Association in collaboration with IMD Business School, Switzerland
- >> Financial Management Course, Economics and Finance Academy, Class 2, Fiscal Policy Research Institute Foundation, Ministry of Finance
- >> Executive Development Program (EDP), Class 5, Thai Listed Companies Association
- >> Leadership Succession Program, Class 11, Institute of Research and Development for Public Enterprises (IRDP)
- >> Insurance Leadership Program, Class 12, OIC Advanced Insurance Institute
- >> The Program for Senior Executives on Justice Administration, Batch 29, Judicial Training Institute

Working Experience in the 5 Preceding Years

Oct 1, 2015-Dec 31, 2020	Executive Vice President, PTT Plc secondment as Senior Executive Vice President, Finance and Accounting, Thai Oil Plc
Jan 1, 2021-Sep 30, 2024	Executive Vice President, PTT Plc secondment as Senior Executive Vice President, Finance and Accounting, PTT Global Chemical Plc
Oct 1, 2024-Present	Chief Financial Officer, PTT Plc

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on accounting and finance in the. The director has experience working for the compyny, PTT Plc and companies in PTT Group, resulting in the ability to provide useful advice and comments on the company's strategic planning and business directions through PTT Group overview.

Current Positions

1. Listed Company (3)

- >> Chief Financial Officer, PTT Plc
- >> Director and Member of the Risk Management Committee, Thai Oil Plc
- >> Director and Member of the Enterprise Risk Management Committee, PTT Oil and Retail Business Plc

2. Public Company

-None-

3. Limited Company (1)

- >> Director, Arun Plus Co., Ltd.

4. Other Organizations/Institutions (5)

- >> Chairman of the Executive Subcommittee on Finance and Budget, Vidyasirimedhi Institute of Science and Technology: VISTEC
- >> Chairman of the Subcommittee on Finance and Budget, Kamnoetvidya Science Academy: KVIS
- >> Directors and Public Relations, Thailand Federation of Accounting Professions
- >> Advisor, Management Accounting Professional Committee, Thailand Federation of Accounting Professions
- >> Subcommittee, Thailand Management Association (TMA)

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mr. Bandhit Thamprajamchit

Director (Executive),
Member of the Risk Management Committee,
Chief Executive Officer and President
and the Secretary to the Board of Directors
Authorized Director
Age 54 Yrs.



Director Term

- >> Director (Executive) (Elected on December 20, 2022 and effective from January 1, 2023: 1 year 4 months)
- >> Director (Executive) (Re-elected on April 11, 2024: 8 months)

Board-Committee Term

- >> Member of the Risk Management Committee (Elected on December 20, 2022 and effective from January 1, 2023)

Education

- >> Bachelor of Engineering (Chemical Engineering) (1st Class Honours, Gold Medal), Chulalongkorn University
- >> M.Sc. in Advanced Chemical Engineering (Distinction), Imperial College, University of London, UK
- >> Master of Business Administration (Executive), Sasn Graduate Institute of Business Administration of Chulalongkorn University

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 187/2014)
- >> Ethical Leadership Program (ELP 27/2022)
- >> Role of the Chairman Program (RCP 52/2022)
- >> Financial Statements for Directors (FSD 53/2024)

Other Trainings

- >> National Defence Course (NDC), Class 63, National Defence College
- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 14, Thailand Energy Academy
- >> Capital Market Academy Leader Program, Class 27, Capital Market Academy
- >> Leadership Development Program (LDP) III, Class 4, PTT Leadership and Learning Institute (PLLI)
- >> Leadership Development Program (LDP 2 with INSEAD) II Thailand & Singapore, PTT Leadership and Learning Institute (PLLI)
- >> The Young Executive Program in Energy Literacy for a Sustainable Future, Class 2, Thailand Energy Academy
- >> Executive Development Program (EDP), Thai Listed Companies Association
- >> Executive Development Program, Fiscal Policy Research Institute Foundation, Thailand
- >> STS Expert Session 2023:
 - >> "Global Trends in Energy", Boston Consulting Group (BCG)
 - >> "Global & Thailand Economic Outlook", Bangkok Bank Plc
- >> STS Expert Session 2024:
 - >> "Outlook and Trends in Net Zero Transition", ADL
 - >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG)
 - >> "Global & Thailand Economic Outlook", The Siam Commercial Bank Plc (SCB)
- >> Seminar: Risk Expert Session 2024 "Generative AI : Opportunities, Risks and Challenges", AFON Precious Co., Ltd.

Working Experience in the 5 Preceding Years

Oct 2018-Jan 2020	Senior Executive Vice President - Petroleum & Petrochemical and Acting Executive Vice President - Operation Excellence, Thai Oil Plc
Feb 2020-Dec 2020	Senior Executive Vice President - Petroleum & Petrochemical, Thai Oil Plc
Jan 2021-Dec 2022	Senior Executive Vice President - Hydrocarbon and Acting Executive Vice President - Manufacturing, Thai Oil Plc
Jan 2023-Mar 2023	Acting Managing Director, LABIX Co., Ltd.
Jan 2023-Sep 2023	Acting Senior Executive Vice President - Hydrocarbon and Acting Executive Vice President - Manufacturing, Thai Oil Plc
Jan 2023-Dec 2023	Chief Executive Officer and President, Thai Oil Plc

Jan 2024-Dec 2024	Chief Executive Officer and President and Acting Executive Vice President - Corporate Governance and Affairs, Thai Oil Plc
Jan 2025-Present	Chief Executive Officer and President and Acting Executive Vice President - Corporate Governance and Sustainability, Thai Oil Plc

Board Industry Experience & Expertise

Possesses knowledge and expertise in energy business, petroleum, and petrochemical industries for more than 33 years, as well as various skills and experiences in policy determination, strategic planning and business practices at corporate level, security strategic plan, environment governance, innovation management, key business decisions eg. project approval, final investment decision, risk management, and management of mega project in energy industry. Also holds the position of Chairman of Petroleum Refining Industry Club, The Federation of Thai Industries. This benefits the management of the Company and enables the achievement of the Company's vision and mission.

Current Positions

1. Listed Company (3)

- >> Director, Member of the Risk Management Committee, Chief Executive Officer and President, and the Secretary to the Board of Directors, Thai Oil Plc
- >> Director, Global Power Synergy Plc
- >> Senior Executive Vice President reporting to Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc

2. Public Company

-None-

3. Limited Company (4)

- >> Director and Chairman of the Board, Thai Paraxylene Co., Ltd.
- >> Director and Chairman of the Board, LABIX Co., Ltd.
- >> Director, Sapthip Co., Ltd.
- >> Director and Chairman of the Board, TOPNEXT International Co., Ltd.

4. Other Organizations/ Institutions (10)

- >> Advisor, The Petroleum Refining Industry Group, The Federation of Thai Industries
- >> Advisor, The Industrial Promotion and Support Committee, The Federation of Thai Industries
- >> Council of Trustees, Petroleum and Energy Institute of Thailand
- >> Director, Thai Listed Companies Association
- >> Committee, Chulalongkorn University Alumni Association under the Royal Patronage of His Majesty the King
- >> Vice President, Thailand Swimming Association
- >> Executive Director, Thailand Energy Academy
- >> Council Member of Thailand Business Council for Sustainable Development
- >> Director, Council of the Institute of Experts, Vidyasirimedhi Institute of Science and Technology: VISTEC
- >> Industry Advisory Board, Chulalongkorn University, Bachelor of Engineering Program in Chemical Engineering and Process (International Program)

5. State Enterprise

-None-

% of Shareholding in Thaioil

2,400 shares
equivalent to 0.00011%
40,000 shares
equivalent to 0.00179%
(By Spouse, Unmarried Partner,
and Minor)

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Dr. Nattapon Nattasomboon

Independent Director (Non-Executive)
and Member of the Risk Management Committee
(Resigned from Directorship: March 15, 2024)
Age 59 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on April 10, 2023: 11 months)

Board-Committee Term

>> Member of the Risk Management Committee (Appointed on April 10, 2023)

Education

>> Bachelor of Engineering (Civil Engineering), Chulalongkorn University
>> Master of Science (Civil Engineering), Oregon State University, USA
>> Ph.D. (Industrial Engineering), Oregon State University, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 316/2022)

Other Trainings

>> The Civil Service Executive Development Program: Visionary and Moral Leadership, Class 38, Office of the Civil Service Commission
>> Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, Class 16, King Prajadhipok's Institute
>> Senior Budget Executive Program, Class 2, Bureau of the Budget
>> Justice Administration Advanced Course, Class 7, Ministry of Justice
>> National Defense Course (NDC), Class 57, National Defence College
>> Corporate Governance Program for Directors and Executives of State Enterprises and Public Organizations, Class 19, King Prajadhipok's Institute
>> Digital CEO, Class 5, Digital Economy Promotion Agency
>> The Executive Program in Energy Literacy for a Sustainable Future, Class 18, Thailand Energy Academy

Working Experience in the 5 Preceding Years

Nov 2019-Dec 2020	Chief Inspector General, Ministry of Industry
Dec 2020-Feb 2022	Director General, Thai Meteorological Department, Ministry of Digital Economy and Society
Feb 2022-Present	Deputy Permanent Secretary, Ministry of Digital Economy and Society

Board Industry Experience & Expertise

Possesses knowledgeable, skillful and has plenty of experience in Thailand's industrial sector. In addition, he currently has responsibilities relating to digital technology, information technology, and cybersecurity management, which is the topic that the Company is focusing.

Current Positions

1. Listed Company (1)

>> Independent Director, Member of the Corporate Governance and Sustainability Committee and Member of the Enterprise Risk Management Committee, PTT Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (1)

>> Deputy Permanent Secretary, Ministry of Digital Economy and Society

5. State Enterprise (2)

>> Director and Chairman of the Board,
National Telecom Plc
>> Director, Thailand Post Co., Ltd.

% of Shareholding in Thailoil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Professor Dr. Supot Teachavorasinskun

Independent Director (Non-Executive)
and Chairman of the Board

(Completed the Term in the 2024 Annual General Meeting of Shareholders)
Age 60 Yrs.



Director Term

- >> Independent Director (Non-Executive) (Appointed on November 25, 2020 and effective from December 1, 2020: 4 months)
- >> Chairman of the Board and Independent Director (Non-Executive) (Elected on December 22, 2020: 3 years 3 months)
- >> Independent Director (Non-Executive) (Re-elected on April 7, 2021: 3 years)

Board-Committee Term

-None-

Education

- >> Bachelor of Engineering (Civil Engineering), Chulalongkorn University
- >> Master of Engineering (Civil Engineering), University of Tokyo
- >> Doctor of Engineering (Civil Engineering), University of Tokyo

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 269/2019)
- >> Financial Statements for Director (FSD 32/2019)
- >> Director Leadership Certification Program (DLCP 2/2021)
- >> Role of the Chairman Program (RCP 53/2023)

Other Trainings

- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 10, Thailand Energy Academy
- >> Special Lecture by Dr. Prinya Hom-Anek, Special Consultant to National Cyber Security Committee: "Cybersecurity in the Boardroom"
- >> IOD National Director Conference 2021: "Leadership Behind Closed Door"
- >> Capital Market Academy Leader Program, Class 32, Capital Market Academy
- >> IOD National Director Conference 2022: "Wisdom for Future: Harmonizing the Diverse Boards"
- >> IOD Chairman Forum No. 1/2022: "Charing the Unknown Future"
- >> IOD Chairman Forum No. 1/2023: "Leadership Amidst Volatility and Distrust"

Working Experience in the 5 Preceding Years

- | | |
|---------------------|---|
| July 2016-June 2024 | Dean, Faculty of Engineering, Chulalongkorn University |
| July 2024-Present | Professor, Department of Civil Engineering,
Faculty of Engineering, Chulalongkorn University |

Board Industry Experience & Expertise

Possesses educational qualification, knowledge, and expertise on engineering (civil engineering field), which would be useful for advising and commenting on the company's construction in many projects. The director also possesses the experience on research development and innovation, which are one of the company's key strategies.

Current Positions

1. Listed Company (1)

- >> Chairman of the Board and Independent Director,
Global Power Synergy Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (1)

- >> Expert Council Member, Office of the National Economic
and Social Development Council, Office of the Prime Minister

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Associate Professor Dr. Pasu Decharin

Independent Director (Non-Executive),
Chairman of the Nomination and Remuneration Committee
and Member of the Audit Committee
(Completed the Term in the 2024 Annual General Meeting of Shareholders)
Age 56 Yrs.



Director Term

- >> Independent Director (Non-Executive) (Appointed on April 11, 2018: 3 years)
- >> Independent Director (Non-Executive) (Re-elected on April 7, 2021: 3 years)

Board-Committee Term

- >> Member of the Audit Committee (Appointed on April 27, 2018 and completed the term in the 2021 Annual General Meeting of Shareholders)
- >> Member of the Nomination and Remuneration Committee (Appointed on August 30, 2019, effective from September 20, 2019 and completed the term in the 2021 Annual General Meeting of Shareholders)
- >> Member of the Audit Committee (Appointed on April 7, 2021)
- >> Member of the Nomination and Remuneration Committee (Appointed on April 7, 2021)
- >> Chairman of the Nomination and Remuneration Committee (Elected on July 12, 2023)

Education

- >> Bachelor of Business Administration (Management), Faculty of Commerce and Accountancy, Chulalongkorn University
- >> Master of Business Administration (General Management), University of Colorado (Boulder), USA
- >> Ph. D. in Management of Technology, School of Management, Asian Institute of Technology

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Accreditation Program (DAP 121/2015)
- >> Director Certification Program (DCP 280/2019)
- >> Director Leadership Certification Program (DLCP 0/2020)
- >> Ethical Leadership Program (ELP 23/2021)
- >> Advanced Audit Committee Program (AACP 44/2022)
- >> Subsidiary Governance Program (SGP 5/2023)
- >> ESG in Board Room (ESG 0/2023)

Other Trainings

- >> Executive Development Program (EDP), Class 3, Thai Listed Companies Association (TLCA)
- >> Leadership Development Program (LDP), Class 6, Thai Listed Companies Association (TLCA)
- >> STS Expert Session 2023:
 - >> "Global Energy Trends in Net Zero Era", McKinsey & Company
 - >> "Global & Thailand Economic Outlook", Bangkok Bank Plc

Working Experience in the 5 Preceding Years

1993-Present Lecturer, Faculty of Commerce and Accountancy, Chulalongkorn University

Board Industry Experience & Expertise

Possesses the leading knowledge, expertise and experience on management and administration in national level as well as holds the position of the managing director of the leading management curricular. The director also composes writings in the leading newspapers and magazines, as well as gives lecture for Thai Institute of Directors. Moreover, the director is interested and usually follows the new business and change of world trend, which highly benefit the company's strategic planning, risk management and business directions.

Current Positions

1. Listed Company (3)

- >> Independent Director, Chairman of the Audit Committee and Member of the Governance and Nomination Committee, The Siam Cement Plc
- >> Independent Director and Chairman of the Board, Warrix Sports Plc
- >> Independent Director, Internet Thailand Plc.

2. Public Company (2)

- >> Independent Director and Chairman of the Board, Aksorn Education Plc
- >> Independent Director, Member of the Audit Committee and Member of the Risk Oversight Committee, Siam Commercial Bank Plc

3. Limited Company (1)

- >> Independent Director, Chairman of the Risk Oversight Committee and Member of the Audit Committee, CardX Co.,Ltd.

4. Other Organizations/Institutions (3)

- >> Lecturer, Faculty of Commerce and Accountancy, Chulalongkorn University
- >> Director Vice-President and Chairman of the Curriculum and Lecturer Committee, Thai Institute of Directors Association (IOD)
- >> Member of Advisor Team to the Deputy Prime Minister (Mr. Phumtham Wechayachai)

5. State Enterprise (1)

- >> Board of Director and Chairman of the Audit Committee, National Science Museum Thailand

% of Shareholding in Thailoil	-None-
Conflict of Interest	-None-
Family Relation with Other Directors	-None-
Dispute in the 10 Preceding Years	-None-

Dr. Buranin Rattanasombat

Director (Non-Executive)
and Member of the Risk Management Committee
(Resigned from Directorship : August 23, 2024)
Age 57 Yrs.



Director Term

- >> Director (Non-Executive) (Appointed on September 18, 2020: 1 year 6 months)
- >> Director (Non-Executive) (Re-elected on April 7, 2022: 2 years 4 months)

Board-Committee Term

- >> Member of the Nomination and Remuneration Committee
(Appointed on September 18, 2020 and vacated from April 23, 2021)
- >> Member of the Risk Management Committee (Appointed on April 23, 2021
and completed the term in the 2022 Annual General Meeting of Shareholders)
- >> Chairman of the Risk Management Committee (Elected on May 19, 2021
and completed the term in the 2022 Annual General Meeting of Shareholders)
- >> Member of the Risk Management Committee (Appointed on April 29, 2022)

Education

- >> Bachelor of Science, Prince of Songkhla University
- >> Master of Business Administration, Chulalongkorn University
- >> Ph.D. (Management), Silpakorn University

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Company Secretary Program (CSP 40/2011)
- >> Director Certification Program (DCP 174/2013)
- >> Director Leadership Certification Program (DLCP 4/2022)

Other Trainings

- >> Capital Market Academy Leader Program, Class 30, Capital Market Academy
- >> Advanced Security Management Program, Class 10,
The Association of National Defence College of Thailand
Under The Royal Patronage of His Majesty The King
- >> Senior Executive Education Program, School of Management, MIT
- >> CMA-GMS International Program 2016, Capital Market Academy
- >> Foreign Affairs Executives Programme, Class 7,
Devawongse Varopakarn Institute of Foreign Affairs, Ministry of Foreign Affairs
- >> PTT Leadership Development Program, Harvard Business School,
Harvard University, USA
- >> Advanced Certificate Course in Public Administration and Law for Executives,
Class 12, King Prajadhipok's Institute
- >> Executive Development Program (EDP), Thai Listed Companies Association
- >> National Defence Course (NDC), Class 64, National Defence College
- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 17,
Thailand Energy Academy
- >> Seminar: Risk Expert Session 2024 "Generative AI : Opportunities,
Risks and Challenges", AFON Precious Co., Ltd.

Working Experience in the 5 Preceding Years

2019-May 2020	Senior Executive Vice President, Corporate Strategy, Innovation and Sustainability Chief Transformation Officer (CTO) PTT Oil and Retail Business Plc
Jun 2020-Sep 2021	Senior Executive Vice President, Downstream Business Group Alignment, PTT Plc
Oct 2021-Sep 2022	Senior Executive Vice President, Innovation and New Ventures, PTT Plc
Oct 2022-Aug 2024	Chief New Business and Infrastructure Officer, PTT Plc
Sep 2024-Present	Chief New Business and Sustainability Officer, PTT Plc

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on energy, strategies, risk management and innovation in the energy industry. The director has work experience working for PTT Plc, resulting in the ability to provide useful advice and comments on the company's strategic planning and business directions through PTT Group overview. The director is interested and usually follows the new business and change of world trend, which highly benefit the company's strategic planning and business directions.

Current Positions

1. Listed Company (3)

- >> Chief New Business and Sustainability Officer, PTT Plc
- >> Director and Member of the Risk Management Committee, IRPC Plc
- >> Director, Chairman of the Risk Management Committee and Member of the
Nomination and Remuneration Committee, Global Power Synergy Plc

2. Public Company

-None-

3. Limited Company (2)

- >> Chairman, FT1 Corporation Co., Ltd.
- >> Chairman, Arun Plus Co., Ltd.

4. Other Organizations/Institutions (5)

- >> Advisory Committee and Networking Research and Industrial User groups,
Synchrotron Light Research Institute
- >> Borad of Directors, National Metal and Materials Technology Center
- >> President, Marketing Association of Thailand
- >> Board of Directors, Thailand Energy Academy
- >> Board of Director, Small and Medium Enterprise Promotion Committee

5. State Enterprise

-None-

% of Shareholding in Thaioil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mr. Terdkiat Prommool

Director (Non-Executive)
and Member of the Nomination and Remuneration Committee
(Resigned from Directorship: August 23, 2024)
Age 59 Yrs.



Director Term

- >> Director (Non-Executive) (Appointed on September 18, 2020 and effective from October 1, 2020: 1 year 6 months)
- >> Director (Non-Executive) (Re-elected April 7, 2022: 2 years 4 months)

Board-Committee Term

- >> Member of the Nomination and Remuneration Committee (Appointed on April 23, 2021 and completed the term in the 2022 Annual General Meeting of Shareholders)
- >> Member of the Nomination and Remuneration Committee (Appointed on April 29, 2022)

Education

- >> Bachelor of Engineering (Chemical Engineering), Chulalongkorn University
- >> Master of Engineering (Industrial&Manufacturing Systems Engineering), University of Missouri-Columbia, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 223/2016)

Other Trainings

- >> Leadership Succession Program (LSP), Class 10, Institute of Research and Development for Public Enterprises

Working Experience in the 5 Preceding Years

Oct 2018- Sep 2020	Managing Director, PTT Digital Solutions Co., Ltd.
Oct 2020-Sep 2021	Senior Executive Vice President, Organization Management and Sustainability, PTT Plc
Oct 2021-July 2024	Senior Executive Vice President, Corporate Strategy and Sustainability, PTT Plc
Aug 2024-Sep 2024	Senior Executive Vice President, Corporate, PTT Plc
Oct 2024-Present	Senior Executive Vice President of Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc, secondment as President and Chief Executive Officer, IRPC Plc

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on digital, personnel management and mega project management in the energy industry. The director has long work experience working for PTT Plc, resulting in the ability to provide useful advice and comments which benefit the company's strategic planning and business directions through PTT Group overview.

Current Positions

1. Listed Company (2)

- >> Senior Executive Vice President of Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc
- >> Director, Member of Risk Management Committee and President and Chief Executive Officer, IRPC Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (3)

- >> Member of the Management Committee, Thailand Energy Academy
- >> Executive Committee, Vidyasirimedhi Institute of Science and Technology (VISTEC)
- >> Secretary-General, Chulalongkorn University Alumni Association under The Royal Patronage of His Majesty the King

5. State Enterprise

-None-

% of Shareholding in Thai oil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mr. Suchat Ramarch

Director (Non-Executive)
and Member of the Corporate Governance
and Sustainability Committee
(Resigned from Directorship: August 23, 2024)
Age 56 Yrs.



Director Term

- >> Director (Non-Executive) (Appointed on September 29, 2021 and effective from October 1, 2021: 6 months)
- >> Director (Non-Executive) (Re-elected on April 7, 2022: 2 years 4 months)

Board-Committee Term

- >> Member of the Corporate Governance and Sustainability Committee (Appointed on April 10, 2023)

Education

- >> Bachelor of Engineering (Mechanical Engineering), Rajamangala University of Technology Krungthep
- >> Master of Arts (Social Development Administration), National Institute of Development Administration

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 176/2017)

Other Trainings

- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 17, Thailand Energy Academy
- >> National Defence Course (NDC), Class 64, National Defence College
- >> Corporate Governance for Directors and Senior Executives of Regulator, State Enterprises and Public Organizations, Class 22, King Prajadhipok's Institute
- >> Capital Market Academy Leader Program, Class 28, Capital Market Academy
- >> Leadership Development Program (LDP) III, 2019 PTT Leadership and Learning Institute (PLLI)
- >> Advanced Certificate Course in Public Administration and Law for Executives, Class 13, King Prajadhipok's Institute
- >> Advance Management Program II, 2013 PTT Leadership and Learning Institute (PLLI)
- >> Management Development Program (MDP) III, 2013 PTT Leadership and Learning Institute (PLLI)
- >> Executive Development Program (EDP), 2011 Thai Listed Companies Association

Working Experience in the 5 Preceding Years

2019-Sep 2021	Senior Executive Vice President, Non-oil Retail Business PTT Oil and Retail Business Plc
Oct 2021-Sep 2022	Senior Executive Vice President, Organization Effectiveness and Corporate Governance, PTT Plc
Oct 2022-Present	Senior Executive Vice President of Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc, secondment as President, PTT Oil and Retail Business Plc

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on energy and marketing in the energy industry. The director has long work experience at PTT Plc and companies in PTT Group, resulting in the ability to provide useful advice and comments which benefit the company's marketing planning and business directions through PTT Group overview.

Current Positions

1. Listed Company (2)

- >> Senior Executive Vice President of Chief Operating Officer, Downstream Petroleum Business Group, PTT Plc
- >> President, PTT Oil and Retail Business Plc

2. Public Company

-None-

3. Limited Company (2)

- >> Chairman of the Board, PTT Retail Management Co., Ltd.
- >> Director and Chairman of the Board, Business Services Alliance Co., Ltd.

4. Other Organizations/ Institutions (2)

- >> Ethics Committee of The Secretariat of the Prime Minister
- >> Member of Business Matching Committee and Member of Retail Committee, The Thai Chamber of Commerce and Board of Trade of Thailand

5. State Enterprise

-None-

% of Shareholding in Thai oil	-None-
Conflict of Interest	-None-
Family Relation with Other Directors	-None-
Dispute in the 10 Preceding Years	-None-

Mr. Distat Hotrakitya

Independent Director (Non-Executive)
and Chairman of the Corporate Governance
and Sustainability Committee
(Resigned from Directorship: August 31, 2024)
Ag 66 Yrs.



Director Term

>> Independent Director (Non-Executive) (Appointed on April 10, 2023:
1 year 4 months)

Board-Committee Term

>> Member of the Corporate Governance and Sustainability Committee
(Appointed on April 10, 2023)
>> Chairman of the Corporate Governance and Sustainability Committee
(Elected on June 14, 2023)

Education

>> Bachelor of Laws (Honours), Chulalongkorn University
>> Master of Laws, D.E.A. de DROIT PUBLIC, Strasbourg III
(Robert Schuman) University, France
>> Diplôme de Droit Comparé (Premier Cycle), Strasbourg III
(Robert Schuman) University, France
>> ENA Brevet d'Administration Publique, France

Director Training Courses of Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 94/2007)

Other Trainings

>> National Defense Course (NDC), Class 53, National Defence College
>> Certificate in Rule of Law for Democracy, Class 3,
Office of the Constitutional Court
>> Certificate in Good Governance for the Development of National Higher
Education 2010, Knowledge Network Institute of Thailand (UGP)
>> The Civil Service Executive Development Program:
Visionary and Moral Leadership, Class 47, Office of the Civil Service Commission
>> Seminar: PTT Group CG Day 2023 "Great of Trust",
Asst. Prof. Dr. Torphas Yomanak, Director of the Center for Political Economy
Studies, Faculty of Economics, Chulalongkorn University

Working Experience in the 5 Preceding Years

July 2019-Dec 15, 2022	Secretary-General to the Prime Minister
Dec 16, 2022-Aug 22, 2023	Advisor to The Prime Minister
Aug 23, 2023-Present	Council of State

Board Industry Experience & Expertise

Possesses knowledgeable, skillful and has long experience in legal field,
which is one of the key qualifications of the Board of Directors.

Current Positions

1. Listed Company (2)

>> Independent Director, Chairman of the Nomination
and Remuneration Committee and Member of the
Risk Management Committee, Global Power Synergy Plc
>> Independent Director, Member of the Audit Committee
and Chairman of the Nomination and Remuneration Committee,
T.K.S. Technologies Plc

2. Public Company

-None-

3. Limited Company

-None-

4. Other Organizations/Institutions (1)

>> Council of State

5. State Enterprise

-None-

% of Shareholding in Thai Oil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Mr. Plakorn Wanglee

Independent Director (Non-Executive),
Member of the Audit Committee
and Member of the Corporate Governance
and Sustainability Committee
(Resigned from Directorship: September 1, 2024)
Age 58 Yrs.



Director Term

- >> Independent Director (Non-Executive) (Appointed on October 22, 2020 and effective from November 1, 2020: 1 year 5 months)
- >> Independent Director (Non-Executive) (Re-elected on April 7, 2022: 2 years 4 months)

Board-Committee Term

- >> Member of the Audit Committee (Appointed on October 22, 2020, effective from November 1, 2020 and completed the term in the 2022 Annual General Meeting of Shareholders)
- >> Member of the Audit Committee (Appointed on April 29, 2022)
- >> Member of the Corporate Governance and Sustainability Committee (Appointed on April 10, 2023)

Education

- >> Bachelor of Accounting, Chulalongkorn University
- >> Master of Business Administration (Finance), University of San Francisco, USA

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 229/2016)
- >> Advanced Audit Committee Program (AACP 44/2022)

Other Trainings

- >> National Defence Course (NDC), Class 62, National Defence College
- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 8, Thailand Energy Academy
- >> Training Course on Good Governance for Directors and Executives of State-Owned Enterprises and Public Organization, Class 14, King Prajadhipok's Institute
- >> Capital Market Academy Leader Program, Class 10, Capital Market Academy
- >> The Programme for Senior Executives on Justice Administration, Batch 25, Judicial Training Institute
- >> PTT Group AC Forum 2022: "Rising to the Challenge"
- >> STS Expert Session 2023:
 - >> "Global Trends in Energy", Boston Consulting Group (BCG)
- >> Seminar: "The Importance of Audit Committee Towards the Confidence in Thai Capital Market", Stock Exchange of Thailand
- >> STS Expert Session 2024:
 - >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG)
- >> Seminar: PTT Group AC Forum 2024 : "Watch Out the Signs"

Working Experience in the 5 Preceding Years

2016-Aug 2024 President and Chief Executive Officer,
Standard Chartered Bank (Thai) Plc
Thailand and Representative Offices

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on accounting and finance, as well as holds the executive positions in leading companies with extensive experience in mergers and acquisitions, debt, equity and market transactions for Thai and international corporations.

Current Positions

1. Listed Company (1)

- >> Independent Director, Member of the Audit Committee, and Member of the Nomination and Remuneration Committee, Rabbit Holdings Plc

2. Public Company

-None-

3. Limited Company (1)

- >> Independent Director, Thanathip Co., Ltd.

4. Other Organizations/Institutions

-None-

5. State Enterprise

-None-

% of Shareholding in Thai oil

-None-

Conflict of Interest

-None-

Family Relation with Other Directors

-None-

Dispute in the 10 Preceding Years

-None-

Ms. Pannalin Mahawongtikul

Director (Non-Executive)
and Chairman of the Risk Management Committee
(Resigned from Directorship: October 1, 2024)
Age 60 Yrs.



Director Term

- >> Director (Non-Executive) (Appointed on September 28, 2018 and effective from October 1, 2018: 2 years 8 months)
- >> Director (Non-Executive) (Re-elected on June 10, 2020: 2 years 10 months)
- >> Director (Non-Executive) (Re-elected on April 10, 2023: 1 year 6 months)

Board-Committee Term

- >> Member of the Risk Management Committee
(Appointed on September 28, 2018, effective from October 1, 2018 and completed the term in the 2020 Annual General Meeting of Shareholders)
- >> Member of the Risk Management Committee (Appointed on June 23, 2020 and completed the term in the 2023 Annual General Meeting of Shareholders)
- >> Member of the Risk Management Committee (Appointed on April 10, 2023)
- >> Chairman of the Risk Management Committee (Elected on May 15, 2023)

Education

- >> Bachelor of Science in Accounting, Thammasat University
- >> Master of Business Administration, Thammasat University

Director Training Courses of Thai Institute of Directors Association (IOD)

- >> Corporate Governance: Regulation and Disclosure (CG PTTEP/2017)
(PTTEP In-house Course)
- >> Director Certification Program (DCP 279/2019)
- >> Strategic Board Master Class (SBM 9/2020)
- >> Risk Management Program for Corporate Leaders (RCL 28/2022)

Other Trainings

- >> Executive Development Program (EDP), Class 2,
Thai Listed Companies Association
- >> PTT-HBS Leadership Development Program II,
Harvard Business School, USA
- >> NIDA-Wharton Executive Leadership Program (ELP),
The Wharton School, University of Pennsylvania, USA
- >> Leadership Development Program (LDP) III,
PTT Leadership and Learning Institute (PLLI)
- >> CMA-Greater Mekong Subregion (CMA-GMS), Class 1,
Capital Market Academy
- >> Leadership Succession Program (LSP), Class 6,
Institute of Research and Development for Public Enterprises
- >> Executive Program for Senior Management (EX-PSM), Class 3,
Fiscal Policy Research Institute Foundation
- >> Capital Market Academy Leader Program, Class 24,
Capital Market Academy
- >> The TIJ Executive Program on the Rule of Law and Development (ROLD) 2020:
The Resilient Leader, Thailand Institute of Justice

- >> The Executive Program in Energy Literacy for a Sustainable Future, Class 15,
Thailand Energy Academy
- >> TLCA CFO Professional Development Program (TLCA CFO CPD) 2023,
Thai Listed Companies Association
- >> STS Expert Session 2023:
 - >> "Global Energy Trends in Net Zero Era", McKinsey & Company
 - >> "Successful SCGJWD Business Expansion Through Partnership",
SCGJWD Logistics Plc
 - >> "Global & Thailand Economic Outlook", Bangkok Bank Plc
- >> STS Expert Session 2024:
 - >> "Outlook and Trends in Net Zero Transition", ADL
 - >> "AI Adoption in Oil & Gas Industry", Boston Consulting Group (BCG)
 - >> "Global & Thailand Economic Outlook",
The Siam Commercial Bank Plc (SCB)

Working Experience in the 5 Preceding Years

Oct 2018-Sep 30, 2024 Chief Financial Officer, PTT Plc

Board Industry Experience & Expertise

Possesses experience, knowledge and expertise on energy and accounting and finance in the energy industry. The director has work experience working for PTT Plc, resulting in the ability to provide useful advice and comments on the company's strategic planning and business directions through PTT Group overview.

Current Positions

- | | |
|---|--------|
| 1. Listed Company | -None- |
| 2. Public Company (1) | |
| >> Director and Member of the Audit Committee, Glow Energy Plc | |
| 3. Limited Company | -None- |
| 4. Other Organizations/Institutions (3) | |
| >> Member of Council, Vidyasirimedhi Institute of Science and Technology (VISTEC) | |
| >> Member of Executive Committee, VISTEC | |
| >> Member of Council, State Enterprise Assessment Board and Chairman of Sub PAC-Agricultural and Resources area | |
| 5. State Enterprise | -None- |
| % of Shareholding in Thai oil | -None- |
| Conflict of Interest | -None- |
| Family Relation with Other Directors | -None- |
| Dispute in the 10 Preceding Years | -None- |

Management Structure

Thai Oil Plc's management structure comprises:

- The Board of Directors (the Board)
- Four Board-committees appointed by the Board to scrutinize significant matters, namely the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance and Sustainability Committee, and the Risk Management Committee
- Executives, with the Chief Executive Officer and President (CEO) as the highest level executive.

The Board of Directors (as of January 1, 2025)

The Board of Directors is made up of 15 members:

- 14 non-executive directors, 8 of whom are independent directors
- One executive director, namely the CEO and President.

Board Composition

Thaioil's Board of Directors is filled with capable and widely recognized directors. The Articles of Association (AOA) require the Board members shall consist at least five (5) but not more than fifteen (15) member and require that each year some directors complete their terms of service. Directors are elected by the shareholders at the Annual General Meeting of Shareholders (AGM). They are appointed through an individual election, with each receiving majority votes from the shareholders who attend the meeting and cast their votes. Directors who have left their positions may be re-nominated and re-elected. Thaioil has also established a **policy on Board diversity**. As specified in the criteria for selecting and appointing directors on page 98, a Board Skill Matrix was developed for mapping out skills, knowledge, and expertise required for the business, consistent with strategies, such as energy, petroleum and petrochemicals, accounting and finance, IT and digital, and innovation and environment. At least three of them must be knowledge about Thaioil's business, at least one person on legal matters and at least one person on finance and accounting. Moreover, the Board must consist of at least one-third in independent directors, numbering no less than three. Current Board composition progress appears in the diagram on page 149.

Authorized Directors

According to the Company's Articles of Association, 1) the Chief Executive Officer (CEO) or 2) two authorized directors shall sign with affixation of the Company's seal to represent the Company. The Board of Directors is entitled to prescribe and amend the list of authorized directors.

At Board of Directors Meeting No. 9/2567 on Friday, September 27, 2024, the Board approved directors and the number of directors authorized to sign on behalf of the Company, namely Mr. Bandhit Thamprajamchit, CEO, signing with affixation of the Company's seal; or Ms. Peangpanor Boonklum and Mr. Prasong Intaranongpai, both of whom jointly sign with the affixation of the Company's seal. This was effective as of September 27, 2024.

Information on Board-Committees

The Board appoints Board-committees to scrutinize specific issues as assigned and has prepared respective charters for them, defining each Committee's complete qualifications, tenures, and roles and responsibility. These charters are available on Thaioil's website for study and downloading.

1) The Audit Committee consists of fully qualified members with a minimum of three independent directors, at least one of whom must possess sufficient knowledge and experience for reviewing the credibility of financial statements. The committee is tasked with reviewing financial statements, the internal-control system, and related-party transactions; considering, selecting, nominating, re-nominating, and terminating external auditors; considering the independence of internal auditors; and endorsing the appointment, transfer, and evaluation of the Vice President-Corporate Internal Audit's annual performance. Ms. Rungtip Maneesarachun, Vice President-Corporate Internal Audit, serves as secretary to this committee.

The Audit Committee, as of January 1, 2025, consisted of three independent directors:

Name	Position
1. Lt. Gen. Apichat Chaiyadar	Chairman of the Audit Committee (Independent)
2. Pol. Capt. Piya Raksakul	Member of the Audit Committee (Independent)
3. Ms. Pantip Sripimol ⁽¹⁾	Member of the Audit Committee (Independent)

Remarks:

⁽¹⁾ Directors with sufficient knowledge and accounting experience for reviewing the credibility of financial statements

In 2024 the Audit Committee performed its duties as detailed in the Audit Committee Report on page 14.

2) The Nomination and Remuneration Committee consists of at least three non-executive directors, most of whom must be independent directors. **NOMINATION:** The committee considers the composition and qualifications of the Board, both overall and individual, to ensure suitability to serve as directors and the top executive as well as reviewing the succession plan for the top executive. **REMUNERATION:** The committee reviews and proposes remuneration packages and criteria to suit the Board's roles and responsibility while seeking approval from the shareholders at the AGM. Also, it conducts the annual assessment of the top executive's performance and considers pay adjustment before proposing it to the Board for approval. Ms. Korapat Limpaphayom, Vice President-Corporate Governance, Compliance and Secretary and Company Secretary, serves as secretary to this committee.

The Nomination and Remuneration Committee, as of January 1, 2025, consisted of three directors:

Name	Position
1. Pol. Lt. Gen. Thiti Sangsawang	Chairman of the Nomination and Remuneration Committee (Independent)
2. Lt. Gen. Apichat Chaiyadar	Member of the Nomination and Remuneration Committee (Independent)

3. Assoc. Prof. Dr. Sittidaj Pongkijvorasin	Member of the Nomination and Remuneration Committee (Independent)
--	---

In 2024 the Nomination and Remuneration Committee performed its duties as detailed in the Nomination and Remuneration Committee Report on page 18.

3) The Corporate Governance and Sustainability Committee consists of at least three non-executive members, the majority of whom are independent directors. Key roles include formulating and reviewing policies and guidelines for corporate governance, the Code of Conduct, and the Anti-Fraud Policy as well as defining sustainability strategies, plans, and goals. The committee also oversees, monitors, and assesses corporate governance and sustainable development appropriate to operating conditions while conforming to international laws and best practices and recommendations of various institutes. Ms. Korapat Limpaphayom, Vice President-Corporate Governance, Compliance and Secretary and Company Secretary, serves as secretary to this committee.

The Corporate Governance and Sustainability Committee, as of January 1, 2025, consisted of five directors:

Name	Position
1. Pol. Capt. Piya Raksakul	Chairman of the Corporate Governance and Sustainability Committee (Independent)
2. Pol. Lt. Gen. Thiti Sangsawang	Member of the Corporate Governance and Sustainability Committee (Independent)
3. Mr. Goanpot Asvinvichit	Member of the Corporate Governance and Sustainability Committee (Independent)
4. Mr. Prajuck Boonyoung	Member of the Corporate Governance and Sustainability Committee

5. Ms. Peangpanor Boonklum	Member of the Corporate Governance and Sustainability Committee
----------------------------	--

In 2024 the committee performed its duties as detailed in the Corporate Governance and Sustainability Committee Report on page 20.

4) The Risk Management Committee consists of at least three members, one of whom must be the CEO. The committee defines and reviews the risk management framework, risk management policies and processes, and proposes guidelines for managing risks to Thai Oil's operations. The committee also supports and develops enterprise risk management, while promoting the corporate culture of risk management. It also oversees, monitors, and reviews key risk management plans and reports. Mr. Chatapong Wungtanagorn, Executive Vice President-Strategy, serves as secretary to this committee.

The Risk Management Committee, as of January 1, 2025, consisted of six directors:

Name	Position
1. Ms. Kris Imsang	Chairman of the Risk Management Committee
2. Ms. Phenrasmi Bhuritdhanalert	Member of the Risk Management Committee (Independent)
3. Dr. Sompop Pattanariyankool	Member of the Risk Management Committee
4. Mr. Prasong Intaranongpai	Member of the Risk Management Committee
5. Ms. Pattaralada Sa-ngasang	Member of the Risk Management Committee
6. Mr. Bandhit Thamprajamchit	Member of the Risk Management Committee/CEO

In 2024 the Risk Management Committee performed its duties as detailed in the Risk Management Committee Report on page 16.

Executives

As of January 1, 2025



Mr. Bandhit Thamprajamchit
Chief Executive Officer and President,
Acting Executive Vice President-
Corporate Governance and Sustainability



Mr. Surachai Saengsamran
Senior Executive Vice President-Hydrocarbon,
Acting Executive Vice President-
CFP Project Sponsor



Mr. Jeerawat Pattanasomsit
Executive Vice President-Power,
New Business and Digitalization
Acting Vice President-Digitalization



Mr. Chatapong Wungtanagorn
Executive Vice President-
Strategy



Mr. Charlee Balmongkol
Executive Vice President-
CFP Project Director



Mr. Nuttapon Meerit
Acting Executive Vice President-
Organization Effectiveness
Vice President-People and Organization Management
Vice President-
assigned as Managing Director,
Thaioil Energy Services Co., Ltd.



Mrs. Runnapa Janchookiat
Executive Vice President-
Corporate Commercial



Mrs. Wanida Boonpiraks
Executive Vice President-
Finance and Accounting



Miss Somporn Bunluesriuang
Acting Executive Vice President-
Manufacturing
Vice President-Movement Marine
and Logistic



Mr. Santi Wasanasiri
Executive Vice President-
Petrochemical Business,
Acting Executive Vice President-
Operation Excellence,
Vice President-
assigned as Managing Director,
Thai Lube Base Plc.
and Thai Paraxylene Co., Ltd.



Miss Korapat Limpaphayom

Vice President-
Corporate Governance,
Compliance and Secretary
and Company Secretary



Mr. Khwanchai Chaigarerk

Acting Vice President-
Engineering



Mr. Chet Prongchit

Vice President-
assigned as Managing Director,
LABIX Co., Ltd.



Mr. Sermsak Nuntapong

Vice President-
Quality Management



Miss Jariya Oonmeechai

Vice President-
Special Assignment



Miss Jidapa Soontrararapong

Vice President-
Technology



Mr. Jumpon Thapanapong

Vice President-
Efficient Operations Support



Mr. Chatchai Siriwit

Vice President-
Strategic Planning



Mr. Narongsak Chaviengpob

Vice President-
Asset Development



Mr. Nattapong Tumsaroj

Vice President-
assigned as Managing Director,
TOPNEXT International Co., Ltd.



Mr. Nuttapol Nopparatwong

Vice President-
Commercial Planning



Mr. Thirayoot Limanond

Vice President-
Corporate Affairs



Miss Torsang Chaipravat

Vice President-
Financial Planning



Mrs. Tarika Devahastin

Vice President-Treasury
Vice President-
assigned as Managing Director,
Thaioil Treasury Center Co., Ltd.



Miss Piyaphon Thakonpatthanakun

Acting Vice President-
Supply Chain Optimization



Miss Pimchanok Sakolwaree

Vice President-
Commercial



Mr. Phuping Taweearp

Acting Vice President-
Corporate Sustainability



Mr. Phumchit Tatsanaprasert

Vice President-
Petrochemical and Lube Base



Mr. Mongkol Janchookiat

Vice President-Corporate Resources &
Transformation Management



Miss Rungtip Maneesarachun

Vice President-
Corporate Internal Audit



Mr. Worrachart Ruangtragool

Vice President-
Corporate Strategic Risk



Miss Warangkana Sukapintha

Acting Vice President-
Research & Development and Innovation



Miss Wanwisa Yanchinda

Vice President-
Accounting



Mr. Vivat Wongnirund

Vice President-
New S-Curve Business Development



Mr. Sarungy Limwongse

Vice President-
Refinery



Mr. Somboon Chuaykoblaph

Vice President-
assigned as Managing Director,
Thaioil Ethanol Co., Ltd.



Mrs. Suchada Deechaiya

Vice President-
People & Organization Excellence



Mr. Anawat Chansaksoong

Vice President-Petrochemical Business
Vice President-
assigned as President Director,
PT TOP Investment Indonesia



Miss Arkhanin Ruang-Art

Vice President-
Corporate Legal



Miss Acharee Tigabhorn

Vice President-
Business Development



Mr. Udom Wongsirinopphakhun

Vice President-
Procurement and Contract



Mr. Viroj Wongsathirayakhun

Executive Vice President-
Organization Effectiveness
(Retired on December 31, 2024)



Mrs. Chanamas Sasnanand

Executive Vice President-
Finance and Accounting
(End of secondment as of September 30, 2024)



Mr. Rathakorn Kampanathsanyakorn

Executive Vice President-
Strategy
(End of secondment as of September 30, 2024)



Miss Duangporn Teerapabpaisit

Head of Innovation,
Research & Development
and High Value Business
(Retired on December 31, 2024)



Mrs. Prapin Thongnium

Vice President-
Procurement and Contract
(Retired on December 31, 2024)



Miss Danusa Sanguanno

Vice President-
New S-Curve Business Development
(End of secondment as of September 30, 2024)

Recruitment and Appointment of the CEO and Succession Plan

To recruit and nominate the Chief Executive Officer and President (CEO), the Nomination and Remuneration Committee bases its consideration on professional experience and specific qualifications necessary and beneficial for Thaipol's operations following the strategies to enhance, extend, and expand the existing businesses, while attempting to pursue new business opportunities. Candidates shall possess knowledge, business administration, and related experience such as energy, petroleum, and petrochemicals on top of their leadership and experience in organization management. They must also be well recognized by organizations involved, taking into account possible conflicts of interest with Thaipol. The committee will finally raise its nomination to the Board for consideration and approval.

Thaipol also values the development of executives to ensure the readiness for internal rotation and high-level executive succession. Their performance will be assessed so that the succession plan can be properly designed to ensure that candidates are developed and groomed for future succession, and only the right persons will be considered. Succession plans are revised annually to assure shareholders and investors of business continuity.

As for the CEO's position holding outside Thaipol and Subsidiaries, the Board developed the 'Guidelines for its Executives and Personnel that are Invited to serve in Other Companies, Agencies, or Organizations', which is included in the Corporate Governance and Code of Conduct Manual (CG Manual). The CEO must inform the Board for acknowledgment or endorsement (as applicable) before assuming the position. However,

the CEO can serve as director of Thaipol's subsidiaries to ensure that Thaipol's business and those of subsidiaries are aligned and mutually support one another.

CEO's Performance Assessment

Thaipol arranges the assessment of CEO's performance on an annual basis. The Nomination and Remuneration Committee takes charge of the assessment, which bases it on two aspects with different weighting:

Part 1-Assessment of Corporate KPIs

Part 2-Assessment of Leadership Competency

The results of the performance assessment would be used to identify CEO remuneration, which will be presented to the Board for consideration and approval.

CEO's Remuneration

The criteria for the CEO's remuneration are explicitly defined and agreed in advance. The Nomination and Remuneration Committee first assesses the CEO's performance annually and proposes for the Board to consider. The Chairman of the Board will inform the CEO of the outcome of the Board consideration. Thaipol has a policy on the CEO's remuneration which is consistent with the current performance (short-term) and performance against Thaipol's strategies (long-term). This is to ensure that the remuneration package for the CEO is a foundation for growth and proves attractive as well as comparable to industry peers under clear and transparent criteria. A Balanced Scorecard, featuring three assessment aspects: namely Business as Usual, Strategic Initiatives, and Strategic Enablers and Sustainability, is used for defining Corporate KPIs and is considered part of the performance assessment criteria.

Executives' Remuneration

At the end of the fiscal year (December 31, 2024), the total remuneration for 40 executives amounted to THB 300.43 million, comprising of salary and allowance of THB 199.06 million, bonus of THB 64.98 million, contribution to the provident fund of THB 24.02 million, retirement benefit of THB 7.61 million, and THB 4.76 million for other items.

Remarks: Remuneration for 40 management team members as of December 31, 2024 excluded these secondees:

Mr. Chet Prongchit

Mr. Nattapong Tumsaroj

Mr. Somboon Chuaykoblaph

Mr. Nuttapon Meerit
(proportional to the secondment period at a Thail oil subsidiary)

Mr. Santi Wasanasiri
(proportional to the secondment period at a Thail oil subsidiary)

Ms. Tarika Devahastin
(proportional to the secondment period at a Thail oil subsidiary)

Mr. Udom Wongsirinopphakhun
(proportional to the secondment period at a Thail oil subsidiary)

Executive Biography (Disclosure Required by Law)

As of January 1, 2025

Mr. Surachai Saengsamran

Senior Executive Vice President-Hydrocarbon
(Appointed on Apr 1, 2024)
and Acting Executive Vice President-CFP Project Sponsor
(Appointed on Apr 1, 2024)
Age 58 Yrs.

Education

>> Bachelor of Engineering, Chulalongkorn University

Working Experience in the 5 Preceding Years

Oct 22, 2018-Sep 2023	Executive Vice President- CFP Project Sponsor
Oct 2023-Mar 31, 2024	Acting Senior Executive Vice President-Hydrocarbon and Executive Vice President- CFP Project Sponsor
Apr 1, 2024-Present	Senior Executive Vice President- Hydrocarbon and Acting Executive Vice President- CFP Project Sponsor

Training

Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 238/2017)

Other Institutes

>> Leadership Development Program (LDP III) Batch 5
PTT Leadership and Learning Institute (PLLI)
>> Executive Socialization Program-Full program
>> You are Top Group 'Great Leader'
>> Work Process Design & Improvement
>> LDP: Leadership Greatness/Financial Secret/
The Speed of Trust/Bold Change

% of Shareholding in Thaioil 107,000 Shares
(equivalent to 0.00480%)

Family Relation with Other Directors -None-

Mr. Jeerawat Pattanasomsit

Executive Vice President-Power, New Business
and Digitalization (Appointed on Jan 1, 2021)
and Acting Vice President-Digitalization
Age 51 Yrs.

Education

>> Bachelor of Engineering, Kasetsart University
>> Master of Science, The Petroleum and
Petrochemical College, Chulalongkorn University

Working Experience in the 5 Preceding Years

Oct 2018-Apr 2019	Acting Executive Vice President- Manufacturing and Vice President Refinery
Apr 2019-Dec 2020	Executive Vice President- Manufacturing and Acting Vice President Refinery
Jan 2021-Sep 2022	Executive Vice President-Power, New Business and Digitalization and Acting Vice President New S-curve Business Development
Oct 2022-Dec 2023	Executive Vice President-Power, New Business and Digitalization
Jan 2024-Present	Executive Vice President-Power, New Business and Digitalization and Acting Vice President-Digitalization

Training

Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 186/2014)
>> Diploma Examination (Exam)
>> IT Governance and Cyber Resilience Program (ITG 16/2021)
>> Director Refreshment Training Program (DRP 3/2021)
>> Role of the Chairman Program (RCP 58/2024)

Other Institutes

- >> Executive Development Program (EDP),
Thai Listed Companies Association
- >> PTT-Harvard Business School Leadership Development
Program
- >> Entrepreneurship
- >> Leadership Development Program (LDP)
- >> Geo-Informatics Technology for Executives 9,
Geo-Informatics and Space Technology Development
Agency (Public Organization) (GISTDA)

% of Shareholding in Thaioil

-None-

Family Relation with Other Directors

-None-

Mr. Chatapong Wungtanagorn

Executive Vice President - Strategy

Function (Appointed on Oct 1, 2024)

Age 59 Yrs.

Education

- >> Bachelor of Engineering,
King Mongkut's University of Technology Thonburi
- >> Master of Advanced Chemical Engineering,
The Imperial College of Science, Technology and Medicine,
London, UK
- >> Master of Management, College of Management,
Mahidol University

Working Experience in the 5 Preceding Years

- | | |
|-------------------|---|
| Jan 2019-Dec 2021 | Executive Vice President-
Corporate Commercial
and Acting Vice President
Commercial Planning |
| Jan 2022-Sep 2024 | Executive Vice President-
Corporate Commercial |
| Oct 2024-Present | Executive Vice President-Strategy |

Training

Thai Institute of Directors Association (IOD)

- >> Role of the Chairman (RCP)
- >> Director Certification Program (DCP)
- >> The Board's Role in Mergers and Acquisitions (BMA)
- >> Strategic Board Master Class (SBM)
- >> Director's Guide to Legal Obligations and Duties (DLD)
- >> ESG in the Boardroom: A Practical Guide for Board (ESG)
- >> Ethical Leadership Program (ELP)

Other Institutes

- >> The Executive Program in Energy Literacy,
Energy Academy Thailand
- >> Advanced Certificate Course in Politics and
Governance in Democratic Systems for Executives,
King Prajadhipok's Institute
- >> Leadership Development Program (LDP) II
PTT Leadership and Learning Institute (PLLI)
- >> Leadership Development Program (LDP) III
PTT Leadership and Learning Institute (PLLI)
- >> Executive Development Program (EDP),
Thai Listed Companies Association

% of Shareholding in Thaioil 105,676 Shares
(equivalent to 0.00473%)

Family Relation with Other Directors -None-

Mr. Charlee Balmongkol

Executive Vice President-CFP Project Director

(Appointed on Apr 22, 2019)

Age 54 Yrs.

Education

- >> Bachelor of Engineering, Chulalongkorn University
- >> Master of Advanced Mechanical Engineering, Imperial College, University of London, UK

Working Experience in the 5 Preceding Years

- >> Oct 22, 2018-Apr 21, 2019 Acting Executive Vice President-CFP Project Director
- >> Apr 22, 2019-Present Executive Vice President-CFP Project Director

Training

Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 209/2015)

Other Institutes

- >> Executive Program in Politics and Governance in Democratic Systems for Executives, Class 28 King Prajadhipok's Institute
- >> PTT - Harvard Business School Leadership Program
- >> Leadership Development Program (LDP) PTT Leadership and Learning Institute (PLLI)
- >> Leadership For Customer (LFC), GE Crotonville

% of Shareholding in Thailoil -None-

Family Relation with Other Directors -None-

Mr. Nuttapon Meerit

Acting Executive Vice President-Organization Effectiveness

(Appointed on Jan 1, 2025)

Vice President - People and Organization Management

Age 47 Yrs.

Education

- >> Bachelor of Chemical Engineering, Thammasat University
- >> Master of Chemical Engineering, King Mongkut Institute-Thonburi

Working Experience in the 5 Preceding Years

- Jul 2019-Dec 2020 Vice President-Special Assignment 05 : CFP Process Manager,
- Jan 2021-Dec 2023 Vice President-Refinery,
- Jan 2024-Dec 2024 Vice President- People and Organization Management, and Managing Director, Thailoil Energy Services Company Limited
- Jan 2025-Present Acting Executive Vice President- Organization Effectiveness, Vice President- People and Organization Management, and Managing Director, Thailoil Energy Services Company Limited

Training

Thai Institute of Directors Association (IOD)

- >> Financial Statements for Directors (FSD 46/2022)
- >> Finance for Non-Finance Managers; Financial Analysis 2008

Other Institutes

- >> Next Steps of Executive Development Program (EDPX) Sustainable Leadership for The Ever-Changing World, Fiscal Policy Research Institute Foundation (FisPRI)
- >> Leadership Development Program (LDP) I, PTT Leadership and Learning Institute (PLLI)
- >> Leadership Development Program (LDP) II, PTT Leadership and Learning Institute (PLLI)
- >> Advance People Management (APM), Personnel Management Association of Thailand: PMAT
- >> Refinery and Technology Management for Next Technology Executive (Japan Cooperation Center Petroleum)

% of Shareholding in Thailoil 1,000 Shares (equivalent to 0.00004%)

Family Relation with Other Directors -None-

Mrs. Rungnapa Janchookiat

Executive Vice President-Corporate Commercial

(Appointed on Oct 1, 2024)

Age 52 Yrs.

Education

- >> Bachelor of Engineering, Chulalongkorn University
- >> Master of Science (Process Engineering),
University of Strathclyde, UK

Working Experience in the 5 Preceding Years

Jan 2014-Jan 2020	Vice President-Technology
Feb 2020-Jun 2020	Acting Executive Vice President- Operation Excellence
Jul 2020-Dec 2021	Executive Vice President- Operation Excellence and Acting Vice President-Technology
Jan 2022-Sep 2023	Executive Vice President- Operation Excellence
Oct 2023-Sep 30, 2024	Executive Vice President- Manufacturing
Oct 1, 2024-Present	Executive Vice President- Corporate Commercial

Training**Thai Institute of Directors Association (IOD)**

- >> Director Certification Program (DCP 307/2021)
- >> Strategic Board Master Class (SBM 13/2023)
- >> Role of the Chairman Program (RCP 57/2024)

Other Institutes

- >> Leadership Development Program (LDP) I 2013,
PTT Leadership and Learning Institute (PLLI)
- >> The Young Executive Program in Energy Literacy
for a Sustainable Future (YTEA) 2018, Class 6
- >> Executive Development Program (EDP),
Thai Listed Companies Association
- >> The Executive Program in Energy Literacy, Class 20
Thailand Energy Academy

% of Shareholding in Thairoil 100 Shares
(equivalent to 0.000004%)

(By Spouse,

Unmarried Partner,

and Minor)

Family Relation with Other Directors -None-

Mrs. Wanida Boonpiraks

Executive Vice President-Finance and Accounting

(Appointed on Oct 1, 2024)

(Person Taking the Highest Responsibility in Finance and Accounting and Person Supervising Accounting)

Age 58 Yrs.

Education

- >> Bachelor of Accountancy, Chulalongkorn University
- >> Master of Business Administration (Finance),
University of St. Thomas, USA

Working Experience in the 5 Preceding Years

Feb 2018-Mar 2020	Executive Vice President- Finance and Accounting, Global Power Synergy Plc
Apr 2020-Dec 2020	Chief-Financial Officer, Global Power Synergy Plc
Jan 2021-Nov 2023	Executive Vice President- Finance and Accounting, Thai Oil Plc
Dec 2023-Sep 2024	Assistant Managing Director- Group Corporate Finance and Strategy, PTT Plc
Oct 2024-Present	Executive Vice President- Finance and Accounting, Thai Oil Plc

Training**Thai Institute of Directors Association (IOD)**

- >> Director Certification Program (DCP 195/2014)

Other Institutes

- >> Executive Development Program (EDP), Class 9,
Thai Listed Companies Association
- >> Chief Financial Officer Certification Program, Class 19,
the Federation of Accounting Professions under
the Royal Patronage of His Majesty the King
- >> Leadership Development Program (LDP) II,
PTT Leadership and Learning Institute (PLLI)
- >> Orchestrating Winning Program (OWP) 2018,
IMD Business School, Switzerland
- >> Leadership Development Program (LDP) III,
IMD Business School, Singapore
- >> The Executive Program in Energy Literacy Class 18
Thailand Energy Academy
- >> The Executive Program in Insurance Leadership Program,
Class 12, OIC Advanced Insurance Institute

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 1/2023 "Economic Update for CFO"

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 2/2023 "Risk Management for CFO"

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 3/2023 "Fintech: Online Technology"

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 4/2023 "Green Assets:
Opportunities for Sustainable Development"

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 4/2024 "Accounting Standards Related
to ESG Securities Issuance"

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 6/2024 "Cybersecurity & Risk Management
for CFOs"

>> TLCA CFO Professional Development Program
(TLCA CFO CPD) 7/2024 "Economic Update for CFO II"

% of Shareholding in Thaiol 6,585 Shares
(equivalent to 0.00030%)

Family Relation with Other Directors -None-

Miss. Somporn Bunluesriruang

Acting Executive Vice President-Manufacturing
(Appointed on Oct 1, 2024)
and Vice President-Movement Marine and Logistic
(Appointed on Jan 1, 2024)
Age 53 Yrs.

Education

>> Bachelor of Science (Chemical Technology),
Chulalongkorn University

>> Master of Science (Chemical Technology),
Chulalongkorn University

>> Master of Public Administration,
National Institute of Development Administration

Working Experience in the 5 Preceding Years

Jul 1, 2016-Dec 2021	Vice President Supply Chain Optimization Department
Jan 1, 2022-Dec 2023	Vice President Efficient Operations Support Department
Jan 1, 2024-Sep 30 2024	Vice President-
	Movement Marine and Logistic
Oct 1, 2024-Present	Acting Executive Vice President-
	Manufacturing
	and Vice President-
	Movement Marine and Logistic

Training

Thai Institute of Directors Association (IOD)
>> Director Certification Program (DCP 373/2024)

Other Institutes

>> Leadership Development Program (LDP) I,
PTT Leadership and Learning Institute (PLLI)

>> Leadership Development Program (LDP) II,
PTT Leadership and Learning Institute (PLLI)

>> Tlca Executive Development Program (EDP)

>> Advance Management Program (AMP) II
Business Management (Online)

% of Shareholding in Thaioil 58,800 Shares
(equivalent to 0.00263%)

Family Relation with Other Directors -None-

Mr. Santi Wasanasiri

Executive Vice President-Petrochemical Business

(Appointed on Jul 1, 2022)

Acting Executive Vice President-Operation Excellence

(Appointed on Oct 1, 2023)

Age 59 Yrs.

Education

>> Bachelor of Engineering, Chulalongkorn University

Working Experience in the 5 Preceding Years

Jul 2020-Jun 2022	Managing Director, Thai Lube Base Plc and Thai Paraxylene Co., Ltd.
Jul 2022-Dec 2022	Acting Executive Vice President- Petrochemical Business Thai Oil Plc. and Managing Director, Thai Lube Base Plc and Thai Paraxylene Co., Ltd.
Jan 2023-Sep 2023	Executive Vice President- Petrochemical Business, Thai Oil Plc. and Managing Director, Thai Lube Base Plc and Thai Paraxylene Co., Ltd.
Oct 2023-Present	Executive Vice President- Petrochemical Business, Acting Executive Vice President- Operation Excellence Thai Oil Plc. and Managing Director, Thai Lube Base Plc and Thai Paraxylene Co., Ltd.

Training

Thai Institute of Directors Association (IOD)

>> Director Certification Program (DCP 152/2011)
>> Boardroom Success through Financing and Investment
(BFI 9/2020)

Other Institutes

>> EX-PSM5 Executive P20 G203 For Senior Management
>> Executive Development Program, Class 17,
Thai Listed Companies Association
>> Leadership Development Program (LDP) II
PTT Leadership and Learning Institute (PLLI)
>> The Executive Program in Energy Literacy for a
Sustainable Future, TEA, Class 17

% of Shareholding in Thaioil	10,976 Shares (equivalent to 0.00049 %)
	55,600 Shares (equivalent to 0.00249 %)
	(By Spouse, Unmarried Partner, and Minor)
Family Relation with Other Directors	-None-

Mr. Bandhit Thamprajamchit

Acting Executive Vice President-

Corporate Governance and Sustainability

Mr. Bandhit's Biography disclosed in the topic
"Board of Directors"

Miss Korapat Limpaphayom

Vice President-Corporate Governance,
Compliance and Secretary
(Appointed on Jan 1, 2025)
Company Secretary
(Appointed on Jan 1, 2024)
Age 45 Yrs.

The Board of Directors (the Board) appointed the Company Secretary to take responsibilities in providing advices to the Board and executives regarding the applicable laws and regulations that the Board must recognize and act upon, the corporate governance policies as well as the arrangement of the Board meetings and the Meeting of Shareholders. The Company Secretary must monitor and coordinate to ensure that the Board and shareholders' resolutions are thoroughly executed. The Company Secretary is also assigned to keep the Company's important documents as required by the laws. In the Board of Directors Meeting No. 12/2023 held on December 15, 2023, the Board resolved to appoint Miss Korapat Limpaphayom as the Company Secretary, effective from January 1, 2024.

Chief of the Compliance (Appointed on Jan 1, 2025)

Thaioil also established Compliance Section to support Thaioil and Subsidiaries' business operations, in accordance with the law, regulations, announcements, as well as systematically monitoring the changes in government policies and newly issued laws.

Education

- >> Bachelor of Business Administration (Finance and Banking) (Second Class Honor), Chulalongkorn University
- >> Master of Arts (Applied Economics), The University of Michigan, Ann Arbor, USA

Working Experience in the 5 Preceding Years

Sep 2017-Dec 2022	Manager, Office of President, PTT Plc.
Jan 2023-Dec 2023	Vice President, PTT Plc. working on secondment as Vice President, Group Company Secretary and Sustainability, Thai Oil Plc.

Jan 2024-Dec 31, 2024	Vice President, PTT Plc. working on secondment as Vice President, Group Company Secretary and Sustainability, Thai Oil Plc. and Company Secretary
Jan 1, 2025-Present	Vice President, PTT Plc. working on secondment as Vice President- Corporate Governance, Compliance and Secretary, Thai Oil Plc. and Company Secretary

Training

Thai Institute of Directors Association (IOD)

- >> Effective Minute Taking (EMT 36/2016)
- >> Board Reporting Program (BRP 33/2020)
- >> Refreshment Training Program (RFP 10/2023)
- >> Refreshment Training Program (RFP 15/2024)
- Best Practices for Company Secretary
in Disclosure Information, Report, Transactions

Other Institutes

- >> Fundamental Practice for Corporate Secretary (FPCS 27/2013), Advances for Corporate Secretaries (2013), Thai Listed Companies Association
- >> Thai Intelligent Investors Program (TIIP-19), Thai Investors Association (2018)
- >> Advanced Management Program 1 (AMP 1) (Business Management), PTT Public Company Limited (2018)
- >> Leadership Development Program (LDP10), PTT Public Company Limited (2021)
- >> Sustainability Forum 2023, Thailand Management Association (TMA)
- >> Trends, Opportunities and Challenges in ESG, Thai Listed Companies Association (2023)
- >> Advanced Management Program 2 (AMP 2) (Business Management and People Management), PTT Public Company Limited (2024)

% of Shareholding in Thaioil	-None-
Family Relation with Other Directors	-None-

Ms. Arkhanin Ruang-art

Vice President-Corporate Legal

(Appointed Jan 1, 2025)

Chief of the Compliance

(end of secondment on Dec 31, 2024)

Age 57 Yrs.

Education

>> Bachelor of Laws, Chulalongkorn University

>> Master of Laws (International Law),
Chulalongkorn University**Working Experience in the 5 Preceding Years**

Jan 2019-Dec 2023	Legal Manager
Jan 1, 2024-Jun 31, 2024	Acting Vice President Corporate Governance, Compliance and Legal
Jul 1, 2024-Dec 31, 2024	Vice President Corporate Governance, Compliance and Legal
Jan 1, 2025-Present	Vice President-Corporate Legal

Training**Thai Institute of Directors Association (IOD)**

-None-

Other Institutes

- >> Intensive Leadership Development Workshop
- >> Thailand Data Protection Guidelines 2.0 (TDPG 2.0)
- >> LDP: Development Journey For Leader

% of Shareholding in Thailoil -None-

Family Relation with Other Directors -None-

Ms. Wanwisa Yanchinda

Vice President Accounting (Appointed on Oct 1, 2020)

(Person Supervising Accounting)

Age 52 Yrs.

Education

>> Bachelor of Accountancy, Bangkok University

>> Master of Business Administration,
Ramkhamhaeng University**Others**

>> Certified public accountant

Working Experience in the 5 Preceding Years

Apr-Sep 2020 Acting Vice President Account

Oct 2020-Present Vice President Account

Training**Thai Institute of Directors Association (IOD)**

>> Director Certification Program (DCP 299/2020)

Other Institutes

- >> Modern Banking Executive Development Program (MOBEX)
- >> Chief Financial Officer Certification Program, Class 4, the Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- >> Strategic CFO in Capital Markets Program,
- >> Finance Transformation
- >> Leadership Development Program (LDP) I & II, Thai Oil Plc.
- >> Certificate of Tax Law, Class 1
- >> IT Governance & IT Risk Management 4.0, Class 1/64, the Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- >> Accounting for assets of interest (TAS16,36,38) of Accounting Professions
- >> Code of Ethics for Professional Accountants
- >> TFRS 16 summary of accounting and tax differences
- >> The process of closing financial statements correctly and timely
- >> How to manage business money easily Accountants should know
- >> Code of Ethics for Professional Accountants
- >> Taxes for Accountants, Taxes for the System
- >> Inventory and Key Accounting Issues
- >> Cash, Accounts Receivable, Inventory, Key Accounting Principles, and Financial Statement Preparation
- >> Latest Updates on e-Payment Laws: Guidelines for e-Tax Invoices, e-Receipts, e-Withholding Tax, and e-Filing
- >> ESG in Finance and Accounting I
- >> ESG Impact & Best Practice in Financial Disclosure

% of Shareholding in Thailoil 5,424 Shares
(equivalent to 0.00024%)

Family Relation with Other Directors -None-

Person taking the highest responsibility in finance and accounting and person supervising accounting are qualified as required by Securities and Exchange Commission, Thailand and Stock Exchange of Thailand, with education and experience relating to finance and/or accounting, and the continuous participation in training courses on accounting at least 6 hours per year.

Ms. Rungtip Maneesarachun

Vice President Corporate Internal Audit

(Appointed on Dec 15, 2020)

(Chief of the Internal Audit)

Age 51 Yrs.

The appointment, removal, and replacement of the Chief of the Internal Audit Unit must be considered and approved by the Audit Committee. The Committee also assesses the performance of the Chief of the Internal Audit against the responsibilities indicated in the Audit Committee Charter.

In the Audit Committee Meeting no. 7/2020 on December 15, 2020, the Committee appointed Mr. Rungtip Maneesarachun (effective on January 1, 2021) as the Chief of the Internal Audit Unit due to qualified knowledge, competency, experience, and continuous improvement through various trainings.

Education

- >> Bachelor of Accountancy, Thammasat University
- >> Graduate Certificate in Auditing, Thammasat University
- >> Bachelor of Laws, Sukhothai Thammathirat Open University
- >> Master of Business Administration Program, Thammasat University
- >> Master of Arts Program in English for Careers, Thammasat University

Working Experience in the 5 Preceding Years

Jul 2017-Dec 2020 Vice President Treasury Department
Jan 2021-Present Vice President Corporate Internal Audit Department

Training

Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 245/2017)
- >> Ethical Leadership Program (ELP 9/2017)
- >> Anti-Corruption: The Practical Guide (ACPG 42/2017)
- >> Advance Audit Committee Program (AACP 49/2023)

Other Institutes

- >> Management Development Program (MDP), Class 22, Thailand Management Association
- >> Leadership Development Program (LDP) 1, Class 2, PTT Leadership and Learning Institute (PLLI)
- >> Financial Executive Development Program (FINEX), Class 27, Thai Banking Academy
- >> COSO Internal Control-Integrated Framework (2013), the Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- >> Certified Professional Internal Audit of Thailand (CPIAT), Class 65, The Institute of Internal Auditors of Thailand
- >> Young Executive Program in Energy Literacy for Sustainable Future (YTEA), Class 8, Thailand Energy Academy
- >> Chief Audit Executive Professional Leadership (CAE), Class 3 Thailand Federation of Accounting Professions
- >> TLCA Executive Development Program (EDP) 2024-Building Transformational Leaders

% of Shareholding in Thaioil -None-
Family Relation with Other Directors -None-

Other important information

Investor Relations Manager

>> Ms. Chuleeyon Leangreunrom
Manager-Investor Relations
(Appointed on January 1, 2023)

Manager-Investor Relations



Thai Oil Plc

Investor Relations

555/1 Energy Complex Building A, 11th floor,
Vibhavadi Rangsit Road, Chatuchak,
Chatuchak, Bangkok 10900, Thailand



ir@thaioilgroup.com



+66(0) -2797-2961 (Direct) or
+66(0) -2797-2999 ext. 42060-42063

Executives who end of secondment and retired in 2024

Mrs. Chanamas Sasnanand

Executive Vice President-Finance and Accounting

(Appointed December 1, 2024)

(end of secondment on Sep 30, 2024)

Age 55 Yrs.

Education

>> Bachelor of Administration, Chulalongkorn University
>> Master of Business Administration,
University of South Carolina, USA

Working Experience in the 5 Preceding Years

Jan 2019-Dec 2020	Senior Vice President-Finance Division, PTT Exploration and Production Plc
Jan 2021-Nov 2023	Senior Vice President-Finance Division, PTT Exploration and Production Plc, working on a secondment as Executive Vice President-Group Corporate Finance and Strategy, PTT Plc
Dec 2023-Sep 30, 2024	Executive Vice President-Finance and Accounting, Thai Oil Plc
Oct 1, 2024-Present	Executive Vice President, Finance and Accounting Group, PTT Exploration and Production Plc

Training

Thai Institute of Directors Association (IOD)

>> TLCA Executive Development Program

Other Institutes

>> Leadership Development Program (LDP) II,
PTT Leadership and Learning Institute (PLLI)
>> EP LEAD III Leadership Development Program, IMD
>> Senior Executive Program, Sasin Graduate Institute of
Business Administration of Chulalongkorn University
>> Audit Report Process, Federation of Accounting Professions
Under The Royals Patronage of His Majesty The King
>> Audit process, Federation of Accounting Professions Under
The Royals Patronage of His Majesty The King
>> Financial & Fiscal. Management Program For
Senior Executive (FME)
>> Advance Master of Management Program (AMM)
>> e-Learning CFO's Orientation Course for New IPOs
(Complete the course by March 2024)

% of Shareholding in Thaioil

-None-

Family Relation with Other Directors

-None-

Mr. Rathakorn Kampanathsanyakorn

Executive Vice President-Strategy

(Appointed on Oct 1, 2021)

(end of secondment on Sep 30, 2024)

Age 52 Yrs.

Education

- >> Bachelor of Engineering, Chulalongkorn University
- >> Master of Science, Chemical Engineering, Imperial College London, England
- >> Master of Science, International Management, King's College London, England

Working Experience in the 5 Preceding Years

Nov 16, 2018-Sep 2021	Executive Vice President-Downstream Business Group Planning, PTT Plc
Oct 2021-Sep 30, 2024	Executive Vice President-Strategy, Thai Oil Plc
Oct 1, 2024-Present	Senior Executive Vice President, Corporate Sustainability, PTT Plc

Training

Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP) 324/2022

Other Institutes

- >> Leadership Development Program (LDP) I 2013, PTT Leadership and Learning Institute (PLLI)
- >> Advanced Management Program 2015, PTT Leadership and Learning Institute (PLLI)
- >> Management Development Program (MDP) III 2015, PTT Leadership and Learning Institute (PLLI)
- >> Leadership Development Program (LDP) II 2018, PTT Leadership and Learning Institute (PLLI)
- >> Leadership Development Program (LDP) III 2019, PTT Leadership and Learning Institute (PLLI)
- >> Director Development Program (DDP PTT), Class 1/2019 (PTTEP In-house Course)

% of Shareholding in Thailoil	-None-
Family Relation with Other Directors	-None-

Mr. Viroj Wongsathirayakhun

Executive Vice President - Organization Effectiveness

(Retired on Dec 31, 2024)

Age 60 Yrs.

Education

- >> Bachelor of Science, Silpakorn University
- >> Master of Public Administration, National Institute of Development Administration (NIDA)

Working Experience in the 5 Preceding Years

Feb 2015-Sep 2018	Senior Vice President-People and Organization Management, and Managing Director, Thailoil Energy Services Co., Ltd.
Oct 2018-Mar 2019	Acting Executive Vice President-Organization Effectiveness, Vice President-People and Organization Management, and Managing Director, Thailoil Energy Services Co., Ltd.
Apr 2019-Mar 2023	Executive Vice President-Organization Effectiveness, Acting Vice President-People and Organization Management and Managing Director, Thailoil Energy Services Co., Ltd.
Mar 2023-Dec 2023	Executive Vice President-Organization Effectiveness, Acting Vice President-People and Organization Management
Jan 2024-Dec 31, 2024	Executive Vice President-Organization Effectiveness,

Training

Thai Institute of Directors Association (IOD)

- >> Director Certification Program (DCP 209/2015)

Other Institutes

- >> Digital Economy for Management (DE4M)
- >> Leadership Succession Program (LSP) 7
- >> Leadership Development Program (LDP): Leading Bold Change
- >> Management Development Program (MDP)
- >> Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, Class 24, King Prajadhipok's Institute

% of Shareholding in Thailoil	23,600 Shares (equivalent to 0.00106%)
Family Relation with Other Directors	-None-

Assets and Shareholders Information

Registered and Paid-up Capitals

Ordinary Shares

On the share registration book closing date as of September 13, 2024, Thaioil's registered capital was THB 22,338,355,660 and the paid up capital was THB 22,338,355,660, comprised of 2,233,835,566 shares at the par value of THB 10 per share.

Shareholders

As of September 13, 2024, the major shareholders (holding 0.50% and more of paid up capital) are as follows:

Major Shareholders	Number of Shares	Shareholding Percentage
1. PTT PUBLIC COMPANY LIMITED ⁽¹⁾	1,005,920,239	45.031 %
2. THAI NVDR COMPANY LIMITED ⁽²⁾	205,755,574	9.211 %
3. CITIBANK NOMINEES SINGAPORE PTE LTD-A/C GIC C	110,084,073	4.928 %
4. STATE STREET EUROPE LIMITED	75,229,315	3.368 %
5. SIAM MANAGEMENT HOLDING COMPANY LIMITED	66,400,499	2.972 %
6. SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	64,537,197	2.889 %
7. THE BANK OF NEW YORK MELLON	45,932,684	2.056 %
8. SOCIAL SECURITY OFFICE	30,529,510	1.367 %
9. CITIBANK NOMINEES SINGAPORE PTE LTD-A/C GIC H	18,383,051	0.823 %
10. TISCO MASTER POOLED REGISTERED PROVIDENT FUND	16,073,332	0.720 %
Total	1,638,845,474	73.365 %

Remarks:

⁽¹⁾ As a major shareholder of Thaioil, PTT Plc (PTT), whose major shareholder is Ministry of Finance, participates in formulating the Company's management and operational policies via Directors nominated to Thaioil's Board of Directors and casting their votes in Board meetings. As of January 1, 2025, there are 5 directors from a total of 15 directors who are also holding position as PTT's executives.

⁽²⁾ Thai NVDR Co., Ltd., is a subsidiary of the Stock Exchange of Thailand with the objective of promoting investor's investment, particularly foreign investors, in order to invest in common stock of listed companies without being restricted by the foreign shareholding limit which does not have the rights to vote at shareholder meetings of listed companies.

Issuance of Other Financial Instruments

Debentures

As of December 31, 2024, Thailoil and Subsidiaries had issued seven sets of Senior Unsecured Debentures with denomination in US dollars totalling USD 2,945 million as detailed below.

Table 1: Debenture with denomination in US dollars issued by Thai Oil Plc

Debenture Set No.	Type of Instrument	Issuance Date	Maturity	Coupon Rate (Percent per annum)	Value (USD Million)	Issue Credit Ratings as of the Issuance Date (S&P's/Moody's)
1.	Rule 144A/ Regulation S	January 23, 2013	2043	4.875	172	BBB+/Baa1
Total value					172	

Table 2: Debentures with denomination in US dollars issued by Thailoil Treasury Center Co., Ltd.

(Guaranteed by Thai Oil Plc)

Debenture Set No.	Type of Instrument	Issuance Date	Maturity	Coupon Rate (Percent per annum)	Value (USD Million)	Issue Credit Ratings as of the Issuance Date (S&P's/Moody's)
1.	Rule 144A/ Regulation S	April 10, 2018	2043	4.875	328	BBB+/Baa1
2.		November 20, 2018	2028	4.625	400	BBB+/Baa1
3.			2048	5.375	600	
4.		October 17, 2019	2049	3.500	565	BBB+/Baa1
5.		June 18, 2020	2030	2.500	400	BBB+/Baa2
6.			2050	3.750	480	
				Total value	2,773	

Thaioil also issued ten sets of Senior Unsecured Debentures with denomination in Thai baht totaling THB 29,500 million as detailed below.

Debenture Set No.	Type of Instrument	Issuance Date	Maturity	Coupon Rate (Percent per annum)	Value (THB Million)	Issue Credit Ratings as of the Issuance Date (Fitch)
1.		March 23, 2012	2027	5.050	7,500	AA- (Stable Outlook)
2.	II/HNW	November 11, 2022	2025	2.990	1,400	A+ (Negative Outlook)
3.			2027	3.640	600	
4.			2029	4.130	2,000	
5.			2032	4.490	1,700	
6.			2034	4.790	3,100	
7.			2037	5.090	3,200	
8.		May 3, 2023	2028	3.320	2,800	A+ (Negative Outlook)
9.			2033	3.840	2,300	
10.			2038	4.240	4,900	
				Total value	29,500	

The proceeds from the debentures issuance were used for long-term investment, business expansion, debt repayment, and/or working capital as well as for other purposes of Thaioil and Subsidiaries.

Dividend Policy

The Company's dividend payout policy is to pay at least 25% of the consolidated net profit after deductions of all categories of reserves as specified in applicable laws and the Company's Article of Association. Each year, the dividend payments are subjected to Thaioil and Subsidiaries' cash flows and investment plans and other necessities and factors the Board of Directors (the Board) deems appropriate. The Board may consider paying the annual dividend with approval from the Annual General Meeting of Shareholders (AGM), except for the payment of interim dividend, which the Board has

the authority to approve periodically when the Company's profit deems appropriate. The interim dividend payment shall be reported at the following AGM.

The Dividend Policy for Subsidiaries of Thaioil shall be considered by the Board of each subsidiary, and later proposed to each subsidiary's AGM for approval each year. Consideration shall be made on investment plans and other requirements, such as adequacy of cash flow of each company after deducting reserve funds in compliance with the law.

Dividend Payout Information

Year	2018	2019	2020	2021	2022	2023
Earnings (Baht per share)	4.97	3.08	(1.62)	6.17	15.63	8.70
Dividend (Baht per share)	2.65	1.50	0.70	2.60	3.70	3.40
Dividend Payout (Percent)	53.0	49.0	N/A	42.0	23.7*	39

*In 2022, there was an equity offering of 193,807,693 shares resulted in a change in the number of shares during the year. Therefore, if calculating the 2022 dividend payout ratio based on the amount of dividend paid (in Baht) compared to the net profit for the year 2022 (in Baht), the dividend payout ratio was at 25.5%.

Legal disputes

As of December 31, 2024, Thailoil and Subsidiaries were not parties to any litigation that may negatively affect Thailoil's or Subsidiaries' assets of over 5% of shareholders' equity as of the last day of the latest fiscal year, nor were they parties to any litigation that may cause significant impacts on the business, nor were they parties to any litigation that did not arise from the course of normal business operations of Thailoil and Subsidiaries.

Relationship with Major Shareholders' Business Groups

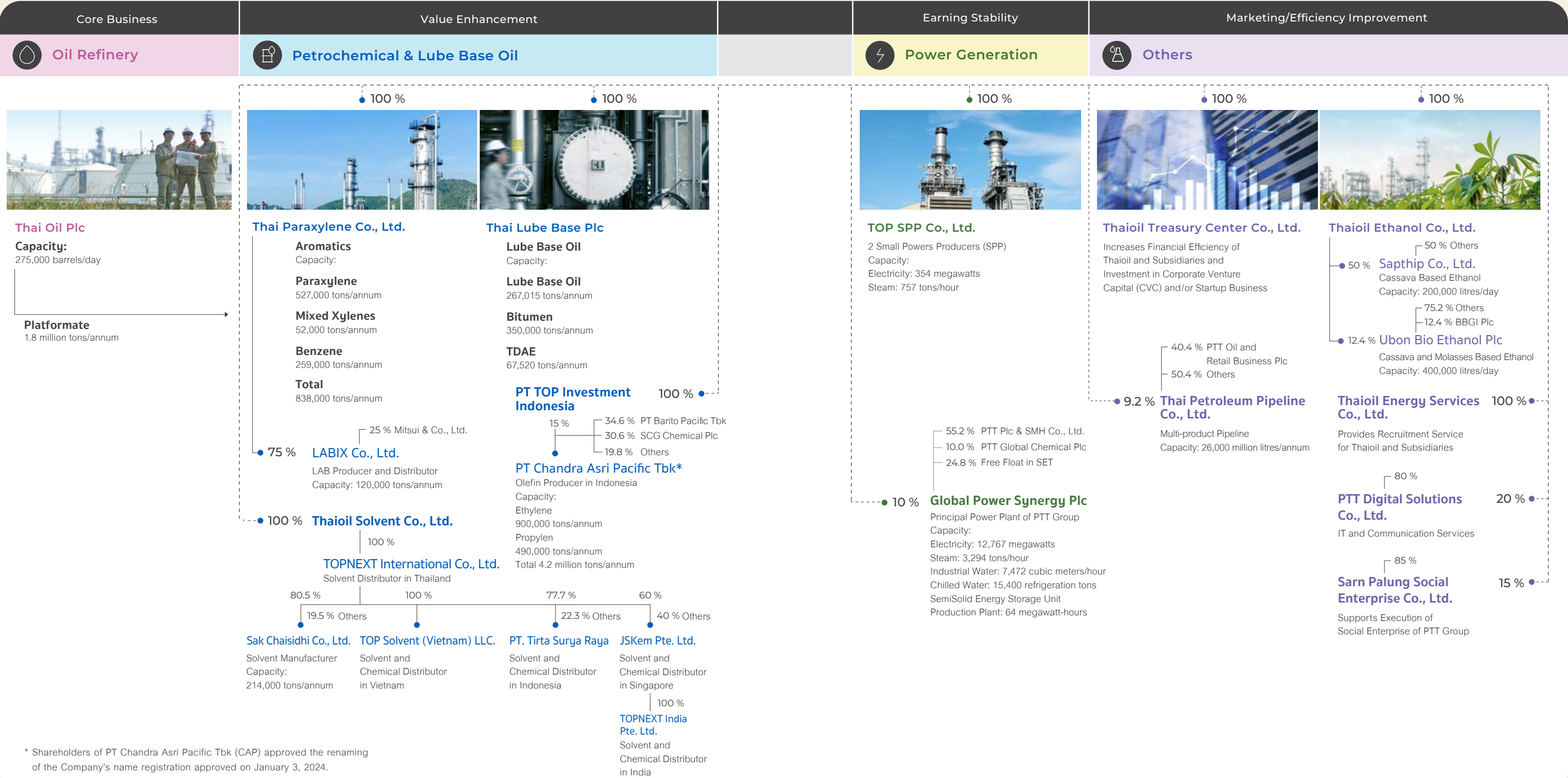
PTT Plc (PTT), Thaioil's major shareholder, is a national energy company engaging in upstream to downstream petroleum and petrochemical businesses. PTT currently holds major shares in three companies running local oil refineries: namely, 48.00% in Thai Oil Plc (inclusive of 2.97% held by Siam Management Holding Co., Ltd., PTT's wholly-owned subsidiary), 45.18% in PTT Global Chemical Plc, and 45.05% in IRPC Plc.

The transactions and business cooperation Thaioil has carried out with PTT and its affiliates include trading of raw materials, feedstock and products; the price of which follows market price and the volume identification follows terms and conditions indicated in the agreed contract.



Thaioil and Subsidiaries' Business Structure

Thaioil is Thailand's leading refinery and supplier of petroleum products. Founded in 1961, we operate one of the leading efficient refineries in Asia Pacific with the current capacity of 275,000 barrels per day. Thaioil operates under the Operational Excellence principle, as an integrated group of businesses in oil refinery, petrochemicals and lube base with supporting businesses, e.g. power generation, solvents and chemicals, pipeline transportation, renewable energy generation, olefins, LAB: an intermediate in the production of surfactants, business in the area of International Business Center and Treasury Center, as well as recruitment services for Thaioil and Subsidiaries. Thaioil leads the Thai refinery industry through a well-planned and integrated production process, yielding optimum efficiency and low-cost products. The product quality is high, rated in the top quartile of refineries in Asia Pacific, giving Thaioil production cost advantage and enhancing Thaioil's recognized competitiveness.



General Information

Thai Oil Public Company Limited

Monogram	TOP
Registration Number	0107547000711
Business	<p>Thaioil is Thailand's leading refinery operator and supplier of petroleum products. Founded in 1961, it operates one of the leading complex refineries in Asia Pacific with the current capacity of 275,000 barrels per day.</p> <p>Thaioil operates under the Operational Excellence system as an integrated group of companies running oil refinery, petrochemicals and lube base with supporting businesses, including power generation, solvents and chemicals, pipeline transportation, renewable-energy generation, olefins business, LAB (an intermediate in the production of cleaning agents), recruitment services for Thaioil and Subsidiaries, as well as Treasury Center to enhance Thaioil and Subsidiaries' capability of financial management. Thaioil leads the domestic refining industry through a well-planned and integrated production process, yielding optimal efficiency and low-cost products, while maintaining the high quality of product at the top quartile of refineries in Asia Pacific, giving it production cost advantages while enhancing its competitiveness.</p>
Registered Capital	<p>22,338,355,660 Baht</p> <p>Comprising 2,233,835,566 paid-up common shares of 10 Baht per share</p>
Address	<p>Bangkok Office</p> <p>555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand</p> <p>Telephone : +66(0) -2797-2999, +66(0) -2797-2900, +66(0) -2299-0000</p> <p>Sriracha Office and refinery</p> <p>42/1 Moo 1, Sukhumvit Road Km.124, Tungsukla, Sriracha, Chonburi 20230, Thailand</p> <p>Telephone : +66(0) -3840-8500, +66(0) -3835-9000, +66(0) -3849-8900</p>
Website	www.thaioilgroup.com
Investor Relations	<p>Telephone : +66(0) -2797-2961, +66(0) -2797-2999 ext. 42060-42063</p> <p>e-Mail : ir@thaioilgroup.com</p>

General Information of the Subsidiaries

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
Lube Base Oil Business							
Thai Lube Base Public Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2970	0107539000090	Lube base oil manufacturer and distributor	1,757,890,730	Common	175,789,073	10	100
Petrochemical Business							
Thai Paraxylene Company Limited 105/12 Moo 2, Sukhumvit Road, Tungskula, Sriracha, Chonburi 20230, Thailand Tel : +66(0) -3835-1317-9, +66(0) -3835-1878 Fax : +66(0) -3835-1320	0105539103288	Upstream petrochemical manufacturer and distributor	2,572,414,160	Common	257,241,416	10	100
LABIX Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2974	0105556110246	LAB (an intermediate in the production of surfactants such as detergents) manufacturer and distributor	4,654,965,000	Common	465,496,500	10	75 (Shareholding through Thai Paraxylene Co., Ltd.)
Thaioil Solvent Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2970	0105551116050	Investment in solvent and petrochemical manufacturing and distributor business	1,250,000,000	Common	125,000,000	10	100

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
TOPNEXT International Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2983	0105551116491	Solvent and petrochemical products distributor	1,200,000,000	Common	120,000,000	10	100 (Shareholding through Thailoil Solvent Co., Ltd.)
Sak Chaisidhi Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0003, +66(0) -2797-2993 Fax : +66(0) -2797-2983	0105527011880	Hydrocarbon solvent manufacturer and distributor	180,000,000	Common	1,800,000	100	80.52 (Shareholding through TOPNEXT International Co., Ltd.)
TOP Solvent (Vietnam) Limited Liability Company Go Dau Industrial Zones, Long Thanh District, Dong Nai Province, Vietnam Tel : +84-83827-9030-4 Fax : +84-83827-9035	472043000745 (Registered in Vietnam)	Solvent and petrochemical product distributor in Vietnam	373,520,000,000 VND	Common	-	-	100 (Shareholding through TOPNEXT International Co., Ltd.)
PT. Tirta Surya Raya Synergy Building Lt. 12 Unit 09 Jl. Jalur Sutera Barat No.17, Kel. Panunggangan Timur, Kec. Pinang, Kota Tangerang, Banten Province, Indonesia 15325 Tel : +62-21808-21308 Fax : +62-21808-21307	9120102163812 (Registered in Indonesia)	Solvent and petrochemical product distributor in Indonesia	23,000,000,000 IDR	Common	23,000	1,000,000 IDR per share	77.71 (Shareholding through TOPNEXT International Co., Ltd.)

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
JSKem Private Limited 28, Sin Ming Lane, #07-143 Midview City, Singapore 573970 Tel : +65-6659-1073 Fax : +65-6659-1075	201311162C (Registered in Singapore)	Solvent and petrochemical product distributor in Singapore	100,000 SGD	Common	100,000	1 SGD per share	60 (Shareholding through TOPNEXT International Co., Ltd.)
TOPNEXT India Private Limited Ram Nivas, Room No. 4, Tilak Nagar, Aarey Road, Goregaon East, Mumbai, Bandra Suburban, Maharashtra, India 400063	U11100MH2021 FTC354985 (Registered in India)	Solvent and petrochemical product distributor in India	1,330,000 INR	Common	133,000	10 INR per share	99.99 (Shareholding through JSKEM Pte. Ltd.)
Olefin PT TOP Investment Indonesia Synergy Building Lt. 12 Unit 08 Jl. Jalur Sutera Barat No. 17, Kel. Panungangan Timur, Kec. Pinang, Kota Tangerang, Banten Province, Indonesia 15325 Tel : 08195111144	429914021416000 (Registered in Indonesia)	Investment in petrochemical business	10,000,000,000 IDR (equivalent to 700,000 USD) 12,332,250,000,000 IDR (equivalent to 913,500,000 USD)	Common	1,000 9,135,000	10,000,000 IDR per share (equivalent to 700 USD per share) 1,350,000 IDR per share (equivalent to 100 USD per share)	100
PT Chandra Asri Pacific Tbk Wisma Barito Pacific Tower A, 7 th floor, Jl. Let. Jend. S. Parman Kav. 62-63 Jakarta, Indonesia 11410 Tel : +62-21530-7950 Fax : +62-21530-8930	8120011061265 (Registered in Indonesia)	Petrochemical manufacturer and distributor	12,264,785,664,000 IDR	Common	86,511,545,092	50 IDR per share	15 (Shareholding through PT TOP Investment Indonesia)

* PT Chandra Asri Petrochemical Tbk has changed name to "PT Chandra Asri Pacific Tbk" on January 3, 2024

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
Power Generation Business Global Power Synergy Public Company Limited 555/2 Energy Complex Building B, 5 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2140-4600 Fax : +66(0) -2140-4601	0107557000411	Operate power generation business, including invest and develop future projects in power business	28,197,293,710	Common	2,819,729,367	10	10
TOP SPP Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2974	0105556198933	Power and steam generator and distributor	3,500,000,000	Common	350,000,000	10	100
Transportation Business Thai Petroleum Pipeline Company Limited 2/8 Moo 11, Lumlukka Road, Ladsawai, Lumlukka, Pathumthani 12150, Thailand Tel : +66(0) -2034-9199 Fax : +66(0) -2533-2687	0105534002696	Pipeline transportation of petroleum products	8,479,000,000	Common	84,790,000	100	9.19
Other Business Thaioil Energy Services Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2970	0105550078006	Recruiting management service	40,000,000	Common	4,000,000	10	100

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
Thaioil Ethanol Company Limited 555/1 Energy Complex Building A, 11 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2970	0105551121754	Investment in ethanol business and alternative energy	1,450,000,000	Common	145,000,000	10	100
Sapthip Company Limited 68 Soi Santipap, Sap Road, Sipraya, Bangrak, Bangkok 10500, Thailand Tel : +66(0) -2233-0444-5 Fax : +66(0) -2233-0441	0105539017543	Cassava-based ethanol manufacturer and distributor	800,000,000	Common	8,000,000	100	50 (Shareholding through Thaioil Ethanol Co., Ltd.)
Sapthip Green Energy Company Limited 49 Moo 6, Nikomlamnalai, Chaibadan, Lopburi 15130, Thailand Tel : +66(0) -3646-2438 Fax : +66(0) -3646-2475	0165561000615	Power from biogas, generator, and distributor	25,000,000	Common	2,500,000	10	50 (Shareholding through Sapthip Co., Ltd.)
Ubon Bio Ethanol Public Company Limited 333 Moo 9, Nadee, Navear, Ubonratchatani 34160, Thailand Tel : +66(0) -4525-2777 Fax : +66(0) -4525-2776	03455500000315	Cassava-based and molasses-based ethanol manufacturer and distributor	3,914,286,000	Common	3,914,286,000	1	12.39 (Shareholding through Thaioil Ethanol Co., Ltd.)

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
PTT Digital Solutions Company Limited 555/1 Energy Complex Building A, 4 th - 5 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2140-2000 Fax : +66(0) -2140-2999	0105549076496	IT and communication services	150,000,000	Common	15,000,000	10	20
PTT Energy Solutions Company Limited 888 Green Building, Mapchalood-Leamson Road, Huai Pong, Mueng Rayong, Rayong 21150, Thailand Tel : +66(0) -3897-8300 Fax : +66(0) -3897-8333	0105554075621	Engineering technique consultation and other services	150,000,000	Common	1,500,000	100	20
Thaioil Treasury Center Company Limited 555/1 Energy Complex Building A, 1 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2974	0105560167273	Financial service provider for Thaioil and Subsidiaries	956,200,000	Common	95,620,000	10	100
TOP Ventures Company Limited 555/1 Energy Complex Building A, 1 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2299-0000, +66(0) -2797-2999 Fax : +66(0) -2797-2974	0105562147342	Investments in Corporate Venture Capital and/or Startup Business	35,000,000	Common	2,925,000	10	100 (Shareholding through Thaioil Treasury Center Co., Ltd.)

Company Name and Address	Registration Number	Business	Registered Capital (THB)	Type of Shares	Number of Shares (Issued)	Value of Share (THB per share)	Shareholding (Percent)
TOP Ventures Hong Kong Limited 40 th Floor, Dah Sing Financial Centre, No. 248 Queen's Road East, Wanchai, Hong Kong Tel : +852-3912-0800 Fax : +852-3912-0801	71042695 (Registered in Hong Kong)	Investments in Corporate Venture Capital and/or Startup Business	1 HKD 23,469,038 USD	Common	1 1	1 HKD per share 23,469,038 USD per share	100 (Shareholding through Thaioil Treasury Center Co., Ltd.)
TOP Ventures America Limited Liability Company The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801 Tel : +1(888)-724-9870	7559091 (Registered in USA)	Investments in Corporate Venture Capital and/or Startup Business	15,946,039 USD	Common	1	15,946,039 USD per share	100 (Shareholding through TOP Ventures Hong Kong Limited)
Sam Palung Social Enterprise Company Limited 555/1 Energy Complex Building A, 10 th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900, Thailand Tel : +66(0) -2537-2971 Fax : +66(0) -2537-2978	0105560151628	Support execution of social enterprise of PTT Group	10,000,000	Common	1,000,000	10	15

Reference

Securities Registrar

Thailand Securities Depository Company Limited (TSD)

The Stock Exchange of Thailand Building,

93 Ratchadaphisek Road, Dindaeng,

Bangkok 10400, Thailand

Tel : +66(0) -2009-9999 (Call center)

e - Mail : SETContactCenter@set.or.th

Debenture Registrar and Principal Paying Agent

Bangkok Bank Public Company Limited

The Registrar and Debenture Holders' Representative

333 Head Office, 1st Floor, Trinity Building,

Silom Road, Silom, Bangrak, Bangkok 10500, Thailand

Tel : +66(0) -2037-7623, +66(0) -2230-1478,

+66(0) -2230-2895

Bank of Ayudhya Public Company Limited

AA Floor, 1222 Rama III Road, Bang Phongphang,

Yan Nawa, Bangkok 10120

Tel : +66(0) -2296-3582 (Call Center)

Contact : Somrudee Yannasin

Auditor

EY Office Limited

33rd Floor, Lake Rajada Office Complex,

193/136-137 Ratchadaphisek Road, Klongtoey,

Bangkok 10110, Thailand

Tel : +66(0) -2264-9090

Fax : +66(0) -2264-0789

Other Services (Loss of Share Certificate, Change of Particulars in Securities Register and Other Services)

Counter Service

The Stock Exchange of Thailand Building, 1st Floor,

93 Ratchadaphisek Road, Dindaeng,

Bangkok 10400, Thailand

Tel : +66(0) -2009-9999 (Call center)

or

Office of Registration Services

Thailand Securities Depository Company Limited (TSD)

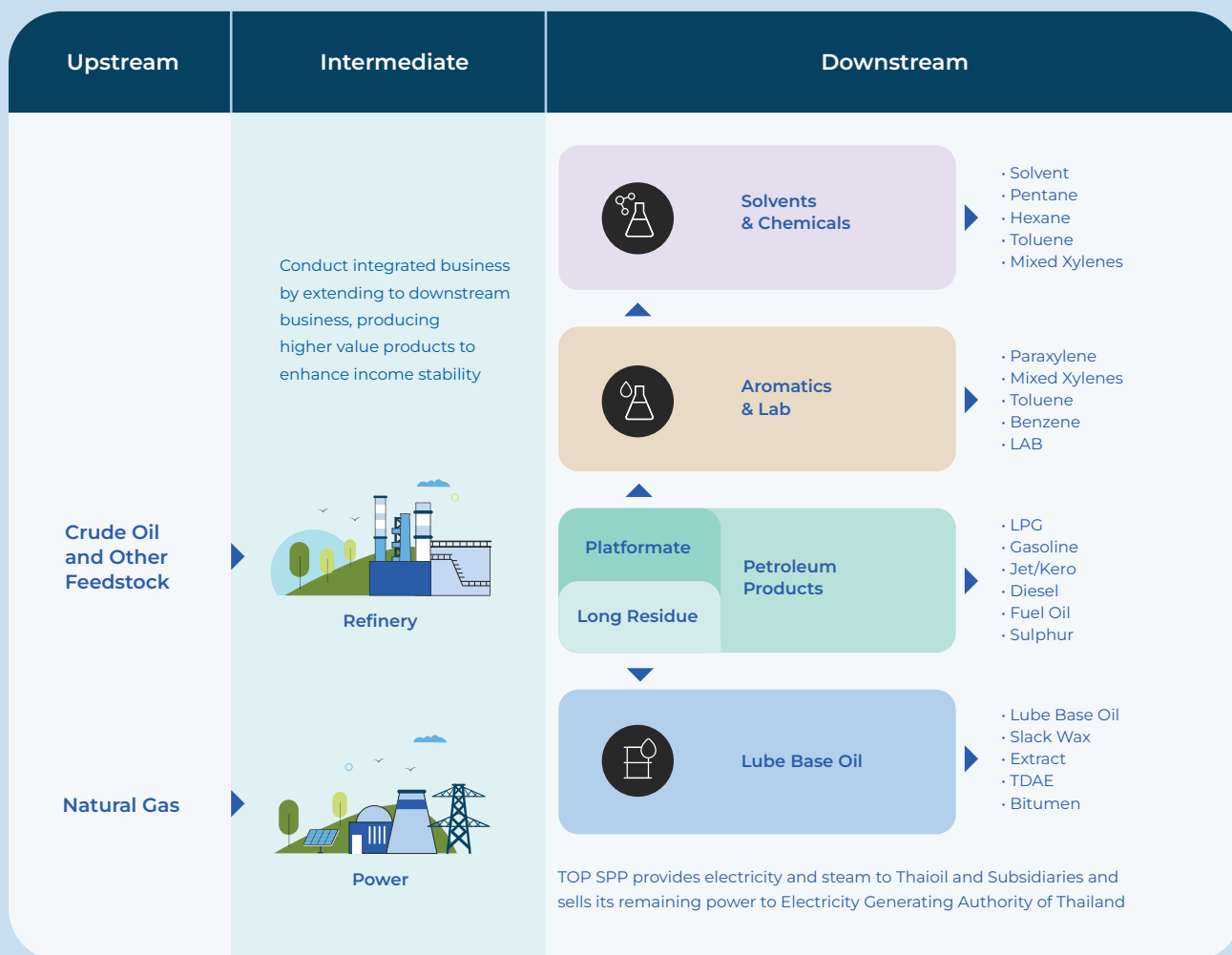
93 Ratchadaphisek Road, Dindaeng,

Bangkok 10400, Thailand

Tel : +66(0) -2009-9000

+66(0) -2009-9999 (Call center)

Products and Services



Thailoil and Subsidiaries' Major Income-generating Products with Domestic Production Base

Refinery Business

Thailoil Refinery is the country's largest single-site refinery with maximum complexity to generate premium value-added products. It is a leading complex refinery with the capacity to produce and distribute wholesale petroleum products (with crude and other raw materials run capacity of approximately 22% of the entire domestic refining capacity), focusing on distributing to domestic and regional markets. Unlike other refineries in Thailand, Thailoil's refining complexity and technologies allow flexibility for maintenance shutdowns of each distillation

unit without shutting down the entire system, thus enabling Thailoil to constantly meet customers' needs.

Lubricant Business

Thai Lube Base Plc (TLB) mainly produces and distributes lube base oil Group 1; When blended with additives, this oil can be turned into lube oil (or lubricating oil) for machinery moving parts such as pistons and shafts, providing lubrication as well as cooling. TLB also produces bitumen for road pavement as well as Treated Distillate Aromatics Extract (TDAE), which lowers carcinogens and air pollutants.

Petrochemical Business

Thai Paraxylene Co., Ltd. (TPX) is a producer of paraxylene, feedstock for Purified Terephthalic Acid (PTA) production in the intermediate petrochemical industry. PTA is the monomer in the downstream petrochemical industry for polyester fiber or synthetic fiber used for manufacturing apparel and plastic bottles commonly known as Polyethylene Terephthalate (PET) such as drinking water bottles and soda bottles, as well as other consumer products such as film, food containers, and plastic bags for heat preservation. TPX also produces benzene (key feedstock for styrene monomer: SM), phenol, and cyclohexene (monomers for plastic packaging, electrical appliances, automobiles, etc.).

LABIX Co., Ltd. (LABIX) is Thailand's first producer of Linear Alkyl Benzene (LAB) and the first fully integrated producer in Southeast Asia. LAB is key feedstock for detergents and cleaning agents.

PT Chandra Asri Petrochemical Tbk (CAP) is Thailoil's investment through PT TOP Investment Indonesia. Being Indonesia's only olefins producer, CAP runs a naphtha cracker with a wide range of petrochemical products from upstream to downstream including Polyethylene (PE), Polypropylene (PP), SM, Butadiene, and several other Olefins products.

Solvent and Chemical Business

Thailoil invested in the solvent business to enhance its product value chain through Thailoil Solvent Co., Ltd. (TOS), of which subsidiary TOPNEXT International Co., Ltd. (TX) (formerly known as TOP Solvent Co., Ltd. (TS)), is a distributor of solvents and chemicals in domestic and overseas markets. TX also owns Sak Chaisidhi Co., Ltd. (SAKC), a producer of high-quality hydrocarbon solvents for industrial applications. It also engages in an overseas business through TOP Solvent (Vietnam) LLC., a distributor of solvents and chemicals in Vietnam with warehouses

in southern and northern Vietnam. Through partnership, TX invested in PT. Tirta Surya Raya to distribute solvents and chemicals in Indonesia. It also entered joint ventures with JSKem Pte. Ltd. (JSKEM) and TXIndia Pte. Ltd., a JSKEM subsidiary, for procurement and distribution of chemicals and solvents in Singapore and India. In Myanmar it appointed TOPNEXT International Co., Ltd. (Myanmar Representative Office), a representative office in Yangon.

Today, Thailoil and Subsidiaries engage in the import, export, sale, and distribution of assorted products together with High Value Products (HPV) to Vietnam, Indonesia, India, Myanmar, Cambodia, Laos, the Philippines, and others. Product groups are described below.

- >> Solvents and chemicals: Hydrocarbon solvents consist of hydrogen and carbon, namely paraffins and aromatics for applications in such industries as paint, polymer, and auto-tire. Chemical solvents consist of alcohol, ketone, ester, and glycol ether for the paint industry and coating work, and others.
- >> Aromatics: Chemicals in this group are benzene, toluene, and xylene, which find applications in the solvent industry and serve as feedstock for other products, including paraxylene.
- >> Olefins: Olefins come in the forms of monomers and polymers, serving as feedstock for chemicals and finding applications in the production of polymers and other everyday products.
- >> Petroleum: Products under this group are exported to retail business target groups to support the CFP product demand in the future in Vietnam and Indonesia.
- >> Lubricants and by-products: For base oil and lubricant products, Thailoil focuses on sale through Flexi Bags to Asian end users, primarily in the Philippines, Malaysia and Vietnam.

>> Specialty products are chemicals used in five industries, namely automotive, personal care, healthcare, electronics, and food & nutrition.

These industry groups feature chemicals that serve as raw materials for assorted products, including additives for lubricants, plastics, paint, auto-tires, lotions, shampoos, and food & nutrition. They also include disinfectants+ surfactants and specialty polymers.

Power and Steam Businesses

Thaioil invests in the cogeneration power business, supplying power and steam for Thaioil and Subsidiaries' core businesses and leading to higher efficiency and securing revenue streams. These businesses are invested through subsidiaries and joint ventures as follows.

- 1) TOP SPP Co., Ltd. (TOP SPP) is running two gas-fired cogeneration power and steam plants. Electricity produced by TOP SPP is sold to the Electricity Generating of Thailand (EGAT) under two 25-year power purchase agreements (PPAs) at a combined volume of 180 megawatts (MW), or 90 MW each. Electricity sale to EGAT generates 38% of TOP SPP's total revenue; the remaining 62% is contributed by the remaining electricity and steam distributed to Thaioil's subsidiaries.
- 2) Global Power Synergy Public Co., Ltd. (GPSC) also produces and distributes utilities through its own operations and joint ventures.

Ethanol Business

To strengthen its business capability, Thaioil invests through Thaioil Ethanol Co., Ltd. (TET) in the production and distribution of ethanol used for producing a variety of gasohol fuels, including gasohol E10, E20 and E85, with 10, 20 and 85% of ethanol content, respectively. TET invests through its subsidiary and joint venture:

- 1) Sapthip Co., Ltd. (SAPTHIP), a TET's subsidiary, produces and distributes cassava-based ethanol for fuel production. SAPTHIP owns another subsidiary, Sapthip Green Energy Co., Ltd., a power producer from biogas.
- 2) Ubon Bio Ethanol Public Co., Ltd. (UBE), a TET joint venture, produces and distributes ethanol from cassava and molasses for fuel production and industrial uses. UBE currently has two subsidiaries. 1) Ubon Sunflower Co., Ltd., a producer of food-grade and industrial-grade tapioca starch. The processed water and tapioca residue can be converted into biogas, used as a renewable fuel and for power generation distributed within Ubon Group and to the Provincial Electricity Authority (PEA). 2) Ubon Bio Agricultural Co., Ltd., a distributor of agricultural products and organic products such as coffee beans, rice, tapioca starch, cassava chips, a soil enhancer from cassava residue, and Napier grass. It also provides livestock management and engages in agricultural land leasing.

Business Assets

Primary Fixed Assets under the Ownership of Thailoil and Subsidiaries

As of December 31, 2024, the primary business assets under the ownership of Thailoil and Subsidiaries after cumulative depreciation and allowance for impairment losses as shown in the financial statements amounted to THB 224,152 million:

Description	Net book value after cumulative depreciation and allowance for impairment losses (THB Million)
Land	7,358
Buildings	5,852
Leasehold improvement	212
Refinery plants and equipment	124,859
Power plants	21,012
Petrochemical plants	36,306
Machinery, equipment, and plant equipment	8,117
Furniture, fixtures, office equipment, and others	1,243
Vehicles	15
Construction in progress	158,017
Total Cost	362,991
Less-Cumulative depreciation and allowance for impairment losses	(138,839)
Total-Net value after cumulative depreciation and allowance for impairment losses	224,152

Thai Oil Plc

As of December 31, 2024, Thaioil's fixed assets were mainly land, buildings, refinery plants, power plants, machinery and equipment, of which the Company took ownership:

Description	Net book value (THB Million)	Obligation (THB)
Land	4,880	-
Buildings	4,438	-
Oil refinery and equipment	115,686	-
Power plant	5,365	-
Machinery, tools and factory equipment	1,629	-
Furniture, fixtures, office equipment, and others	840	-
Vehicles	1	-
Construction work in progress	159,339	-
Total Cost	292,178	-
Less-Cumulative depreciation and allowance for impairment losses	(95,013)	-
Total-Net value after cumulative depreciation and allowance for impairment losses	197,165	-

Subsidiaries

As of December 31, 2024, Thaioil's 20 subsidiaries: namely, Thai Paraxylene Co., Ltd., LABIX Co., Ltd., Thai Lube Base Plc, TOP SPP Co., Ltd., Thaioil Solvent Co., Ltd., TOPNEXT International Co., Ltd., Sak Chaisidhi Co., Ltd., TOP Solvent (Vietnam) LLC, PT Tirta Surya Raya, JSKem Pte., Ltd., TOPNEXT India Private Limited (formerly known as TSCHEM India Pte., Ltd.), Thaioil Ethanol Co., Ltd., Sapthip Co., Ltd., Sapthip Green Energy Co., Ltd., Thaioil Energy Services Co., Ltd., Thaioil Treasury Center Co., Ltd., TOP Ventures Co., Ltd., TOP Ventures Hong Kong Limited, TOP Ventures America LLC., and PT TOP Investment Indonesia, held several primary fixed assets such as land, office buildings, power plants, plants, and machinery as detailed below:

Description	Net book value (THB Million)	Obligation (THB)
Land	1,388	-
Buildings	1,448	-
Leasehold improvement	212	-
Power plants, plants, machinery, equipment and plant equipment	68,488	- Land, machinery, buildings, and the wastewater residue treatment unit of Sapthip Co., Ltd. have been used as collateral to secure a loan of THB 114 million from a financial institution. - The petrochemical plant of LABIX Co., Ltd. has been used as collateral to secure a loan of THB 5,400 million from multiple financial institutions.
Furniture, fixtures, office equipment, and others	281	-
Vehicles	15	-
Construction in progress	725	-
Total Cost	72,557	-
Less - Cumulative depreciation and allowance for impairment losses	(44,465)	-
Total-Net value after cumulative depreciation and allowance for impairment losses	28,092	-

Investment Properties

As of December 31, 2024, investment properties which can generate profit from rental or from value appreciation or both under the ownership of Thailoil and Subsidiaries registered a net value-after cumulative depreciation and allowance for impairment losses-of THB 103 million and THB 1,185 million respectively, as shown in the consolidated financial statements and separate financial statements.

Intangible Assets

Right of Use of Water Pipelines and Natural Gas Pipelines

Under the water consumption contract that Thailoil made with Eastern Water Resources Development and Management Plc, it is entitled to pipe water from the Nong Pla Lai-Nong Kho and Nong Kho-Laem Chabang water pipelines to the oil refining system. Permission has also been granted by applicable agencies to lay connecting pipes through their land to Thailoil's water-receiving point.

Thailoil is also entitled to share the use of the gas pipelines belonging to PTT Plc for gas delivery to Thailoil's refinery processes for 15 years. The pipeline fee is included in the monthly gas consumption charge, based on a formula specified under the agreement. The agreement can be renewed by Thailoil through a written notification to PTT Plc no less than six months in advance.

Right under Land and Building Rental Contracts

On August 21, 2018, Thailoil engaged in a land lease agreement with the Treasury Department, Ministry of Finance, whereby Thailoil must pay rent yearly for 30 years from 2022 to 2052 for the right to exploit such land for an oil refinery and staff housing in Chon Buri Province. The land occupies 1,499 rai, 3 ngan, and 26 square wah (65% of the total area of Thailoil refinery in Sriracha). The agreement will expire on September 10, 2052. The annual rental fee for September 2022 to September 2025 is around THB 384 million. The total rent through the contract period, with an increase of 10% every

three years, will be about THB 21,321 million. On the contract signing date, Thailoil had already paid THB 2,962 million in advance.

The Treasury Department has allowed Thailoil to allocate part of the rented land, accounting for 8% of the total refinery area, to subsidiaries and other companies related to Thailoil. For the sublease, Thailoil must pay an additional annual rental fee to the department. Thailoil has also allowed subsidiaries and related companies to lease 10% of the refinery area with a rental period and sublease period equal to the remaining validity of the rental contract it holds with the department.

Investment in Equity Shares of Subsidiaries and Affiliates

As of December 31, 2024, and December 31, 2023, financial investment in equity shares of Thailoil's subsidiaries and affiliates, using the cost method under separate financial statements, amounted to THB 42,262 million and THB 42,262 million, respectively.

Policy on Investment in Subsidiaries

Thailoil holds a policy on investment in subsidiaries and on future investment in businesses that support Thailoil or strengthen Thailoil and Subsidiaries.

To supervise subsidiaries, Thailoil as a shareholder appoints a representative to participate in the subsidiaries' shareholders' meeting as proxy or representative and exercise the voting right at the shareholders' meeting under the Board of Directors' principles or guidelines.

Moreover, Thailoil appoints representatives to serve as directors or managing director of subsidiaries, or both. The positions of representatives include the Chairman of the Board, director, managing director, high-level executives or experts with the required knowledge and experience suitable for and without any direct conflict of interest with the business. The appointed representatives will manage subsidiaries under rules, regulations, and guidelines specified in the articles of association of Thailoil and each given subsidiary, and applicable laws.

Investment Promotion Privileges

Thai Oil Plc has gained a number of investment promotion privileges from the Board of Investment (BOI) under the criteria and procedures stated in the Investment Promotion Act, B.E. 2520 (1977), for the rights and incentives given to the oil refining business. This includes the exemption of import duties on machinery and equipment, a permit to import skilled workers and experts to work in the number and for the periods agreed by BOI, and a permit for overseas remittance in foreign currencies. In 2018, Thail's Clean Fuel Project (CFP) gained such privileges for the exemption of import duties on machinery and equipment. In 2020, additional BOI privileges were granted to support investment in power generation from pitch at the Residue Hydrocracking Unit (RHCU) and in sulfuric acid production. This investment was exempt from corporate income tax on the combined net profit of up to 100% of the investment cost over eight years. After corporate income tax exemption has ended, the project would receive an additional 50% in corporate income tax reduction from the normal rates on the net profit for five years of power generation and for three years of sulfuric acid production in addition to import tax exemption. In 2024, Thail gained an additional investment promotion for two activities. First, the activity involved industrial standard upgrades, designed to improve production efficiency via energy saving and environmental impact mitigation. Thail earned the benefit of corporate tax exemption for the net profit derived from promoted businesses, equivalent to 50% of the investment in efficiency improvement, plus tariff exemption on project machinery and equipment. The second activity involved investment promotion measures for community and

social development. The ratio of up to 200% of the investment supporting community education and public health would qualify for corporate tax exemption for the net profit earned from promoted businesses for three years (June 1, 2024 to May 31, 2027).

BOI promotion privileges have also been granted to other activities by Thail's subsidiaries:

- >> TOP SPP Co., Ltd. (TOP SPP) earned BOI privileges in 2021 for its investment in power and steam generation. The privileges included corporate income tax exemption on the combined net profit of up to 100% of the investment cost for three years, from April 1, 2023, to March 30, 2026. In 2024, TOP SPP gained BOI privileges for industry upgrade measures to improve production efficiency with alternative energy. Qualified corporate tax exemption for the net profit derived from promoted businesses amount to 50% of the investment in efficiency improvement for three years.
- >> Sak Chaisidhi Co., Ltd. (SAKC) gained BOI privileges for investment in the production of aliphatic hydrocarbons and aromatic hydrocarbons. The company gained corporate income tax exemption on the combined net profit of up to 100% of the investment cost for eight years. This exemption has now expired. The company is currently exercising its corporate income tax reduction of 50% of the usual rate on the net profit for five years, from May 12, 2022, to May 11, 2027. SAKC also received a permit for utility (electricity and piped water) cost deduction of twice the actual expense for 10 years.

>> Sapthip Green Energy Co., Ltd. (SGE) gained BOI privileges in 2018 for power generation from biogas. SGE gained corporate income tax exemption on the combined net profit of up to 100% of the investment cost for eight years, from January 1, 2020, to December 31, 2027. In 2019, it received BOI privileges for its investment in steam production together with corporate income tax exemption on the combined net profit of up to 100% of the investment

cost for five years, from January 1, 2020, to December 31, 2024. The company, in 2020, gained BOI privileges for power generation from agricultural products under measures to improve production efficiency using renewable energy as well as for machinery modification to improve production efficiency. Also granted was corporate income tax reduction of 50% of the normal rates on the combined net profit for three years, from May 27, 2022, to May 26, 2025.



Revenue Structure

Thaioil's core earnings were derived from our oil refinery business. Other revenue contributors were the lube base oil refinery, aromatics and LAB, power generation, solvent, ethanol, olefins and others businesses.

(THB Million)

			Ownership		For the year ended December 31				
			Interest	2024		2023		2022	
				Amount	%	Amount	%	Amount	%
Operator ⁽¹⁾			(%)						
A. Net Sales									
1. Oil refinery	TOP	-	497,530	106	501,897	107	568,678	103	
2. Lube base oil refinery	TLB	100	25,739	6	25,315	5	27,773	5	
3. Aromatics and LAB	TPX	100	80,529	17	78,974	17	88,938	16	
4. Power generation	TOP SPP	100	11,825	3	12,788	3	11,716	3	
5. Solvent	TOS	100	19,725	4	19,381	4	22,585	5	
6. Ethanol	TET	100	1,681	-	1,879	-	1,796	-	
7. Olefins	TII	100	4	-	5	-	2	-	
8. Others	TES/TTC	100	7,350	2	7,068	2	6,647	1	
Less: Eliminations			(177,606)	(38)	(178,063)	(38)	(198,546)	(36)	
Total			466,777	100	469,244	100	529,589	97	
B. Net Derivative Gain on Hedging ⁽²⁾									
1. Oil refinery	TOP	-	298	-	-	-	-	-	
2. Aromatics and LAB	TPX	100	122	-	168	-	100	-	
3. Solvent	TOS	100	-	-	15	-	13	-	
4. Others	TES/TTC	100	-	-	-	-	10	-	
Total			420	-	183	-	123	-	
C. Net Foreign Exchange Gain ⁽³⁾									
1. Oil refinery	TOP	-	25	-	254	-	-	-	
2. Lube base oil refinery	TLB	100	-	-	-	-	30	-	
3. Aromatics and LAB	TPX	100	32	-	-	-	-	-	
4. Power generation	TOP SPP	100	1	-	11	-	6	-	
5. Solvent	TOS	100	-	-	14	-	-	-	
6. Olefins	TII	100	-	-	1	-	-	-	
7. Others	TES/TTC	100	1	-	-	-	-	-	
Total			59	-	280	-	36	-	

			Ownership		For the year ended December 31						
			Interest		2024		2023		2022		
					Amount	%	Amount	%	Amount	%	
Operator ⁽¹⁾			(%)								
D. Other Revenues ⁽⁴⁾											
1. Oil refinery	TOP	-	4,117	1	3,477	1	20,623	3			
2. Lube base oil refinery	TLB	100	206	-	147	-	114	-			
3. Aromatics and LAB	TPX	100	305	-	272	-	314	-			
4. Power generation	TOP SPP	100	99	-	54	-	18	-			
5. Solvent	TOS	100	86	-	76	-	40	-			
6. Ethanol	TET	100	7	-	14	-	5	-			
7. Olefins	TII	100	5	-	-	-	-	-			
8. Others	TES/TTC	100	1,394	-	293	-	297	-			
Less: Eliminations			(3,103)	(1)	(2,916)	(1)	(3,001)	-			
Total			3,116	-	1,417	-	18,410	3			
Total revenues (A-D)			470,372	100	471,124	100	548,158	100			

Remarks:⁽¹⁾ TOP is Thai Oil Plc

TLB is Thai Lube Base Plc

TPX is Thai Paraxylene Co., Ltd. having respective interests in LABIX Co., Ltd.

TOP SPP is TOP SPP Co., Ltd.

TOS is Thaioil Solvent Co., Ltd. having respective direct interests in TOPNEXT International Co., Ltd. and indirect interest in Sak Chaisidhi Co., Ltd., TOP Solvent (Vietnam) LLC., PT. Tirta Surya Raya, JSKEM Private Limited and TOPNEXT India Private Limited (Formerly TSCHEM India Private Limited.).

TET is Thaioil Ethanol Co., Ltd. having respective interests in Sapthip Co., Ltd.

TES is Thaioil Energy Services Co., Ltd.

TTC is Thaioil Treasury Center Co., Ltd. having respective direct interests in TOP Ventures Company Limited, TOP Ventures Hong Kong Limited and indirect interest in TOP Ventures America LLC.

TII is PT TOP Investment Indonesia

⁽²⁾ Oil refinery has net derivative loss on hedging in 2022 and 2023 but oil refinery has net derivative gain on hedging in 2024.⁽³⁾ Oil refinery has net foreign exchange loss in 2022 but oil refinery has net foreign exchange gain in 2023 and 2024.⁽⁴⁾ Comprises received interests, export tax subsidy, revenues from services provided to subsidiary companies, land lease, single buoy mooring service fee, oil storage tank lease, revenue from disposal of scrap, gain on disposal of investments in associate, gain on reclassified of investment, share of profit of joint ventures and associates

Related Party Transactions

For Fiscal Years 2023-2024, Thaioil and/or Subsidiaries engaged in key business transactions with subsidiaries and associates as well as related parties with common major shareholders and/or directors, as shown in the notes to the financial statements. All such transactions are based on market prices wherever available or mutually agreed prices wherever market prices are unavailable. The relationships among parties are listed as follow:

Company	Relationship with Thaioil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
PTT Plc (PTT)	Major shareholder, holding 45.03% of Thaioil's total shares	>> Revenue >> TOPNEXT International Co., Ltd. sold solvents	7	2	Occasional sale of solvents, considered normal business practice.
		>> Thaioil generated revenue from P1 Collaboration agreement	643	344	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expires in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Thai Paraxylene Co., Ltd. generated revenue from P1 Collaboration agreement	10	3	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expires in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Other income	12	25	

Company	Relationship with Thaioil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
		>> Expenses			
		>> Thaioil purchased petroleum products	313,523	327,082	The Product Offtake and Crude Oil Supply Agreement (POCSA) and Feedstock Supply Agreement.
		>> Thaioil purchased natural gas	2,359	3,166	The 9-month gas supply agreements expired in 2024. (under renewal process)
		>> Thai Lube Base Plc purchased natural gas	353	344	The 10-year natural gas supply agreements expire in 2026
		>> TOP SPP Co., Ltd. purchased natural gas	7,445	8,451	The 25-year natural gas supply agreements expire in 2041
		>> SAK Chaisidhi Co., Ltd. purchased natural gas	17	80	The 10-year natural gas supply agreements expire in 2028
		>> LABIX Co., Ltd. purchased natural gas	838	802	The 10-year natural gas supply agreements expire in 2025
		>> Other expenses	125	123	
		>> Acquisition of assets	9	121	
		>> Trade accounts receivable	5	-	
		>> Other receivables	676	586	
		>> Trade accounts payable	49,852	48,344	
		>> Other payables	1	95	
		>> Lease liabilities	2	3	

Company	Relationship with Thaiol as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
Global Power Synergy Plc ⁽¹⁾ (GPSC)	>> 47.27% owned by PTT >> 10% owned by Thaiol >> Common Directors: Mr. Bandhit Thamprajamchit and Mr. Kris Imsang	>> Revenue	-	2,482	The 25-year agreement to obtain compensation for the construction cost of pipeline to supply water, and petroleum product and fuel oil reserve sales agreement (2023-2025). The 7-year and 3-month sales and purchase agreement of backup power expires in August 2025 The 2-year sales agreement of raw water reserve expires in April 2027
		>> Thaiol generated revenue from services			
		>> TOP SPP Co., Ltd. generated revenue from backup power	1	1	
		>> Thaiol received dividend	251	169	
		>> Other income	21	25	
		>> Expenses			
		>> Thaiol-purchase of raw water for production process	6	-	
		>> Acquisition of assets	3	-	
		>> Other receivables	3	5	
		>> Other non-current liabilities	3	3	
Energy Recovery Unit Co., Ltd.	>> Wholly owned by GPSC	>> Other non-current liabilities	3,092	3,092	The sales and purchase agreement of the Energy Recovery Unit (ERU) to supply power and steam to the Clean Fuel Project (CFP). Thaiol transferred the rights of use of ERU assets to Energy Recovery Unit Co., Ltd.

Company	Relationship with Thaioil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
Thai Petroleum Pipeline Co., Ltd. (THAPP)	>> 40.53% owned by PTT Oil and Retail Business Plc (PTTOR) >> 9.19% owned by Thaioil >> Thaioil's executive on THAPP Board: Mr. Chatapong Wungtanagorn	>> Revenue			
		>> Thaioil received dividend	71	212	
		>> Expenses			
		>> Thaioil paid transportation service expenses and other expenses	109	106	The 20-year service agreement for transportation of petroleum products started from May 17, 1994 or goals achieved (which have not been met)
		>> Other payables	7	8	
PTT Digital Solutions Co., Ltd. (PTTDG)	>> 20% owned by PTT >> 20% owned by Thaioil >> Thaioil's executive on PTTDG Board: Mr. Jeerawat Pattanasomsit	>> Revenue			
		>> Thaioil received dividend	37	30	
		>> Expenses			
		>> Thaioil paid service expenses	312	239	The one-year information technology and telecommunication services agreement expires in December 2025.
		>> Acquisition of assets	74	43	
		>> Other receivables	113	68	
		>> Other payables	155	126	
		>> Lease liabilities	4	5	
PTT Global Chemical Plc (GC)	>> 45.18% owned by PTT	>> Revenue			
		>> TOPNEXT International Co., Ltd. sold solvent products	198	235	Occasional sales and purchase of solvent product, and purchase of feedstock, considered normal business practice
		>> SAK Chaisidhi Co., Ltd.	1,094	160	
		>> Other income	2	2	

Company	Relationship with Thaiol as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
IRPC Plc (IRPC)	>> 45.05% owned by PTT	>> Expenses			
		>> TOPNEXT International Co., Ltd. purchased solvent products	254	210	
		>> SAK Chaisidhi Co., Ltd. purchased raw materials	46	-	
		>> TOP Solvent (Vietnam) LLC purchased solvent products	265	114	
		>> JKSEM Private Limited purchased solvent products	7	-	
		>> Other expenses	4	2	
		>> Trade accounts receivable	131	22	
		>> Other receivables	2	1	
		>> Trade accounts payable	18	21	
		>> Revenue			Occasional sale and purchase of petroleum, petrochemical and solvent products, considered normal business practice
		>> Thaiol sold petroleum products	-	142	
		>> Thai Paraxylene Co., Ltd. sold petrochemical products	1,649	2,244	
		>> TOPNEXT International Co., Ltd sold solvent products	158	91	
		>> Expenses			
		>> Thai Lube Base Plc. purchased raw materials	84	89	
		>> TOPNEXT International Co., Ltd. purchased solvent products	2,018	1,489	
		>> Sak Chaisidhi Co., Ltd. purchased raw materials	408	475	
		>> Trade accounts receivable	15	68	
		>> Trade accounts payable	157	94	

Company	Relationship with Thairoil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
PTT Oil and Retail Business Plc (PTTOR)	>> 75% owned by PTT >> Common Director: Ms. Pattaralada Sa-ngasang	>> Revenue			
		>> Thairoil sold petroleum products	185,672	200,817	The Product Offtake and Crude Oil Supply Agreement (POCSA) and Feedstock Supply Agreement
		>> Thai Lube Base Plc sold lube base oil products	4,634	3,956	Occasional sales of lube base oil, considered normal business practice
		>> Saphip Co., Ltd. sold ethanol products	665	675	Occasional sales of ethanol, considered normal business practice.
		>> LABIX Co., Ltd. sold petrochemicals products	2	-	
		>> Other income	12	13	
		>> Expenses			
		>> Thairoil purchased petroleum products	342	114	Occasional purchase of petroleum products and lube base oil, considered normal business practice
		>> Thai Paraxylene Co., Ltd. purchased fuel for production	3	3	
		>> TOPNEXT International Co., Ltd. purchased solvents	18	20	
		>> Saphip Co., Ltd. purchased petroleum products	5	7	
		>> Other expenses	47	24	
		>> Trade accounts receivable	11,424	11,335	
		>> Trade accounts payable	2	94	
		>> Other payables	-	4	
GC Maintenance and Engineering Co., Ltd.	>> Wholly owned by GC	>> Acquisition of assets	92	41	
		>> Other expenses	9	4	
		>> Other payables	38	4	

Company	Relationship with ThaiOil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
IRPC Polyol Co., Ltd.	>> 50% owned by IRPC	>> Revenue >> TOPNEXT International Co., Ltd. sold solvents	5	3	Occasional sales of solvent products, considered normal business practice.
NPC Safety and Environmental Service Co., Ltd.	>> Wholly owned by GC	>> Expenses >> Other expenses	1	1	
Energy Complex Co., Ltd.	>> 50% owned by PTT	>> Expenses >> Other expenses >> Interest expense-finance lease >> Other non-current assets >> Other payables >> Lease liabilities	38 1 15 3 59	45 1 15 6 20	Three-year property lease agreement expires in November 2027 and can be renewed on a three-year basis
Global Green Chemicals Plc	>> 72.29% owned by GC	>> Expenses >> ThaiOil purchased petroleum products >> Trade accounts payable	2,098 84	2,154 97	Occasional sales of petroleum products, considered normal business practice
PTT International Trading Pte. Ltd.	>> Wholly owned by PTT	>> Revenue >> ThaiOil sold petroleum products >> Thai Paraxylene Co., Ltd. sold petrochemical products >> Thai Lube Base Plc sold lube base oil products	13,918 5,267 4	11,091 2,416 31	Occasional sales of petroleum products, lube base oil and petrochemical products, considered normal business practice.

Company	Relationship with Thailoil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
		>> Thailoil generated revenue from P1 Collaboration Agreement	432	585	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expired in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Thai Paraxylene Co., Ltd. generated revenue from P1 Collaboration Agreement	8	3	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expired in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Revenue from oil price crack spread swap contract	76	42	
		>> Expenses			
		>> Expenses on petroleum products	5,829	2,577	
		>> TOP Solvent (Vietnam) LLC. purchased solvent products	631	376	
		>> JSKEM Private Limited purchased solvent products	87	35	
		>> Othe expenses	45	-	
		>> Trade accounts receivable	1,503	3,276	
		>> Other receivables	427	636	
		>> Derivatives assets	18	-	
		>> Trade accounts payable	39	33	

Company	Relationship with Thaiol as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
PTT Phenol Co., Ltd. ⁽¹⁾	>> Wholly owned by GC	>> Expenses >> TOPNEXT International Co., Ltd. purchased solvent products	-	17	Occasional purchase of solvent products, considered normal business practice.
Vencorex (Thailand) Co., Ltd.	>> Wholly owned by GC	>> Revenue >> TOPNEXT International Co., Ltd. sold solvent products >> Trade accounts receivable	2 -	5 1	Occasional sales of solvents products, considered normal business practice.
GC Polyols Co., Ltd.	>> 82.10% owned by GC	>> Expenses >> TOP Solvent (Vietnam) LLC. purchased solvent products >> Trade accounts payable	8 1	2 1	Occasional sales of solvents, considered normal business practice.
PTT Tank Terminal Co., Ltd.	>> Wholly owned by PTT >> Common Directors: Mr. Kris Imsang and Mr. Prasong Intaranongpai	>> Expenses >> Sak Chaisidhi Co., Ltd. paid storage tank service expenses >> Other payables	27 -	24 2	The 24-year storage tank service agreement expires on September 30, 2038
Thai Tank Terminal Co., Ltd.	>> 36.43% owned by GC	>> Expenses >> Sak Chaisidhi Co., Ltd. paid storage tank service expenses >> Other payables	17 2	13 -	The three-year storage tank service agreement expires on December 31, 2025.
Combined Heat and Power Producing Co., Ltd. (CHPP)	>> Wholly owned by GPSC	>> Expenses >> Thaiol purchases fuels for production process	4	5	Occasional purchase of fuels for production process, considered normal business practice

Company	Relationship with Thailoil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
GC-M PTA Co., Ltd.	>> 74% owned by GC	>> Revenue >> Thai Paraxylene Co., Ltd. sold petrochemical products >> Trade accounts receivable	3,980 143	5,462 423	Occasional sales and purchase of petrochemical products, considered normal business practice.
Business Services Alliance Co., Ltd.	>> 25% owned by PTT	>> Expenses >> Other expenses >> Other payables	1 1	- -	
PTT LNG Co., Ltd.	>> Wholly owned by PTT	>> Revenue >> TOPNEXT International Co., Ltd. sold solvent products	1	-	Occasional sales of solvents products, considered normal business practice.
Nuplex Resins (Vietnam) Pty Ltd.	>> Wholly owned by GC	>> Revenue >> TOP Solvent (Vietnam) LLC. sold solvent products >> Trade accounts receivable	22 3	21 3	Occasional sales of solvent products, considered normal business practice
PTT International Trading London Ltd.	>> Wholly owned by PTT	>> Revenue >> Thailoil generated revenue from P1 Collaboration Agreement	37	23	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expired in December 2024 and has been renewed. The agreement will be valid until termination by either party.

Company	Relationship with Thaitoil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
PTT International Trading USA Inc.		>> Thai Paraxylene Co., Ltd. generated revenue from P1 Collaboration Agreement	1	-	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expired in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Other receivables	36	26	
	>> Wholly owned by PTT	>> Revenue >> Thaitoil generated revenue from P1 Collaboration Agreement	26	2	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expired in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Other receivables	24	2	

Company	Relationship with Thaioil as at December 31, 2024	Transaction	Value (THB Million)		Conditions
			2024	2023	
PTT MEA Ltd.	>> Wholly owned by PTT	>> Revenue >> Thaioil generated revenue from P1 Collaboration Agreement	14	11	The three-year P1 Collaboration agreement for the sourcing of crude and condensate and supplying of products within PTT Group expired in December 2024 and has been renewed. The agreement will be valid until termination by either party.
		>> Thai Paraxylene Co., Ltd.- revenue from P1 Collaboration agreement	1	-	
		>> Expenses >> Thaioil purchased bunker oil	-	86	Occasional sales of bunker oil, considered normal business practice.
		>> Other receivables	14	5	

Remarks:

⁽¹⁾ On March 31, 2023, PTT Phenol Co., Ltd., filed for dissolution with the Department of Business Development, Ministry of Commerce. As of December 31, 2023, PTT Phenol was in the liquidation process.



Opinion of the Audit Committee on Connected Transactions

The Audit Committee does not have any difference in opinion from that of the Board of Directors.

Policy on Future Connected Transactions

Thaioil is committed to full compliance with laws, rules and regulations set forth by the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET), including generally acceptable accounting principles on the disclosure of related parties and entities and connected transactions defined by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King.

In case of any accounting disagreement and discrepancy on related party transactions with either persons or

entities, the Audit Committee is charge for reviewing and making decisions on the appropriateness of such transactions. Should any transactions need specific knowledge and expertise, Thaioil is to acquire comments and suggestions from a third party with applicable proficiency, such as the external auditor or independent asset assessor and individuals with conflicts of interests. The opinions of the Audit Committee or the proficient third party will serve as insights and information for the approval by the Board or the shareholders, as applicable. This is to ensure that such transactions are not considered an illegal transfer of benefit among and between Thaioil, subsidiaries, joint ventures and associates, or related parties and shareholders, but transactions taken for the maximum benefit of the shareholders, especially minor shareholders.

Management Discussion and Analysis of Financial Position and Operating Results Fiscal Year 2024

Operating Results-Consolidated Financial Results

		2024	2023	+/(−)
Gross Integrated Margin (GIM)	USD/barrel	7.1	10.0	(2.9)
<u>excluding</u> Stock Gain/(Loss) ⁽¹⁾				
Group Integrated Margin (GIM)	"	5.6	9.8	(4.2)
<u>including</u> Stock Gain/(Loss) ⁽¹⁾				
Sales Revenue	Million Baht	455,857	459,402	(3,545)
Net Realized Gain/(Loss) on Financial Instruments	"	626	(2,493)	3,119
EBITDA	"	22,026	35,453	(13,427)
Gain/(Loss) on Fair Value Measurement of Financial Instruments	"	(265)	(356)	91
Net Foreign-Exchange Gain/(Loss) ⁽²⁾	"	52	213	(161)
Gain from Debenture Buy-back	"	1,134	-	1,134
Financial Costs	"	(4,052)	(4,089)	37
Reversal of Income Tax/(Expenses)	"	(2,283)	(4,672)	2,389
Net Profit/(Loss)	"	9,959	19,443	(9,484)
Basic Earnings/(Loss) per Share	Baht	4.46	8.70	(4.24)
Stock Gain/(Loss)	Million Baht	(5,913)	(808)	(5,105)
Reversal/(Write-down) on Crude and Petroleum Product Inventory ⁽³⁾	"	(80)	(125)	45

Remarks:

- ⁽¹⁾ Gross Integrated Margin (GIM) is the integrated margin among Thailoil Refinery, Thai Lube Base Plc, Thai Paraxylene Co., Ltd., and LABIX Co., Ltd.
- ⁽²⁾ Including the net foreign-exchange gain/(loss) on foreign currency assets and liabilities in 2024 and 2023 of THB (301) million and THB 523 million.
- ⁽³⁾ Including reversal/(write-down) of allowance for the decline in values of crude and petroleum product inventory, adjusted to realizable values and reversal/(write-down) of petroleum products at cost.

In 2024, Thailoil and Subsidiaries commanded a lower refinery utilization rate due to a 13-day unplanned shutdown at the Crude Distillation Unit-3 (CDU-3) in January and an 11-day planned shutdown at CDU-1 and related units in May. These, together with the declining prices of several products, resulted in sales revenue of THB 455,857 million, THB 3,545 million decreased from that of last year. The gross integrated margin (GIM) dropped due to the lower spreads of gasoline, jet/kerosene, and diesel against Dubai prices, in line with rising supply from new refineries. Meanwhile, the GIM of the aromatics business increased from the rising spread between benzene and ULG 95, resulted from China's low benzene inventory during the first three quarters of 2024. The gross profit of Linear Alkyl Benzene (LAB) business dropped in view of the lower domestic demand. The situation of which also happened to the lube base oil business. This resulted in Thailoil and Subsidiaries' GIM excluding the crude oil stock dropped by 2.9 USD per barrel to 7.1 USD per barrel. Compared to that of 2023, the 2024 average Dubai crude oil price decreased due to concerns about a global economic slowdown-particularly in the USA and China. This resulted in Thailoil and Subsidiaries' booking a stock loss of THB 5,913 million, a sizeable THB 5,105-million increment from last year, while the write-down on crude and petroleum product inventory was booked at THB 80 million, an improvement of THB 45 million from the year before. By incorporating this with the net realized gain on financial instruments of THB 626 million (including only what incurred from commodity hedging), Thailoil and Subsidiaries' EBITDA was THB 22,026 million, a decrease of THB 13,427 million. Thailoil and Subsidiaries' loss on fair value measurement of financial instruments was THB 265 million, while the net foreign exchange gain equaled THB 52 million and the gain from bond buybacks equaled THB 1,134 million. Finally, after deducting depreciation, financial costs, and income-tax payables, Thailoil and Subsidiaries' 2024 net profit amounted to THB 9,959 million, decreasing THB 9,484 million from that of last year.

Results by Company for the Year 2024 versus 2023

Thailoil Refinery (Thailoil): Thailoil's utilization rate slightly dropped this year, while the sales revenue amounted to THB 486,610 million, or THB 5,445 million lower following the decrease of product prices. Thailoil's GIM excluding its oil stock was 5.3 USD per barrel, or 3.2 USD per barrel lower, due mainly to the narrowing spreads of gasoline, jet/kerosene, and diesel against Dubai crude oil prices. The oil stock loss amounted to THB 5,913 million, or THB 5,105 million greater loss year-on-year, while the write-down on crude and petroleum product inventory equaled THB 80 million, which improved by THB 45 million from that of last year. Incorporating the net realized gain on financial instruments of THB 481 million with the 2023 net loss on financial instruments of THB 2,650 million, Thailoil's EBITDA in 2024 equaled THB 12,232 million, or THB 14,057 million lower year-on-year. Nevertheless, Thailoil posted a loss on fair value measurement of financial instruments of THB 184 million-a slight improvement from that of last year, while gaining a net foreign exchange of THB 25 million, or THB 229 million higher than that of last year. So, after deducting depreciation, financial costs, and income-tax payables, the 2024 net profit for Thailoil refinery equaled THB 3,343 million, or THB 11,164 million lower year-on-year, or THB 9,886 million including dividend.

Thai Lube Base Plc (TLB): Cooperating among Thailoil and Subsidiaries on production planning, TLB's production of base oil increased 1%, and with rising outputs and sales, its revenue surged THB 423 million. Yet, economic uncertainties caused the base oil demand to slow down, in turn depressing the spreads between product and fuel oil prices. In 2024, therefore, TLB's EBITDA equaled THB 2,077 million dropping THB 601 million from that of last year, and the net profit fell THB 499 million from last year to THB 1,485 million.

Thai Paraxylene Co., Ltd. (TPX): In view of rising total product sales, TPX's revenue amounted to THB 56,448 million, or THB 2,441 million increase from that of last year. Its product-to-feed margin increased 17 per USD ton, due mainly to the significant increase in the spread between benzene and ULG 95. Incorporated with the net

gain on financial instruments of THB 138 million, TPX's EBITDA equaled THB 2,939 million, an increment of THB 1,655 million from that of last year. TPX posted a loss on fair value measurement of financial instruments of THB 18 million, against the THB 7-million gain of the year before; while TPX enjoyed a net foreign exchange gain of THB 25 million in 2024, against the loss of THB 33 million of last year. In 2024, TPX posted a net profit of THB 1,769 million, or THB 1,368 million increase from last year.

LABIX Co., Ltd. (LABIX): The company posted a 1% rise in LAB outputs and sales, while LAB prices dropped following its feedstock prices, thus lowering the sales revenue to THB 25,837 million, or THB 778 million lower. LAB gross profit margin also dropped due to a lower domestic demand, and LAB market supply increased; this resulted in LABIX's lower EBITDA of THB 438 million. In 2024, LABIX enjoyed a foreign exchange gain amounting to THB 7 million, against a loss of THB 33 million last year. So, after deducting depreciation, financial costs, and income-tax payables, LABIX's net profit decreased THB 305 million year-on-year.

In 2024, the aromatics business group (including 100% TPX shares and its 75% shares in LABIX) generated a sales revenue of THB 80,529 million, EBITDA of THB 4,158 million, and a net profit of THB 2,013 million.

TOP SPP Co., Ltd. (TOP SPP): The company posted THB 11,826 million in sales revenue, or THB 962 million lower than that of last year, due mainly to the sharp fall in the average power prices, consistent with natural gas prices. Meanwhile, the sales volume and overall fuel consumption for power generation coinciding with the first full-year operation of TOP SPP Expansion Project, which first went commercial in Q2/2023. This year, TOP SPP commanded THB 3,008 million in EBITDA, or THB 21 million dropped from last year, THB 53 million in depreciation increment, and THB 203 million in income tax increment. However, TOP SPP posted a loss of THB 202 million in 2023 due to the revocation of a contract on interest-rate and financial-cost swap related to its loan refinancing. This resulted in TOP SPP's net profit of THB 1,649 million, THB 88 million dropped from last year.

Thaioil and Subsidiaries held 10% shares in Global Power Synergy Plc, thus booking THB 251 million in dividends in 2024, or THB 81 million higher than that of last year.

Thaioil Solvent Co., Ltd. (TOS): The business group commanded a 92% utilization rate of solvent production together with an approximate 4,000 tons of sales increment compared to that of last year, thus resulting in THB 19,724 million in sales revenue, or THB 343 million increased from that of last year. The business group posted THB 919 million in EBITDA, or THB 32 million increased following the rising gross profit. In 2024, TOS booked a loss in foreign-exchange and in fair value measurement of financial instruments of THB 29 million, against a gain of THB 29 million last year. So, after deducting depreciation, financial costs, income-tax payables, and uncontrolled equity, The business group posted a net profit of THB 385 million, or a THB 18 million drop year-on-year.

PT TOP Investment Indonesia (TII): The company realized a net loss of THB 374 million, a further loss of THB 174 million from last year resulted from its equity loss in PT Chandra Asri Pacific Tbk (CAP). This resulted from the decrease in product price spread in line with the unrecovered petrochemical market demand and new supply capacities, in addition to CAP's major turnaround in Q2/2024.

Thaioil Ethanol Co., Ltd. (TET): The company booked the revenue from Saphip Co., Ltd (SAPTHIP) where it held 50% share, and dividends from Ubon Bio Ethanol Plc (UBE) where it held 12.39% share. TET posted a revenue of THB 1,681 million, THB 198 million lower year-on-year due to SAPTHIP's weaker ethanol sales in line with the decreasing demand for E20 and E85, and more write-down on inventory than that of last year. This resulted in TET's EBITDA of THB 31 million, or THB 56 million dropped from that of last year, while a net loss equaled THB 74 million, posting further loss of THB 20 million from that of last year.

Analysis of Consolidated Financial Position

Unit: THB Million

Financial Position	As at December 31, 2024	As at December 31, 2023	+/(−)
Total Assets	409,010	419,993	(10,983)
Total Liabilities	242,825	251,681	(8,856)
Total Equity-net	166,185	168,312	(2,127)

Total Assets

As of December 31, 2024, Thaioil and Subsidiaries commanded THB 409,010 million in total assets, THB 10,983 million or 3% lower than that of last year, with the main reasons as follows

- >> Cash and cash equivalents and short-term investments increased THB 5,362 million, due mainly to short-term investments in assets surging by THB 4,751 million following greater saving in foreign currencies, and an increase in cash of THB 611 million resulted from cash from operation deducted by cash for investing and financing activities.
- >> Current assets fell THB 18,511 million, due mainly to the drop in inventory of THB 12,079 million in line with the lower prices and inventory of crude and products, and a lower account receivables of THB 3,554 million following lower product prices. In addition, VAT receivables dropped by THB 1,267 million due to VAT refund payment made during the period. Also, the advance payment of corporate tax dropped THB 830 million due to the corporate tax refund for 2022.
- >> Non-current assets increased THB 2,167 million from the net increase of THB 6,673 million in property, plant, and equipment. This resulted from planned project investments, including CFP. Nevertheless, the fair value through other comprehensive income decreased THB 2,940 million with the adjusted fair value of investments in line with a plunge of GPSC and UBE share value, and a decrease in Rights of Use (ROU) of THB 1,842 million.

Total Liabilities

As of December 31, 2024, Thaioil and Subsidiaries posted THB 242,825 million in total liabilities (inclusive of all liabilities), a decline of THB 8,856 million or 4% year-on-year, mainly due to

- >> Current liabilities dropped THB 954 million, mainly due to a drop in income tax payables of THB 2,709 million and short-term loans of THB 474 million, against an increase in account payables of THB 1,395 million. This resulted from the greater extension of commercial credit for PTT Plc and an increase in excise tax payables of THB 1,073 million following higher sales and excise taxes.
- >> Long-term loans and debentures (including current portions) dropped THB 7,846 million, since the current portion decreased THB 5,600 million. In addition, the net current portion dropped THB 6,140 million due to partial call before the maturity date as well as foreign exchange spread. On the other hand, long-term loans from financial institutions (including current portion) increased THB 3,907 million from additional loans during the year.
- >> Other non-current liabilities fell THB 56 million, mainly due to a fall in the current portion of finance lease liabilities of THB 1,577 million, and a drop in the provision for long-term employee benefit. Financial derivatives liabilities, however, increased THB 1,537 million from the adjusted fair value of derivative liabilities.

Total Equity

As of December 31, 2024, Thaioil and Subsidiaries posted THB 166,185 million in total equity, a decline of THB 2,127 million year-on-year. This resulted from other components of the equity fell THB 3,254 million following a decrease in financial assets measured by a fair value

through other comprehensive income of investment. Meanwhile, the retained earnings of THB 1,129 million increased from the 2024 net operation results deducted by dividend payment.

Analysis of Cash Flow and Financial Ratios

Briefly Cash Flow Statement

Unit: THB Million

	Consolidated Financial Statements	Separate Financial Statements
Net cash flow from operating activities	39,355	29,956
Net cash flow used in investing activities	(14,009)	(6,121)
Net cash flow used in financing activities	(24,627)	(21,805)
Net increase in cash and cash equivalents	719	(2,030)
Cash and cash equivalents at the beginning of period	28,432	23,737
Effect of exchange rate changes on cash and cash equivalents	(109)	(195)
Cash and cash equivalents at the end of period	29,042	25,572

In 2024, Thaioil and Subsidiaries commanded THB 39,355 million in cash flow from operating activities, arising from the pre-income tax profit of THB 12,264 million, supplemented by THB 11,090 million adjustment to the pre-tax profit. Meanwhile, Thaioil had THB 20,339 million in cash from operating assets and liabilities, and the net cash paid for income taxes of THB 4,338 million. Thaioil and Subsidiaries posted THB 14,009 million in cash flow from investing activities, mainly for purchasing property, plant, and equipment (THB 8,955 million) mostly under the investment in CFP. Thaioil had THB 4,961 million of cash paid for short-term investments in financial assets.

Furthermore, Thaioil and Subsidiaries commanded THB 24,627 million in cash flow for financing activities, mainly from debenture calling and buybacks of THB 10,303 million and cash paid for short-term and long-term

loans from financial institutions of THB 15,974 million. Meanwhile, Thaioil had THB 19,238 million in net cash of short-term and long-term loans. Thaioil and Subsidiaries posted THB 8,832 million of cash for dividend payment along with cash for financial costs totaling THB 7,618 million.

In view of the cash flow from aforementioned activities, Thaioil and Subsidiaries' cash and cash equivalents increased THB 719 million from that of last year. Thaioil was affected by exchange rate changes, which lowered the cash and cash equivalents by THB 109 million. Incorporating with cash and cash equivalents at the beginning of the period of the THB 28,432 million, Thaioil and Subsidiaries commanded cash and cash equivalents of THB 29,042 million as of December 31, 2024.

Financial Ratios

Financial Ratios		2024	2023 ⁽¹⁾
Current Ratio	Times	1.7	1.7
Interest Coverage Ratio ⁽¹⁾	"	5.4	8.7
Long-term Loans/Total Capitalization	Percent	51	52
Long-term Loans/Total Equity	Times	1.0	1.1
Total Liabilities/Total Equity	"	1.5	1.5
Net Debt/Equity	"	0.8	0.9

Remark:

⁽¹⁾ Excluding depreciation and amortization.

In 2024, Thaioil and Subsidiaries' current ratio amounted to 1.7 times, unchanged from that of last year, while the interest coverage ratio equaled 5.4 times or 3.3 times lower than that of last year due to lower performance results in 2024. However, the cash flows and current ratio, as well as other financial ratios shown in the table above, were still considered healthy, thus bolstering

the confidence that Thaioil and Subsidiaries command sufficient liquidity for operations and investments, and are fully capable of repaying loans and complying with essential loan terms.

Moreover, in 2024, Thaioil and Subsidiaries reported lower long-term loans to total capitalization, long-term loans to total equity, and total liabilities to total equity than last year.

Outstanding Consolidated Liabilities (Short-Term and Long-Term)
As of December 31, 2024 and 2023

Unit: THB Million

	For the year ended as at December 31	
	2024	2023
Short-term loans from financial institutions	2,725	3,198
Current portion of long-term loans from financial institutions	3,777	3,061
Long-term loans from financial institutions, net current portion	19,226	16,035
Long-term loans from a third party	179	191
Current portion of debentures	1,400	7,000
Debentures, net current portion	127,492	133,632
Total	154,799	163,117

Details of Long-Term Borrowings and Outstanding Debentures as of December 31, 2024
By Company and Denomination

Unit: THB Million

	Thai Oil Plc	LABIX Co., Ltd.	Thaioil Ethanol Co., Ltd.	Thaioil Treasury Center Co., Ltd.	Total
USD-denominated Debentures ⁽¹⁾	5,774	-	-	93,635	99,409
THB-denominated Debentures	29,843	-	-	-	29,843
THB-denominated Borrowings	20,839	1,974	-	24	22,837
Borrowings in other currencies ⁽¹⁾	-	-	345	-	345
Total	56,096	1,974	345	93,659	152,074

Remark:

⁽¹⁾ Including foreign exchange gain/(loss) from foreign currency-denominated liabilities revaluation

Capital Expenditure by Company for 2024 and 2023

Unit: THB Million

	For the year ended December 31	
	2024	2023
Thai Oil Plc	7,888	12,912
Thai Paraxylene Co., Ltd.	69	8
LABIX Co., Ltd.	134	26
Thai Lube Base Plc	138	198
Thaioil Solvent Co., Ltd.	105	42
Thaioil Ethanol Co., Ltd.	48	80
Thaioil Energy Service Co., Ltd.	0	0
PT TOP Investment Indonesia	0	0
TOP SPP Co., Ltd.	66	731
Total	8,955	14,504

Remark:

⁽¹⁾ Excluding related-party transactions within Thaioil and Subsidiaries.

In 2024, Thaioil and Subsidiaries posted a total capital expenditure of THB 8,955 million: THB 7,888 million under Thaioil and the remaining THB 1,067 million under subsidiaries. This capital expenditure was allocated to the following major projects:

- >> THB 5,625 million for CFP
- >> THB 454 million for the RHCU Phase 2 Construction Project
- >> THB 65 million for the Corporate Venture Capital (CVC) Project
- >> THB 226 million for the Digital Transformation Project
- >> THB 30 million for the New Fuel Oil Storage Tank Construction Project
- >> THB 4 million for the Water Piping Project from Bang Phra Reservoir.

In 2023, Thaioil and Subsidiaries reported a total capital expenditure of THB 14,504 million: THB 12,912 million under Thaioil and the remaining THB 1,592 million under subsidiaries. This capital expenditure was allocated to the following major projects:

- >> THB 11,646 million for CFP
- >> THB 255 million for the RHCU Phase 2 Construction Project
- >> THB 150 million for the Corporate Venture Capital (CVC) Project
- >> THB 121 million for the Digital Transformation Project
- >> THB 44 million for the New Fuel Oil Storage Tank Construction Project
- >> THB 12 million for the Water Piping Project from Bang Phra Reservoir
- >> THB 5 million for the Office Building Project.

Investors can access historical details under “Management Discussion and Analysis of Financial Position and Operating Performance” at the corporate website www.thaioilgroup.com – Investor Relations/Financial Highlights.

Outlook and Impacts of Sustainability

To upgrade the quality of life for all by leveraging our sustainable energy and chemical businesses, Thailoil and Subsidiaries strive to build on our strong foundation, leading to robust growth. Our goal is to become a highly competitive energy and chemical company that strives for sustainable growth while paying due regard to Environment, Social and Governance (ESG) in line with our business context and future directions of the energy industry while meeting expectations and maintaining our engagement with all stakeholders.

In 2024, Thailoil and Subsidiaries continued to face various challenges from incidents in Thailand and abroad. The challenges of which were mostly caused by economic slowdowns and geopolitical conflicts beyond control, thus resulting in overall business uncertainty directly hurting our array of businesses. The challenges included various accords and more explicit measures under the United Nations Framework Convention on Climate Change (UNFCCC) and the draft act on climate change prepared

to be enforced by the public sector to support entities’ development and production of low carbon products. This shall lead to energy transition and the Energy Mix era, where there were mixes of diverse energy forms, including a declining proportion of fossil energy consumption, replaced by other forms of more eco-friendly energy. Thailand’s target determination of Net Zero GHG Emissions by 2065 in pursuit of a low-carbon society, shall cause changes in consumers’ needs and behavior. Thus, Thailoil and Subsidiaries have integrated sustainability as a part of the business strategy to upgrade our competitiveness and sustainable growth.

The analysis and assessment of 2024 materiality issues indicated that climate change would continue to wield both positive and negative effects on stakeholders and businesses over the long term. Thailoil and Subsidiaries have therefore integratively managed our business to ensure flexibility and preparedness for short-term and long-term business opportunities to align with the vision of Empowering Human Life through Sustainable Energy and Chemicals, striving to become a centennial sustainable organization.

For additional details, please go to “Sustainability” on page 80 under “Policy and Goals for Sustainability Management” and “Sustainability Management in Environmental Aspect”.

Summary of Financial Data

Summary of consolidated financial statements of Thaioil and Subsidiaries for the period 2022-2024

Statement of Financial Position

Unit: THB Million

Statement of Financial Position	As at 31 December		
	2024	2023 ⁽¹⁾	2022 ⁽¹⁾
Assets			
Current assets			
Cash and cash equivalents	29,042	28,432	43,576
Deposits at financial institutions as collaterals	-	-	343
Short-term investments	10,695	5,945	-
Trade accounts receivable	27,601	31,154	28,759
Other receivables	2,212	2,353	4,361
Inventories	40,577	52,656	55,343
Derivative assets	58	219	1,408
Prepaid corporate income tax	1,368	2,197	2,197
Value-added tax receivables	524	1,790	1,957
Other current assets	144	625	15,884
Total current assets	112,222	125,371	153,828
Non-current assets			
Financial assets measured at fair value through profit or loss	686	722	798
Financial assets measured at fair value through other comprehensive income	11,313	14,253	21,394
Investments in joint ventures	31,427	32,039	32,603
Investments properties	103	103	103
Property, plant and equipment	224,153	217,479	203,290
Right-of-use assets	20,382	22,224	24,038
Intangible assets	3,255	3,230	3,348
Deferred tax assets	3,460	2,502	1,125
Other non-current assets	2,010	2,069	4,054
Total non-current assets	296,788	294,622	290,753
Total assets	409,010	419,993	444,581

Statement of Financial Position

As at 31 December

	2024	2023 ⁽¹⁾	2022 ⁽¹⁾
Liability and equity			
Current liabilities			
Short-term loans from financial institutions	2,725	3,199	1,892
Trade accounts payable	51,579	50,184	74,154
Other payables	3,698	3,910	4,948
Current portion of long-term loans from financial institutions	3,777	3,061	2,884
Current portion of debentures	1,400	7,000	17,317
Derivatives liabilities	3	29	193
Current portion of lease liabilities	1,445	1,402	1,401
Excise duty payables	2,536	1,463	452
Income tax payables	445	3,154	432
Estimated short-term liabilities	55	99	-
Total current liabilities	67,663	73,501	103,673
Non-current liabilities			
Long-term loans from financial institutions-net of current portion	19,226	16,035	19,807
Long-term loans from third parties	179	191	216
Long-term loans from related parties-net of current portion	-	-	-
Debentures-net of current portion	127,492	133,632	131,635
Derivatives liabilities	2,646	1,109	1,980
Lease liabilities-net of current portion	18,112	19,688	21,107
Deferred tax liabilities	18	16	3
Other non-current liabilities	7,491	7,509	7,503
Total non-current liabilities	175,162	178,180	182,251
Total liabilities	242,825	251,681	285,924

Statement of Financial Position

As at 31 December

	2024	2023 ⁽¹⁾	2022 ⁽¹⁾
Shareholders' Equity			
Share capital			
Registered	22,338	22,338	23,151 ⁽²⁾
Issued and fully paid-up	22,338	22,338	22,338
Share premium on ordinary shares	10,699	10,699	10,699
Appropriated retained earnings			
Statutory reserve	2,315	2,315	2,315
Other reserves	245	245	245
Unappropriated retained earnings	142,424	141,288	127,095
Other deficits	(4,344)	(4,343)	(4,343)
Other components of shareholders' equity	(10,230)	(6,974)	(2,315)
Equity attributable to owners of the company	163,446	165,568	156,034
Non-controlling interests	2,739	2,744	2,623
Total equity	166,185	168,312	158,657
Total liabilities and equity	409,010	419,993	444,581

Remarks:

⁽¹⁾ The comparative figures have been reclassified to ensure that they can be compared with changes in the data presentation of the current fiscal year. Accounting reclassification of property, plant and equipment, and other non-current assets does not affect the reported profit or shareholders' equity.

⁽²⁾ Registered share capital, issued, and offered of 2,315,147,873 ordinary shares at a par value of THB 10 each, totaling THB 23,151 million, and fully paid-up share capital of 2,233,835,566 ordinary shares at a par value of THB 10 each, for a total of THB 22,338 million at year-end 2022.

Statement of Income

Unit: THB Million

Statement of Income	For the year ended December 31		
	2024	2023	2022
Revenue			
Revenue from sales	455,857	459,402	505,703
Subsidy from Oil Fuel Fund	10,920	9,842	23,886
Gain from financial instruments	360	-	-
Foreign exchange gain	52	213	-
Gain on disposal of investment in associate	-	-	10,038
Gain from investment reclassification	-	-	7,297
Dividend income	269	201	81
Other income	1,739	1,138	781
Total revenue	469,198	470,796	547,786
Expenses			
Cost of sales	(450,010)	(436,164)	(481,137)
Selling expenses	(1,140)	(950)	(1,052)
Administrative expenses	(2,734)	(2,570)	(3,130)
Loss from financial instruments	-	(2,850)	(16,006)
Exchange loss	-	-	(64)
Total expenses	(453,884)	(442,534)	(501,389)
Share of profits (losses) from investments in joint ventures and associates	(132)	83	(513)
Profit from bond buyback	1,134	-	-
Profit before finance costs and income tax expenses	16,316	28,345	45,884
Finance costs	(4,052)	(4,088)	(3,860)
Profit before income tax expenses	12,264	24,257	42,024
Income tax expenses	(2,283)	(4,672)	(8,918)
Net profit for the year	9,981	19,585	33,106

Statement of Income

For the year ended December 31

2024

2023

2022

Other comprehensive income

Changes in fair value of financial assets at fair value through other comprehensive income, net of tax	(2,369)	(5,793)	1,486
Net actuarial gain (loss), net of income tax	-	(2)	1,569
Cash flow hedges, net of tax	192	1,482	(3,035)
Cost of hedging, net of tax	(666)	11	(532)
Exchange rate differences on translation of financial statements	(383)	(406)	992
Share of other comprehensive income (expense) of an associate accounted for using the equity method, net of tax	(27)	46	210
Other comprehensive income (expense) for the year	(3,254)	(4,663)	690
Total comprehensive income (expense) for the year	6,727	14,922	33,796
Profit (loss) attributable to:			
Owners of the parent company	9,959	19,443	32,668
Non-controlling interests	22	142	438
Net profit (loss) for the year	9,981	19,585	33,106
Total comprehensive income (expense) attribute to:			
Owners of the parent company	6,703	14,782	33,354
Non-controlling interests	24	140	442
Total comprehensive income (expense) for the year	6,727	14,922	33,796
Basic earnings (loss) per share (Baht)	4.46	8.70	15.63

Statement of Cash Flows

Unit: THB Million

Statement of Cash Flows	For the year ended December 31		
	2024	2023	2022 ⁽¹⁾
Cash flow from operating activities			
Net profit (loss) for the year	9,981	19,585	33,106
Adjustments to reconcile profit (loss) to cash:			
Loss (reversal) of reduction of inventory to net realizable value	(582)	(55)	558
Depreciation and amortization	8,106	7,799	7,744
Allowance of expected credit loss	45	3	3
Finance costs	4,052	4,089	3,860
Net unrealized loss on foreign exchange	220	779	1,034
Share of loss (profit) from investment in joint ventures and associates	132	(84)	514
Gain from investment reclassification	-	-	(7,297)
Dividends income	(269)	(201)	(81)
Difference on lease termination	(2)	-	(78)
Profit from bond buyback	(1,134)	-	-
Gain on disposal of investment in associates	-	-	(10,038)
Loss on hedging of forecasted revenue transaction	301	225	271
(Gain) loss from changes in fair value of financial assets	76	118	(18)
Unrealized loss from changes in fair value of derivatives	223	130	183
(Gain) loss on write-off of property, plant and equipment	(1)	0	(0)
(Gain) loss on write-off of property, plant, and equipment	0	9	(0)
Estimated short-term liabilities (reversal)	(43)	98	-
Reversal of impairment loss on property, plant and equipment, and investment property	-	-	687
Gain on disposal of assets and liabilities held-for-sale	-	-	(12)
Amortization of advance receipts for land lease and others	(34)	(24)	(17)
Income tax expense	2,283	4,672	8,918
	23,354	37,143	39,337

Statement of Cash Flows

For the year ended December 31

	2024	2023	2022 ⁽¹⁾
--	------	------	---------------------

Changes in operating assets and liabilities

Trade accounts receivable	3,613	(2,532)	(5,430)
Other receivables	178	2,042	(3,316)
Receivables from Oil Fuel Fund	480	15,259	(12,316)
Value-added tax receivables	1,267	166	543
Inventories	12,661	2,743	(16,325)
Other non-current assets	(78)	44	(1,599)
Trade accounts payable	1,358	(23,967)	51,162
Other payables	(154)	(1,587)	(330)
Excise duty payables	1,073	1,011	(1,346)
Other non-current liabilities	(59)	(51)	746
Income tax received (paid)	(4,338)	(2,183)	(9,468)
Net cash generated from operating activities	39,355	28,088	41,656

Cash flow from investing activities

Dividends received	532	595	841
Decrease (increase) in deposits at a financial institution used as collateral	-	343	(15)
Proceeds from (repayment of) short-term investments in short-term financial assets	(4,961)	(5,766)	-
Payments for financial assets measured at fair value through other comprehensive income	(22)	(100)	(70)
Payments for financial assets measured at fair value through profit and loss	(43)	(45)	(85)
Proceeds from long-term loans to savings co-operative of employees	43	0	44
Payment for long-term loans to savings co-operative of employees	(2)	(118)	(13)
Proceeds from disposal of property, plant and equipment	1	0	0
Payments for property, plant and equipment	(8,955)	(14,504)	(30,336)
Payments for intangible assets	(365)	(96)	(160)
Payments for rights-of-use assets	(235)	(1)	(19)
Proceeds from liquidation of subsidiaries	-	-	308
Proceeds from disposal of investment in an associate	-	-	22,047
Proceeds from liquidation of joint ventures	-	0	-
Proceeds from disposal of investment in joint ventures	-	-	1
Net cash used in investing activities	(14,009)	(19,692)	(7,456)

Statement of Cash Flows	For the year ended December 31		
	2024	2023	2022 ⁽¹⁾
Cash flows from financing activities			
Finance costs paid	(7,618)	(7,654)	(7,397)
Dividends paid to the shareholders of the company	(8,852)	(5,268)	(8,579)
Proceeds from short-term loans from financial institutions	12,184	11,481	17,325
Repayment of short-term loans from financial institutions	(12,634)	(10,151)	(16,358)
Repayment of long-term loans from related parties	-	-	(14,000)
Proceeds from long-term loans from financial institutions	7,054	6,012	8,779
Repayment of long-term loans from financial institutions	(3,160)	(9,651)	(17,863)
Proceeds from long-term loans from third parties	(13)	(25)	(63)
Proceeds from debentures	-	10,000	12,000
Redemption of debentures	(10,303)	(16,381)	(3,000)
Payment for debentures and loans financing fee	(4)	(32)	(20)
Proceeds from capital increase	-	-	10,369
Transaction cost of share issuance	-	-	(235)
Repayment of principal portion of lease liabilities	(1,282)	(1,403)	(1,211)
Net cash generated from financing activities	(24,627)	(23,072)	(20,253)
Net increase (decrease) in cash and cash equivalents	719	(14,676)	13,949
Effect of exchange rate changes	(109)	(468)	(69)
Cash and cash equivalents at the beginning of the year	28,432	43,576	29,696
Cash and cash equivalents at the end of the year	29,042	28,432	43,576
Supplementary information related to cash flow			
Payables on acquisition of property, plant and equipment	372	350	741
Payables on purchase of intangible assets	56	134	214
Changes in the right-of-use assets and lease liabilities	275	132	9,458

Remarks:

⁽¹⁾ The comparative figures have been reclassified to ensure that they can be compared with changes in the data presentation of the current fiscal year. Accounting reclassification of property, plant and equipment, and other non-current assets does not affect the reported profit or shareholders' equity.

Key Financial Ratios

Financial Ratios	Unit	2024	2023	2022
Liquidity ratios				
Liquidity ratio	times	1.7	1.7	1.5
Quick ratio	"	1.0	0.9	0.7
Cash flow current ratio	"	0.6	0.3	0.6
Receivables turnover ratio	"	15.5	15.3	19.4
Average debt collection period ⁽²⁾	day	23.5	23.8	18.8
Inventory turnover period	times	9.7	8.1	10.1
Average selling period ⁽²⁾	day	37.8	45.2	36.0
Payable current ratio	times	8.8	7.0	9.9
Loan repayment period ⁽²⁾	day	41.3	52.0	36.9
Cash Cycle ⁽²⁾	"	20.1	17.0	18.0
Profitability ratios				
Gross profit margin ⁽²⁾	percent	3.6	7.0	9.1
Operating profit margin ⁽²⁾	"	4.7	7.6	7.0
Other profit margin	"	2.8	2.4	7.7
Cash to profit margin	"	178.7	79.2	112.0
Net profit margin	"	2.1	4.2	6.0
Return on equity ⁽²⁾	"	6.0	12.0	23.5
Interest-bearing debt to EBITDA Ratio	times	7.9	5.2	5.3
Debt coverage ratio	"	2.4	2.4	1.6
Operating Efficiency ratios				
Return on assets	percent	2.4	4.5	8.2
Return on fixed assets ⁽²⁾	"	8.2	13.0	21.4
Asset turnover ⁽²⁾	times	1.1	1.1	1.4
Financial policy ratios				
Total debt to equity ratio	times	1.5	1.5	1.8
Net debt to equity ratio	"	0.8	0.9	1.0
Share price to book value	"	0.7	0.7	0.8
Interest coverage ratio	"	5.4	8.7	9.6
Dividend payout ratio ⁽¹⁾	percent	43	39	26

Remarks:

⁽¹⁾ Dividend payments for 2022, 2023 and 2024 were THB 3.70, 3.40, and 1.90 per share, respectively. Thaioil wil present and seek approval for the 2024 dividend payment at the 2025 AGM

⁽²⁾ Adjusted calculation method under the guidelines of the Office of the Securities and Exchange Commission, Thailand.

Credit Terms

Valuing credit administration by Thailoil and Subsidiaries, Thailoil appointed a Credit Committee to map out a policy and guidelines for governing, monitoring, administering, and analyzing credit for business partners and suppliers that would be the most suitable for each business and standardized through all Thailoil and Subsidiaries. For maximum efficiency, the committee meets at least quarterly to define business partners' and suppliers' qualifications and criteria for credit analysis. Their risks, both qualitative and financial, are scrutinized. In addition, the committee defines the approach for controlling individual partners' credit lines and follows up on their payment to ensure that they can indeed punctually pay the agreed amounts to manage cash flow and liquidity.

Analysis of the ratio of average debt collection periods and payment periods in the table above follows Thailoil's policy.

Key Operating Information

	For the year ended December 31		
	2024	2023	2022
1. Refining Capacity (thousand barrels per day)	275	275	275
2. Intake Feedstock (thousand barrels per day) ⁽¹⁾	304	307	294
3. Refining Utilization (percent) ^{(2) (3)}	111	112	107
4. Gross Refining Margin-Refinery (USD per barrel) ⁽⁴⁾	5.3	8.5	12.0
5. Integrated Intake Feedstock (thousand barrels per day) ⁽⁵⁾	307	310	297
6. Gross Integrated Margin (USD per barrel) ⁽⁶⁾	7.1	10.0	13.4
6.1 Gross Refining Margin-Refinery (USD per barrel)	5.3	8.4	11.9
6.2 Gross Margin-Aromatics and intermediates	1.2	0.9	0.4
in the production of surfactants (USD per barrel)			
6.3 Gross Margin-Lube base oil (USD per barrel)	0.6	0.7	1.1
7. Operating Cost-/Refinery (USD per barrel) ⁽⁷⁾	1.5	1.6	1.5

Remarks:

- ⁽¹⁾ Calculated from the intake of refinery feedstock for each period divided by the number of days in such period. After the disposal of mixed xylenes units to Thai Paraxylene Co., Ltd. on April 1, 2005, the average intake feedstock of each period excludes by-products from Thai Lube Base Plc, Thai Paraxylene Co., Ltd. and LABIX Co., Ltd., which become Thairoil Refinery's feedstock for refining and blending for refined products
- ⁽²⁾ Calculated from the 275,000-barrel-per-day refining capacity for the selected period
- ⁽³⁾ Calculated from the intake feedstock divided by refining capacity
- ⁽⁴⁾ The Gross Refining Margin excludes the impact of the oil stock, using the average sales price converted into US dollars by the exchange rate announced by the Bank of Thailand for such specific period and calculated in unit value, based on the intake feedstock
- ⁽⁵⁾ Calculated by the integrated intake by the refinery, aromatics, an intermediate in the production of surfactants, and lube base oil in each period, divided by the number of days in such period
- ⁽⁶⁾ The Gross Integrated Margin is calculated from the gross margin of Thairoil Refinery, Thai Lube Base Plc, Thai Paraxylene Co., Ltd., and LABIX Co., Ltd., excluding the impact of the oil stock, divided by the average exchange rate of each period, and further divided by the intake feedstock
- ⁽⁷⁾ Including expenses on employees, maintenance, catalysts, insurance, land leases, and others

Board of Directors' Responsibility for Financial Reporting

The accompanying financial statements of Thai Oil Public Company Limited and the consolidated financial statements of Thai Oil Public Company Limited and its subsidiaries have been prepared in conformity to the requirements of the Public Companies Act B.E. 2535 (1992), the Securities and Exchange Act (No. 5), B.E. 2559 (2016), and the Announcement of the Department of Business Development on the abbreviation of items required in the financial statements for B.E. 2566 (2023) dated 27 October 2023, issued under Section 11, paragraph 3 of the Accounting Act B.E. 2543 (2000), and the financial reporting standards prescribed by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King.

The Board of Directors is responsible for the financial statements which have been prepared to ensure that the financial position, results of operations, and cash flows are presented accurately; an effective internal-control system has been established; and accounting records have been precisely, thoroughly, and adequately maintained to safeguard assets and prevent fraud and other irregularities with material implications. Suitable accounting policies have been selected in the preparation of the financial statements and consistently applied in accordance with Financial Reporting Standards, and key information has been adequately disclosed in the notes to the financial statements. The independent auditor has expressed opinions on the financial statements of Thai Oil Public Company Limited and the consolidated financial statements of Thai Oil Public Company Limited and its subsidiaries in the Auditor's Report.

Air Chief Marshal



(Chanon Mungthanya)
Chairman of the Board



(Mr. Bandhit Thamprajamchit)
Chief Executive Officer and President

Independent Auditor's Report

To the Shareholders of Thai Oil Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Thai Oil Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2024, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policy information, and have also audited the separate financial statements of Thai Oil Public Company Limited for the same period (collectively "the financial statements").

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Thai Oil Public Company Limited and its subsidiaries and of Thai Oil Public Company Limited as at 31 December 2024, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in *the Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Group in accordance with the *Code of Ethics for Professional Accountants including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond to each matter are described below.

Allowance for diminution in value of inventories

The balance of the Group's inventories is significant to the financial statements while the Group's raw materials and finished goods are commodities, which are exposed to price volatility. The inventories are measured at the lower of cost or net realisable value. I focused on the estimation of the net realisable value of inventory, as disclosed in Note 11 to the financial statements, since it is an area requiring significant management judgment and may affect the valuation of inventories at the end of the reporting period.

I have examined the allowance for diminution in value of inventories of the Group as follows.

- Gained an understanding of and assessed the design and implementation of internal controls and tested the effectiveness of the controls related to the estimation of allowance for diminution in value of inventories.
- Evaluated the methodology used to calculate the net realisable value of inventories at the end of reporting period, considering the market price used through comparison with the expected selling price of commodity, and tested the calculation.
- Assessed the disclosures made in the notes to the financial statements in relation to the allowance for diminution in value of inventories.

Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group'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 or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the 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 Thai Standards on Auditing 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 financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the 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 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 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 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 to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the 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 those charged with governance 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 those charged with governance with a statement that I have complied with 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 those charged with governance, I determine those matters that were of most significance in the audit of the 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.

I am responsible for the audit resulting in this independent auditor's report.

Kessirin Pinpuvadol

Certified Public Accountant (Thailand) No. 7325

EY Office Limited

Bangkok: 14 February 2025

Statement of financial position

Thai Oil Public Company Limited and its subsidiaries

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Assets					
Current assets					
Cash and cash equivalents	7	29,042,414,201	28,431,620,650	25,571,833,933	23,736,906,709
Short-term investments in					
financial assets	8	10,695,313,674	5,944,539,560	10,526,504,000	5,774,645,000
Trade receivables	9	27,600,682,542	31,154,418,362	28,032,855,839	31,899,944,117
Other receivables	10	2,212,275,254	2,353,195,206	2,284,007,201	2,398,157,893
Current portion of finance					
lease receivables		-	-	348,995,897	307,103,777
Receivables from oil fuel fund		144,305,894	624,548,280	144,305,894	624,548,280
Short-term loans to related parties	6	-	-	232,884,660	934,382,650
Inventories	11	40,577,073,852	52,655,827,049	35,750,471,175	47,174,183,274
Derivative assets	35	58,417,303	218,987,454	55,170,187	188,127,115
Prepaid corporate income tax		1,367,686,941	2,197,393,961	920,793,407	1,769,103,579
Value added tax receivables		523,671,031	1,790,795,406	-	1,285,504,086
Total current assets		112,221,840,692	125,371,325,928	103,867,822,193	116,092,606,480

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of financial position

Thai Oil Public Company Limited and its subsidiaries

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Assets (continued)					
Non-current assets					
Financial assets measured at fair value through profit or loss	35	685,885,445	721,837,723	274,212,827	314,353,497
Financial assets measured at fair value through other comprehensive income	35	11,313,204,350	14,252,714,196	10,786,964,840	13,677,187,445
Investments in subsidiaries	12	-	-	41,280,364,907	41,280,364,907
Investments in joint ventures and associates	13	31,427,042,900	32,039,270,297	981,869,921	981,869,921
Long-term loans to related party	6	-	-	9,987,401,324	9,985,938,541
Finance lease receivables, net of current portion		-	-	837,977,171	837,111,270
Investment properties	14	102,520,270	102,520,270	1,185,363,847	1,185,363,847
Property, plant and equipment	15	224,152,542,964	217,479,180,745	197,165,193,042	188,182,742,991
Right-of-use assets	16	20,381,870,278	22,223,561,873	19,737,295,242	21,508,999,826
Goodwill	17	798,331,641	826,150,184	-	-
Intangible assets	18	2,457,118,737	2,403,654,692	979,066,346	860,863,095
Deferred tax assets	19	3,460,468,779	2,502,706,442	3,290,865,040	1,906,800,870
Other non-current assets		2,009,605,683	2,069,778,702	1,979,308,217	1,999,440,398
Total non-current assets		296,788,591,047	294,621,375,124	288,485,882,724	282,721,036,608
Total assets		409,010,431,739	419,992,701,052	392,353,704,917	398,813,643,088

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of financial position

Thai Oil Public Company Limited and its subsidiaries

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from					
financial institutions	20	2,724,907,771	3,198,430,994	-	-
Short-term loans from					
related parties	6	-	-	7,648,229,779	5,185,565,423
Trade payables	21	51,579,311,499	50,184,442,001	55,024,570,837	54,495,483,064
Other payables	22	3,698,074,325	3,910,475,893	3,285,287,957	3,218,319,234
Current portion of long-term loans					
from financial institutions	23	3,776,683,165	3,060,928,045	3,100,835,791	2,374,126,219
Current portion of debentures	24	1,399,902,447	7,000,000,000	1,399,902,447	7,000,000,000
Derivative liabilities	35	2,522,011	29,222,411	2,674,647	47,259,392
Current portion of lease liabilities	16	1,444,930,111	1,402,283,432	1,423,313,177	1,355,538,212
Income tax payables		445,422,211	3,153,972,139	-	2,729,195,655
Excise duty payables		2,536,116,442	1,463,127,267	2,535,199,427	1,461,835,339
Short-term provision		55,222,957	98,436,300	55,222,957	98,436,300
Total current liabilities		67,663,092,939	73,501,318,482	74,475,237,019	77,965,758,838

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of financial position

Thai Oil Public Company Limited and its subsidiaries

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Liabilities and shareholders' equity (continued)					
Non-current liabilities					
Long-term loans from financial institutions, net of current portion	23	19,225,919,235	16,034,540,475	17,738,612,905	13,837,711,964
Long-term loans from a third party	23	178,937,500	191,437,500	-	-
Long-term loans from related party	6	-	-	94,983,244,353	98,651,501,113
Debentures, net of current portion	24	127,491,540,413	133,631,605,245	33,856,580,087	35,292,022,580
Derivative liabilities	35	2,645,709,471	1,109,069,159	2,645,709,471	1,109,069,159
Lease liabilities, net of current portion	16	18,111,685,878	19,688,452,996	18,324,587,462	19,866,558,337
Deferred tax liabilities	19	17,740,807	15,751,580	-	-
Provision for long-term employee benefits	25	2,644,907,143	2,714,494,330	1,934,349,520	2,069,970,365
Other non-current liabilities		4,846,001,318	4,794,340,688	5,032,642,225	4,934,452,286
Total non-current liabilities		175,162,441,765	178,179,691,973	174,515,726,023	175,761,285,804
Total liabilities		242,825,534,704	251,681,010,455	248,990,963,042	253,727,044,642

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of financial position

Thai Oil Public Company Limited and its subsidiaries

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Shareholders' equity					
Share capital					
Registered					
2,233,835,566 ordinary shares of Baht 10 each		22,338,355,660	22,338,355,660	22,338,355,660	22,338,355,660
Issued and fully paid up					
2,233,835,566 ordinary shares of Baht 10 each		22,338,355,660	22,338,355,660	22,338,355,660	22,338,355,660
Share premium on ordinary shares		10,698,724,259	10,698,724,259	10,698,724,259	10,698,724,259
Other deficits		(4,344,397,287)	(4,342,658,559)	(9,146,634,394)	(9,146,634,394)
Retained earnings					
Appropriated - statutory reserve	26	2,315,147,873	2,315,147,873	2,315,147,873	2,315,147,873
Appropriated - other reserves		244,500,000	244,500,000	244,500,000	244,500,000
Unappropriated		142,423,975,363	141,288,329,958	127,829,354,558	126,766,514,243
Other components of shareholders' equity		(10,229,972,816)	(6,974,640,316)	(10,916,706,081)	(8,130,009,195)
Equity attributable to owners					
of the Company		163,446,333,052	165,567,758,875	143,362,741,875	145,086,598,446
Non-controlling interests					
of the subsidiaries		2,738,563,983	2,743,931,722	-	-
Total shareholders' equity		166,184,897,035	168,311,690,597	143,362,741,875	145,086,598,446
Total liabilities and shareholders' equity		409,010,431,739	419,992,701,052	392,353,704,917	398,813,643,088

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of income

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Revenue					
Revenue from sales		455,856,874,971	459,402,194,950	486,610,365,532	492,054,518,624
Subsidy from oil fuel fund		10,920,126,475	9,841,693,460	10,920,126,475	9,841,693,460
Total revenue		466,777,001,446	469,243,888,410	497,530,492,007	501,896,212,084
Cost of sales		(450,010,192,381)	(436,163,527,244)	(490,182,395,136)	(477,488,207,787)
Gross profit		16,766,809,065	33,080,361,166	7,348,096,871	24,408,004,297
Dividend income		269,115,182	200,774,430	6,442,367,800	6,905,946,641
Gain (loss) from financial instruments		360,350,957	(2,849,952,347)	297,677,202	(2,873,490,433)
Gain on exchange		52,470,488	212,826,718	24,896,366	253,985,452
Gain on repurchase of debentures	24	1,134,184,913	-	-	-
Other income	27	1,739,188,788	1,138,175,482	4,116,970,135	3,477,187,708
Selling and distribution expenses		(1,140,438,218)	(949,961,377)	(190,008,521)	(108,638,695)
Administrative expenses		(2,733,670,103)	(2,570,854,449)	(3,219,278,594)	(3,097,255,409)
Share of profit (loss) from investments					
in joint ventures and associates	13	(131,683,267)	83,753,805	-	-
Operating profit		16,316,327,805	28,345,123,428	14,820,721,259	28,965,739,561
Finance cost		(4,051,967,126)	(4,088,509,884)	(3,999,275,061)	(3,754,545,176)
Profit before income tax expenses		12,264,360,679	24,256,613,544	10,821,446,198	25,211,194,385
Income tax expenses	19	(2,283,366,383)	(4,671,722,061)	(935,623,371)	(3,698,311,432)
Profit for the year		9,980,994,296	19,584,891,483	9,885,822,827	21,512,882,953

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of income

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Profit attributable to:					
Equity holders of the Company		9,958,627,917	19,443,165,644	9,885,822,827	21,512,882,953
Non-controlling interests					
of the subsidiaries		22,366,379	141,725,839		
		9,980,994,296	19,584,891,483		
Earnings per share	30				
Basic earnings per share					
Profit attributable to					
equity holders of the Company		4.46	8.70	4.43	9.63

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of comprehensive income

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Profit for the year		9,980,994,296	19,584,891,483	9,885,822,827	21,512,882,953
Other comprehensive income:					
<i>Other comprehensive income</i>					
<i>to be reclassified to profit or</i>					
<i>loss in subsequent periods:</i>					
Cash flow hedges, net of income tax	34	191,736,649	1,481,858,771	191,736,649	1,434,589,915
Cost of hedging, net of income tax	34	(666,255,452)	11,112,355	(666,255,452)	11,112,355
Exchange differences on translation					
of financial statements in					
foreign currency		(383,005,579)	(405,977,626)	-	-
Share of other comprehensive					
income from investments in					
associates under equity					
method, net of income tax	13	(26,934,926)	45,781,296	-	-
Other comprehensive income					
to be reclassified to profit or					
loss in subsequent periods,					
net of income tax		(884,459,308)	1,132,774,796	(474,518,803)	1,445,702,270

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of comprehensive income

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods</i>					
Actuarial loss, net of income tax	25	-	(2,151,044)	-	-
Changes in fair value of financial assets at fair value through other comprehensive income, net of income tax		(2,369,335,300)	(5,793,057,494)	(2,312,178,083)	(5,526,669,565)
<hr/>					
Other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of income tax		(2,369,335,300)	(5,795,208,538)	(2,312,178,083)	(5,526,669,565)
<hr/>					
Other comprehensive income for the year		(3,253,794,608)	(4,662,433,742)	(2,786,696,886)	(4,080,967,295)
<hr/>					
Total comprehensive income for the year		6,727,199,688	14,922,457,741	7,099,125,941	17,431,915,658
<hr/>					
Total comprehensive income attributable to:					
Equity holders of the Company		6,703,295,417	14,782,358,010	7,099,125,941	17,431,915,658
Non-controlling interests of the subsidiaries		23,904,271	140,099,731		
		6,727,199,688	14,922,457,741		

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of changes in shareholders' equity

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Baht)

Consolidated financial statements

	Equity attributable to owners of the Company													Total equity attributable to owners of the Company	Non-controlling interests of the subsidiaries	Total shareholders' equity	
	Other surpluses (deficits)						Other components of shareholders' equity										
	Share premium on ordinary shares	Share premium combination under common control	Surplus on business	Deficits from the change in the ownership interests in subsidiaries	Deficits from the change in the net assets in an associate		Appropriated - statutory reserve	Appropriated - other reserves	Unappropriated	Changes in value of financial assets designated at fair value through other comprehensive income	Exchange differences on translation of financial statements in foreign currency	Share of other comprehensive income from an associate	Cash flow hedges				Cost of hedging
Balance as at 1 January 2023	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	-	2,315,147,873	244,500,000	127,095,140,237	1,424,545,139	2,036,800,865	(5,286,235,619)	(671,096,521)	181,277,933	156,034,301,267	2,623,070,199	158,657,371,466
Profit for the year	-	-	-	-	-	-	-	19,443,165,644	-	-	-	-	-	-	19,443,165,644	141,725,839	19,584,891,483
Other comprehensive income for the year	-	-	-	-	-	-	-	(1,075,521)	(5,793,057,494)	(405,427,041)	(405,427,041)	1,481,856,771	11,112,355	45,781,296	(4,660,807,694)	(1,626,108)	(4,662,433,742)
Total comprehensive income for the year	-	-	-	-	-	-	-	19,442,090,123	(5,793,057,494)	(405,427,041)	(405,427,041)	1,481,856,771	11,112,355	45,781,296	14,762,358,010	140,099,731	14,922,457,741
Dividend paid (Note 32)	-	-	-	-	-	-	-	(5,248,900,402)	-	-	-	-	-	-	(5,248,900,402)	(19,238,208)	(5,268,138,610)
Balance as at 31 December 2023	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	-	2,315,147,873	244,500,000	141,288,329,958	(4,368,512,355)	1,631,173,824	(3,804,376,848)	(659,984,166)	227,059,229	165,567,758,875	2,743,931,722	168,311,690,597
Balance as at 1 January 2024	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	-	2,315,147,873	244,500,000	141,288,329,958	(4,368,512,355)	1,631,173,824	(3,804,376,848)	(659,984,166)	227,059,229	165,567,758,875	2,743,931,722	168,311,690,597
Profit for the year	-	-	-	-	-	-	-	-	9,958,627,917	-	-	-	-	-	9,958,627,917	22,366,379	9,980,994,296
Other comprehensive income for the year	-	-	-	-	-	-	-	-	-	(2,369,335,300)	(384,543,471)	191,736,649	(666,255,452)	(26,934,926)	(3,255,332,500)	1,537,892	(3,253,794,608)
Total comprehensive income for the year	-	-	-	-	-	-	-	-	9,958,627,917	(2,369,335,300)	(384,543,471)	191,736,649	(666,255,452)	(26,934,926)	6,703,295,417	23,904,271	6,727,199,688
Dividend paid (Note 32)	-	-	-	-	-	-	-	-	(8,822,982,512)	-	-	-	-	-	(8,822,982,512)	(29,272,010)	(8,852,254,522)
Deficits from the change in the net assets in an associate	-	-	-	-	-	(1,738,728)	-	-	-	-	-	-	-	-	(1,738,728)	-	(1,738,728)
Balance as at 31 December 2024	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	(1,738,728)	-	2,315,147,873	244,500,000	142,423,975,363	(6,737,847,655)	1,246,630,353	(3,612,640,199)	(1,326,239,618)	200,124,303	163,446,333,052	2,738,563,983	166,184,897,035

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of changes in shareholders' equity

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Baht)

Separate financial statements

	Other components of shareholders' equity									
	Other comprehensive income									
	Change in value of financial assets disigned at fair value through other comprehensive income									
	Issued and fully paid-up share capital	Share premium on ordinary shares	Other deficits on business combination under common control	Retained earnings - Appropriated - statutory reserve	Retained earnings - Appropriated - other reserves	Unappropriated	Cash flow hedges	Cost of hedging	Total shareholders' equity	
Balance as at 1 January 2023	22,338,355,660	10,698,724,259	(9,243,166,763)	2,315,147,873	244,500,000	110,599,064,061	1,861,021,384	(5,238,966,763)	(671,096,521)	132,903,583,190
Profit for the year	-	-	-	-	-	21,512,882,953	-	-	-	21,512,882,953
Other comprehensive income for the year	-	-	-	-	-	-	(5,526,669,565)	1,434,589,915	11,112,355	(4,080,967,295)
Total comprehensive income for the year	-	-	-	-	-	21,512,882,953	(5,526,669,565)	1,434,589,915	11,112,355	17,431,915,658
Dividend paid (Note 32)	-	-	-	-	-	(5,248,900,402)	-	-	-	(5,248,900,402)
Disposal of assets acquired from business combination under common control	-	-	96,532,369	-	-	(96,532,369)	-	-	-	-
Balance as at 31 December 2023	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	126,766,514,243	(3,665,648,181)	(3,804,376,848)	(659,984,166)	145,086,598,446
Balance as at 1 January 2024	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	126,766,514,243	(3,665,648,181)	(3,804,376,848)	(659,984,166)	145,086,598,446
Profit for the year	-	-	-	-	-	9,885,822,827	-	-	-	9,885,822,827
Other comprehensive income for the year	-	-	-	-	-	-	(2,312,178,083)	191,736,649	(666,255,452)	(2,786,696,886)
Total comprehensive income for the year	-	-	-	-	-	9,885,822,827	(2,312,178,083)	191,736,649	(666,255,452)	7,099,125,941
Dividend paid (Note 32)	-	-	-	-	-	(8,822,982,512)	-	-	-	(8,822,982,512)
Balance as at 31 December 2024	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	127,829,354,558	(5,977,826,264)	(3,612,640,199)	(1,326,239,618)	143,362,741,875

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of cash flows

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Cash flows from operating activities					
Profit before income tax expenses		12,264,360,679	24,256,613,544	10,821,446,198	25,211,194,385
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:					
Depreciation and amortisation	28	8,105,923,279	7,799,461,684	5,444,994,100	5,175,044,946
Expected credit loss		44,887,250	2,990,407	-	-
Loss (reversal) of reduction of inventory to net realisable value	11	(581,989,391)	(55,459,025)	(643,694,265)	221,343,137
Finance cost		4,051,967,126	4,088,509,884	3,999,275,061	3,754,545,176
Unrealised loss on exchange		220,061,224	778,724,483	359,640,408	730,525,498
Share of loss (profit) from investments in joint ventures and associates	13	131,683,267	(83,753,805)	-	-
Dividends income		(269,115,182)	(200,774,430)	(6,442,367,800)	(6,905,946,641)
Difference on lease termination		(1,630,411)	-	-	-
Gain on repurchase of debentures		(1,134,184,913)	-	-	-
Loss (gain) on disposal of property, plant and equipment		(861,322)	34,151	(341,689)	(61,859,575)
Loss on write-off of property, plant and equipment		31,414	8,922,645	80	8,899,721
Short-term provision (reversal)		(43,213,343)	98,436,300	(43,213,343)	98,436,300
Loss on hedging of forecasted revenue transaction		300,882,833	224,946,715	300,882,833	224,946,715
Loss from changes in fair value of financial assets		76,144,576	117,814,302	40,140,670	66,827,060
Unrealised loss from changes in fair value of derivatives		223,077,655	130,507,872	177,580,088	156,696,406
Amortisation of advance receipts for land lease and others		(33,838,569)	(23,680,612)	(896,998,030)	(673,343,161)

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of cash flows

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
Note	2024	2023	2024	2023
Cash flows from operating activities (continued)				
Profit from operating activities				
before changes in operating				
assets and liabilities	23,354,186,172	37,143,294,115	13,117,344,311	28,007,309,967
Operating assets (increase) decrease				
Trade receivables	3,612,746,669	(2,531,565,450)	3,860,718,528	(2,198,325,874)
Other receivables	177,710,761	2,041,682,804	44,390,637	1,921,268,029
Receivables from oil fuel fund	480,242,386	15,259,071,699	480,242,386	15,259,071,699
Inventories	12,660,742,588	2,742,775,472	12,067,406,364	2,458,682,448
Value added tax receivables	1,267,124,375	166,331,913	1,285,504,086	(153,031,411)
Other non-current assets	(77,916,518)	43,238,973	(84,766,964)	10,967,051
Operating liabilities increase (decrease)				
Trade payables	1,358,053,052	(23,967,425,095)	529,083,839	(24,132,659,907)
Other payables	(153,593,506)	(1,586,943,196)	1,075,807,048	(621,552,848)
Excise duty payables	1,072,989,175	1,011,289,680	1,073,364,088	1,010,080,202
Other non-current liabilities	(59,409,406)	(51,053,506)	(63,844,203)	(40,616,901)
Cash from operating activities	43,692,875,748	30,270,697,409	33,385,250,120	21,521,192,455
Corporate income tax paid	(4,338,173,443)	(2,182,928,753)	(3,428,678,094)	(1,336,374,046)
Net cash flows from operating activities	39,354,702,305	28,087,768,656	29,956,572,026	20,184,818,409

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of cash flows

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Cash flows from investing activities					
Dividends received		531,789,355	594,809,552	6,442,367,800	6,905,946,641
Decrease in deposits at a financial institution used as collateral		-	342,942,122	-	-
Repayment of short-term investments in financial assets		(4,961,284,613)	(5,766,216,853)	(4,961,284,000)	(5,589,161,000)
Cash payment for purchase of financial assets measured at fair value through other comprehensive income		(22,186,689)	(99,662,001)	-	-
Cash payment for purchase of financial assets measured at fair value through profit or loss		(43,258,313)	(45,276,631)	-	-
Cash receipt from short-term loans to related parties	6	-	-	743,157,440	1,135,281,727
Cash payment for short-term loans to related parties	6	-	-	(40,000,000)	-
Cash receipt from long-term loans to related party	6	-	-	-	2,000,000,000
Cash payment for long-term loans to related party	6	-	-	-	(9,985,000,000)
Proceeds from long-term loans to savings co-operative of employees		42,566,623	187,259	40,941,101	-
Cash payment for long-term loans to savings co-operative of employees		(1,950,000)	(118,225,368)	-	(116,975,368)
Proceeds from disposal of property, plant and equipment		1,226,022	133,899	629,458	72,837,832
Cash payment for acquisition of property, plant and equipment		(8,955,471,314)	(14,503,557,443)	(7,888,489,839)	(12,912,018,397)
Cash payment for acquisition of intangible assets		(364,862,478)	(96,266,773)	(223,319,520)	(90,542,213)
Cash payment for right-of-use assets		(235,150,138)	(814,139)	(235,150,138)	(814,139)
Proceeds from liquidation of joint ventures		-	4,769	-	-
Net cash flows used in investing activities		(14,008,581,545)	(19,691,941,607)	(6,121,147,698)	(18,580,444,917)

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of cash flows

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Cash flows from financing activities					
Finance costs paid		(7,618,362,343)	(7,653,521,747)	(8,572,279,120)	(8,323,443,642)
Dividends paid to the shareholders of the Company	32	(8,822,982,512)	(5,248,900,402)	(8,822,982,512)	(5,248,900,402)
Dividends paid to non-controlling interests		(29,272,011)	(19,238,208)	-	-
Proceeds from short-term loans from financial institutions	20	12,184,371,803	11,480,657,635	-	-
Repayment of short-term loans from financial institutions	20	(12,634,399,332)	(10,150,168,786)	-	-
Proceeds from short-term loans from related parties	6	-	-	2,462,664,356	4,864,627,766
Proceeds from long-term loans from financial institutions	23	7,054,106,886	6,012,208,056	7,000,000,000	6,000,000,000
Repayment of long-term loans from financial institutions	23	(3,159,714,033)	(9,651,308,085)	(2,400,000,000)	(1,700,000,000)
Repayment of long-term loans from a third party	23	(12,500,000)	(25,000,000)	-	-
Repayment of long-term loans from related parties	6	-	-	(3,239,632,734)	(9,365,156,104)
Cash payment for loans financing fee	23	(4,125,000)	(28,178,562)	(4,125,000)	(28,133,562)
Proceeds from issuance of debentures	24	-	10,000,000,000	-	10,000,000,000
Redemption and repurchase of debentures	24	(10,302,612,049)	(16,381,352,255)	(7,000,000,000)	(7,109,024,651)
Cash payment for debenture financing fee	24	-	(3,944,712)	-	(3,944,712)
Payment of principal portion of lease liabilities		(1,281,649,884)	(1,403,133,971)	(1,228,939,233)	(1,346,015,721)
Net cash flows used in financing activities		(24,627,138,475)	(23,071,881,037)	(21,805,294,243)	(12,259,991,028)

The accompanying notes to financial statements are an integral part of the financial statements.

Statement of cash flows

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Net increase (decrease) in cash and cash equivalents		718,982,285	(14,676,053,988)	2,030,130,085	(10,655,617,536)
Cash and cash equivalents at beginning of the year		28,431,620,650	43,576,141,447	23,736,906,709	34,787,150,811
Effect of exchange rate changes		(108,188,734)	(468,466,809)	(195,202,861)	(394,626,566)
Cash and cash equivalents at end of the year	7	29,042,414,201	28,431,620,650	25,571,833,933	23,736,906,709
Supplemental disclosure of cash flows information					
Payables on acquisition of property, plant and equipment		371,659,723	350,341,399	193,002,181	176,741,783
Payables on acquisition of intangible assets		55,953,735	134,122,039	39,192,217	15,309,165
Increase in right-of-use assets and lease liabilities		275,175,113	131,946,159	278,206,467	122,155,829

The accompanying notes to financial statements are an integral part of the financial statements.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

1. General information

Thai Oil Public Company Limited (the Company) is a public limited company which is incorporated and domiciled in Thailand and is listed on the Stock Exchange of Thailand. The parent company is PTT Public Company Limited (45.03% of shareholding as at 31 December 2024).

The principal business operations of the Group is oil refinery and distributions, petrochemicals, lube base oil and other businesses in domestic and overseas. The address of the Company's registered offices and refinery plant as follows:

Head office: 555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road,
Kwang Chatuchak, Khet Chatuchak, Bangkok 10900

Sriracha office and refinery plant: 42/1 Moo 1, Sukhumvit Road Km. 124, Tambol Tungsukla,
Amphur Sriracha, Chonburi 20230

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543, including guidelines promulgated by the Federation of Accounting Professions (TFAC), and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act, B.E. 2535.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

2.2 Basis of consolidation

- a) The consolidated financial statements include the financial statements of Thai Oil Public Company Limited ("the Company") and the following subsidiary companies ("the subsidiaries") (collectively as "the Group"). The details of subsidiaries as disclosed in Note 12.2.
- b) The financial statements of the subsidiaries are prepared using the same accounting policies as the Company.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2024. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2025

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2025. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Accounting policies

4.1 Principles of consolidation

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.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

b) Associates

Associates are all entities over which the Group has significant influence but does not have control or joint control. Investments in associates are accounted for using the equity method of accounting, in consolidated financial statements.

In the separate financial statements, investments in associates are accounted for using cost method.

c) 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. 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.

d) 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.

Upon the disposal of investments, the difference between the net disposal proceeds and the carrying amount of the investments is recorded in profit or loss.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

e) 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.

4.2 Foreign currency translation

a) Functional and presentation currency

The financial statements are presented in Thai Baht, which is the Group's and the Company's functional and 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 the group recognises gains and losses on a non-monetary item that recognised in other comprehensive income, all of gains and losses on foreign exchange components will also be recognised in other comprehensive income. On the other hand, if gains and losses on a non-monetary item is recognised in profit and loss, all gains and losses on foreign exchange components will be recognised in profit and 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 as follows.

- Assets and liabilities are translated at the closing rate at the date of respective statement of financial position
- Income and expenses in statement of profit or loss and statement of comprehensive income are translated at average exchange rates and
- All resulting exchange differences are recognised in other comprehensive income.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

4.3 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

Bank overdrafts are included in current liabilities in the statements of financial position.

4.4 Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost of inventories is determined by the weighted average method. Cost of raw materials comprise all purchase cost and costs directly attributable to the acquisition of the inventory less all attributable discounts. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs, overhead costs and directly attributable costs to bring the inventories to their present location and condition.

4.5 Investment property

Investment property, which is land, is held for long-term rental yields or for capital appreciation and is not occupied by the Group.

Investment properties are measured initially at cost, including transaction costs. Subsequently to initial recognition, investment properties are stated at cost less allowance for loss on impairment (if any). Land is not depreciated.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss in the period when the asset is derecognised.

4.6 Property, plant and equipment

Land is stated at cost. Buildings and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any). The costs comprise any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating. These include decommissioning costs, delivery and restoration costs, and any obligation associated with either its acquisition or a consequence of having used the items.

Subsequent costs are included carrying value of replace items, only when it is probable that future economic benefit associated with the items will flow to the group. In the case of replacement, the Group writes off carrying value of replaced items. Repair and maintenance costs are recognized in profit or loss during the financial period in which they are incurred.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Depreciation of plant and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

	Years
Buildings	10 - 30
Leasehold improvements	5 - 20
Refinery plant and equipment	20 - 35
Lube base oil refinery plants and equipment	16 - 30
Petrochemical plants	10 - 30
Power plants	20 - 25
Machinery, equipment and plant equipment	3 - 20
Oil and liquid chemical tankers and crew boats	10 - 25
Furniture, fixtures, office equipment and others	3 - 10
Vehicles	5

Depreciation is included in determining income.

No depreciation is provided on land and assets under construction.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.7 Goodwill

Goodwill is initially recorded at cost, which equals to the excess of cost of business combination over the fair value of the net assets acquired. If the fair value of the net assets acquired exceeds the cost of business combination, the excess is immediately recognised as gain in profit or loss.

Goodwill is carried at cost less any accumulated impairment losses. Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the Company's cash-generating units (or group of cash-generating units) that are expected to benefit from the synergies of the combination. The Company estimates the recoverable amount of each cash-generating unit (or group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognised in profit or loss. Impairment losses relating to goodwill cannot be reversed in future periods.

4.8 Intangible assets

Intangible assets acquired through business combination are initially recognised at their fair value on the date of business acquisition while intangible assets acquired in other cases are recognised at cost. Following the initial recognition, the intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

A summary of the intangible assets with finite useful lives is as follows:

	Years
License fee	10 - 25
Computer software	5 - 10
Patent	10

4.9 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, right-of-use assets, investment properties and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Group also carries out annual impairment reviews in respect of goodwill. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

An impairment loss is recognised in profit or loss.

In the assessment of asset impairment (except for goodwill), if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss.

4.10 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group as a lessee

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

Right-of-use assets

Right-of-use assets are measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, lease payments made at or before the commencement date of the lease, and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located less any lease incentives received.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	33 years
Buildings	3 years
Equipment	5 years
Oil tanker	10 years
Motor vehicles	5 years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounted the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

The Group as a lessor

A lease that transfers substantially all the risks and rewards incidental to ownership of an underlying asset to a lessee is classified as finance leases. As at the commencement date, an asset held under a finance lease is recognised as a receivable at an amount equal to the net investment in the lease or the present value of the lease payments receivable and any unguaranteed residual value. Subsequently, finance income is recognised over the lease term to reflect a constant periodic rate of return on the net investment in the lease.

A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset to a lessee. Lease receivables from operating leases is recognised as income in profit or loss on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying assets and recognised as an expense over the lease term on the same basis as the lease income.

4.11 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

4.12 Employee benefits

a) Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

b) Post-employment benefits and other long-term employee benefits

Defined contribution plans

The Company and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Company. The fund's assets are held in a separate trust fund and the Company's contributions are recognised as expenses when incurred.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Defined benefit plans and other long-term employee benefits

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law and other employee benefit plans. The Group treats these severance payment obligations as a defined benefit plan. In addition, the Group provides other long-term employee benefit plan, namely long service awards.

The obligation under the defined benefit plan and other long-term employee benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

The obligation under the defined benefit plan and other long-term employee benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefit plans are recognised immediately in other comprehensive income.

Actuarial gains and losses arising from other long-term benefits are recognised immediately in profit and loss.

Past service costs are recognised in profit or loss on the earlier of the date of the plan amendment or curtailment and the date that the Group recognises restructuring-related costs.

4.13 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

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 finance costs.

4.14 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with attached conditions.

Government grants relating to income are deferred and recognised in profit or loss as subsidy over the period necessary to match them with the costs they are intended to compensate.

Subsidy from oil fuel fund is calculated based on the conditions and rates announced by the Energy Policy and Planning committees.

The Group separately presents government grants from revenue from sales in profit or loss.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

4.15 Revenue recognition

Sales of goods

Revenue from contracts with customers that is derived in connection with oil refinery, lube base oil refinery, aromatics and LAB, solvent and ethanol business is recognised when the Group satisfies a performance obligation by transferring the petroleum products, petrochemical products and other products to customers via vessel, truck, or pipeline. A transfer of goods generally occurs at the same time when legal ownerships are transferred to customers and customers have physical goods in their possession. In that case, the Group satisfies a performance obligation at a point in time.

Electricity and steam sales are recognised on delivery of electricity and steam and customers' acceptance, and measured based on actual electricity and steam delivered and the price as set out in the electricity and steam purchase agreements.

Revenue is measured at the amount of the consideration received or receivable, excluding value added tax.

4.16 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component, are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortised cost

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Financial assets at amortised cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets designated at FVOCI (equity instruments)

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognised in other comprehensive income on these financial assets are never recycled to profit or loss.

Dividends are recognised as other income in profit or loss, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognised in other comprehensive income.

Equity instruments designated at FVOCI are not subject to impairment assessment.

Financial assets at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value including interest income recognised in profit or loss.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognised as other income in profit or loss.

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. In determining amortised cost, the Group takes into account any discounts or premiums on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in profit or loss.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Financial guarantee contracts

Provisions on financial guarantee contracts are initially recognised in the financial statements at fair value. The provision under each guarantee contract is subsequently measured at the higher of the amount initially recognised less cumulative amortisation, and the allowance for expected credit losses.

The guarantee fee income is recognised as other income in profit or loss by amortising the initial fair value on a straight-line basis over the life of the guarantee.

Derecognition of financial instruments

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in profit or loss.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Impairment of financial guarantee contract

The Company estimates the expected credit losses of financial guarantee contracts based on the present value of the payments expected to be made to the holder of the contract if a default occurs, discounted using a risk-adjusted interest rate relevant to the exposure. The expected credit losses related to financial guarantee contracts are recognised under.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

4.17 Derivatives and hedge accounting

The Group uses derivatives, such as forward currency contracts, cross currency swaps, interest rate swaps and commodity forward contracts, to hedge its foreign currency risks, interest rate risks and commodity price risks, respectively.

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes including interest income are recognised in profit or loss unless the derivative is designated and effective as a hedging instrument under cash flow hedge. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Derivatives are presented as non-current assets or non-current liabilities if the remaining maturity of the instrument is more than 12 months and it is not due to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Hedge accounting

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to a variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment
- Hedges of a net investment in a foreign operation

At the inception of a hedging relationship, the Group formally designates and documents the hedging relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

A hedging relationship qualifies for hedge accounting if it meets all of the following hedge effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument.
- The effect of credit risk is not the dominant factor in the value changes that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges that meet all of the qualifying criteria for hedge accounting are accounted for, as described below:

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in profit or loss.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

The way cash flow hedge reserve accumulated in other comprehensive income are subsequently accounted for, depends on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the reserve accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and is not recognised in other comprehensive income for the period. For any other cash flow hedges, the reserve accumulated in other comprehensive income is subsequently reclassified to profit or loss as a reclassification adjustment in the same period which the hedged cash flows affect profit or loss.

When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

4.18 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

- Level 1 - Use of quoted market prices in an active market for such assets or liabilities
- Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly
- Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

Allowance for diminution in value of inventories

Net realisable value is the estimate of the selling price in the ordinary course of business, less applicable variable selling expenses. Allowance is made, where necessary, for obsolete, slow-moving and defective inventories.

Goodwill

The initial recognition and measurement of goodwill, and subsequent impairment testing, require management to make estimates of cash flows to be generated by the asset or the cash-generating units and to choose a suitable discount rate in order to calculate the present value of those cash flows.

Investment in associate

The management of the Company determined that the Group has significant influence on PT Chandra Asri Pacific Tbk (CAP) and classified investment as an investment in associate, even though the Group only holds less than 20% of shares and voting rights. This is because the Company hold 15% of the shares in CAP through its subsidiary, PT TOP Investment Indonesia. The Company has delegated representatives to serve as the directors of CAP's Board of Commissioners and executives to serve as the members of CAP's Board of Directors. In addition, the Company also entered into the Feedstock Sale and Purchase Agreement with CAP.

Lease

Determining the lease term with extension and termination options - The Group as a lessee

In determining the lease term, the management is required to exercise judgement in assessing whether the Group is reasonably certain to exercise the option to extend or terminate the lease considering all relevant facts and circumstances that create an economic incentive for the Group to exercise either the extension or termination option.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Estimating the incremental borrowing rate - The Group as a lessee

The Group cannot readily determine the interest rate implicit in the lease, therefore, the management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Post-employment benefits under defined benefit plans and other long-term employee benefits

The obligation under the defined benefit plan and other long-term employee benefit plans is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

6. Related party transactions

During the years, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business.

Relationships with key management and other related parties were as follows:

Name of entities	Country of incorporation	Nature of relationships
PTT Public Company Limited	Thailand	Parent company
Thai Paraxylene Co., Ltd.	Thailand	Subsidiary and/or common directors and/or the Company's management as a director
LABIX Co., Ltd.	Thailand	Indirect subsidiary and/or common directors and/or the Company's management as a director
Thai Lube Base Public Company Limited	Thailand	Subsidiary and/or the Company's management as a director
PT TOP Investment Indonesia	Republic of Indonesia	Subsidiary and/or the Company's management as a director

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Name of entities	Country of incorporation	Nature of relationships
PT Chandra Asri Pacific Tbk	Republic of Indonesia	Indirect associate and/or common directors
Thaioil Energy Services Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Thaioil Solvent Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
TOPNEXT International Co., Ltd	Thailand	Indirect subsidiary and/or common directors/ or the Company's management as a director
Sak Chaisidhi Co., Ltd.	Thailand	Indirect subsidiary and/or the Company's management as a director
TOP Solvent (Vietnam) LLC.	Socialist Republic of Vietnam	Indirect subsidiary and/or the Company's management as a director
PT Tirta Surya Raya	Republic of Indonesia	Indirect subsidiary
JSKEM Private Limited	Republic of Singapore	Indirect subsidiary and/or the Company's management as a director
TOPNEXT India Private Limited	Republic of India	Subsidiary of indirect subsidiary
TOP SPP Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Thaioil Ethanol Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Sapthip Co., Ltd.	Thailand	Indirect subsidiary and/or common directors and/or the Company's management as a director
Sapthip Green Energy Co., Ltd.	Thailand	Subsidiary of indirect subsidiary and/or the Company's management as a director
Ubon Bio Ethanol Public Co., Ltd.	Thailand	Other related and/or the Company's management as a director
Thaioil Treasury Center Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Name of entities	Country of incorporation	Nature of relationships
TOP Ventures Company Limited	Thailand	Indirect subsidiary and/or the Company's management as a director
TOP Ventures Hong Kong Limited	Hong Kong Special Administrative Region	Indirect subsidiary and/or the Company's management as a director
TOP Ventures America LLC.	United States of America	Indirect subsidiary and/or the Company's management as a director
PTT Digital Solutions Co., Ltd.	Thailand	Associate and/or the Company's management as a director
PTT Energy Solutions Co., Ltd. ⁽¹⁾	Thailand	Associate and/or common directors and/or the Company's management as a director
Thai Petroleum Pipeline Co., Ltd.	Thailand	Associate and/or the Company's management as a director
Global Power Synergy Public Co., Ltd.	Thailand	Other related and/or common directors
Sarn Palung Social Enterprise Company Limited	Thailand	Other related and/or the Company's management as director
PTT Oil and Retail Business Public Company Limited	Thailand	Subsidiary of the parent company and/or common directors
Business Services Alliance Co., Ltd.	Thailand	Subsidiary of the parent company
PTT Exploration and Production Public Company Limited	Thailand	Subsidiary of the parent company
PTT International Trading Pte. Ltd.	Republic of Singapore	Subsidiary of the parent company
PTT Treasury Center Co., Ltd.	Thailand	Subsidiary of the parent company
Energy Complex Co., Ltd.	Thailand	Subsidiary of the parent company
IRPC Public Company Limited	Thailand	Subsidiary of the parent company
PTT Tank Terminal Co., Ltd.	Thailand	Subsidiary of the parent company and/or common directors
PTT Global Chemical Public Company Limited	Thailand	Subsidiary of the parent company

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Name of entities	Country of incorporation	Nature of relationships
PTT LNG Co., Ltd.	Thailand	Subsidiary of the parent company
PTT International Trading London Ltd.	England	Subsidiary of the parent company
PTT International Trading USA Inc.	United States of America	Subsidiary of the parent company
PTT MEA Ltd.	United Arab Emirates	Indirect subsidiary of the parent company
Siam Management Holding Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Mekha V Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Energy Recovery Unit Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Combined Heat and Power Producing Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Nuplex Resins (Vietnam) Pty Ltd.	Socialist Republic of Vietnam	Indirect subsidiary of the parent company
GC Maintenance & Engineering Co., Ltd.	Thailand	Indirect subsidiary of the parent company
NPC Safety and Environmental	Thailand	Indirect subsidiary of the parent company
Global Green Chemicals Public Company Limited	Thailand	Indirect subsidiary of the parent company
PTT Phenol Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Vencorex (Thailand) Co., Ltd.	Thailand	Indirect subsidiary of the parent company
GC Polyols Co., Ltd.	Thailand	Indirect subsidiary of the parent company
GC-M PTA Company Limited	Thailand	Indirect subsidiary of the parent company
Thai Tank Terminal Ltd.	Thailand	Joint venture of subsidiary of the parent company
IRPC Polyol Co., Ltd.	Thailand	Joint venture of subsidiary of the parent company
Brighter PTT Oil and Retail Business Company Limited	Myanmar	Joint venture of subsidiary of the parent company

⁽¹⁾ On 29 August 2022, the Extraordinary General Meeting of Shareholders of PTT Energy Solutions Company Limited (“PTTES”) passed a resolution approving the dissolution of PTTES. The liquidation process is expected to be completed within 2 years from the date of approval.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Revenue from sale and services, lease income, purchase of goods and assets	Market prices or, where no market price exists, at contractually agreed prices
Interest income and expense	Agreed rates as stipulated in the agreements
Dividend income	Right to receive dividends
Other income and expenses	Contractually agreed prices
Directors' remuneration	Amounts approved by the Group's shareholders

Summarised significant business transactions with related parties are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Parent company				
Revenue from sale	7	2	-	-
Purchase of crude oil and feedstock	323,882	339,577	315,239	329,904
Other income	12	25	12	25
Other expenses	125	122	124	122
Purchase of assets	9	121	9	-

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Subsidiaries				
<i>(eliminated from the consolidated financial statements)</i>				
Revenue from sale	-	-	98,513	100,623
Purchase of crude oil and feedstock	-	-	64,988	64,762
Interest income	-	-	470	373
Dividend income	-	-	6,077	6,487
Land lease income	-	-	102	112
Other income	-	-	1,940	1,956
Interest expense	-	-	892	795
Interest expense capitalised as cost of assets	-	-	3,927	3,931
Other expenses	-	-	2,237	1,763
Purchase of assets	-	-	247	230
Associates				
Revenue from sale	149	317	-	-
Purchase of crude oil and feedstock	1,622	1,131	-	-
Dividend income	-	-	108	242
Other expenses	422	346	419	345
Purchase of assets	74	43	74	43
Subsidiaries of the parent company				
Revenue from sale	217,268	227,341	199,591	212,049
Purchase of crude oil and feedstock	11,589	7,169	7,764	4,314
Other income	90	15	90	15
Interest expense	-	1	-	1
Other expenses	173	60	116	15
Purchase of assets	92	41	92	41

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other related parties				
Revenue from sale	7	2,487	-	2,482
Purchase of crude oil and feedstock	6	-	6	-
Dividend income	259	189	251	169
Other income	21	25	21	25
Other expenses	18	14	-	-
Purchase of assets	3	-	3	-

As at 31 December 2024 and 2023, the balances of the accounts between the Group and those related companies are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade receivables - related parties (Note 9)				
Parent company	6	-	-	-
Subsidiaries	-	-	8,098	9,076
An associate	13	146	-	-
Subsidiaries of the parent company	13,219	15,127	11,705	13,872
Other related parties	1	-	-	-
Total	13,239	15,273	19,803	22,948

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other receivables - related parties				
Parent company	676	586	671	582
Subsidiaries	-	-	362	309
An associate	113	68	113	68
Subsidiaries of the parent company	504	670	500	666
Other related party	3	5	3	5
Total	1,296	1,329	1,649	1,630
Derivative liability - related party				
A subsidiary of the parent company	18	-	18	-
Total	18	-	18	-
Finance lease receivables- related parties				
Subsidiaries	-	-	1,187	1,144
Total	-	-	1,187	1,144
Other non-current assets - related parties				
Subsidiaries	-	-	117	88
A subsidiary of the parent company	15	15	15	15
Total	15	15	132	103

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade payables - related parties (Note 21)				
Parent company	49,852	48,344	48,754	46,699
Subsidiaries	-	-	5,201	6,443
An associate	150	103	-	-
Subsidiaries of the parent company	304	339	86	188
Total	50,306	48,786	54,041	53,330
Other payables - related parties				
Parent company	1	94	1	-
Subsidiaries	-	-	922	890
Associates	163	134	162	134
Subsidiaries of the parent company	46	17	42	11
Other related parties	3	1	-	-
Total	213	246	1,127	1,035
Finance lease payables - related parties				
Parent company	2	3	2	3
Subsidiaries	-	-	534	508
An associate	4	5	4	5
A subsidiary of the parent company	58	20	58	20
Total	64	28	598	536
Derivative liability - related parties				
Subsidiaries	-	-	-	19
Total	-	-	-	19

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other non-current liabilities - related parties				
Subsidiaries	-	-	733	671
A subsidiary of the parent company	3,092	3,092	3,092	3,092
Other related party	3	3	3	3
Total	3,095	3,095	3,828	3,766

Short-term loans to related parties

Movements of short-term loans to related parties during year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements				
	Balance as at 1 January 2024	Increase	Decrease	Effect of exchange rate	Balance as at 31 December 2024
Subsidiaries	934	40	(743)	2	233
Total	934	40	(743)	2	233

Interest rates for the year ended 31 December 2024 and 2023 is charged based on BIBOR 3M plus certain fixed margin per annum and SOFR 3M plus certain fixed margin per annum.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Long-term loans to related party

Movements of long-term loans to related party during the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements			
	Balance as at 1 January 2024	Increase	Decrease	Amortise of deferred financing fee
				Balance as at 31 December 2024
A subsidiary	9,986	-	-	1
Total	9,986	-	-	1

On 3 May 2023, the Company entered into a loan agreement with a subsidiary in an amount not exceeding of Baht 10,000 million, with an average interest rate of not exceeding 4.05% per annum throughout the contract period. The agreement is effective for 5 - 15 years. The loan serves the purposes of repaying loans to various financial institutions and financing the operations of an electricity and steam generating expansion project for the subsidiary within the Group.

Short-term loans from related parties

Movements of short-term loans from related parties during the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements		
	Balance as at 1 January 2024	Increase	Decrease
			Balance as at 31 December 2024
Subsidiaries	5,186	2,462	-
Total	5,186	2,462	-

Interest rates for year ended 31 December 2024 and 2023 are charged based on BIBOR 1M plus certain fixed margin per annum.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Long-term loans from related party

Movements of long-term loans from related party during the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements					Balance as at 31 December 2024
	Balance as at 1 January 2024	Increase	Decrease	Amortise of deferred financing fee	Effect of exchange rate	
A subsidiary	98,652	-	(3,240)	26	(455)	94,983
Total	98,652	-	(3,240)	26	(455)	94,983

The Company entered into multiple loan agreements with a subsidiary, with repayment due ranging from 2023 to 2050. As at 31 December 2024, the outstanding balance of loans were US dollar 2,779 million. (2023: US dollar 2,878 million) The loans bear fixed interest rates of 3.03% to 5.96% per annum.

Directors and management's benefits

During the years ended 31 December 2024 and 2023, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Short-term employee benefits	78	77	74	71
Total	78	77	74	71

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Significant agreements with related parties

During the year ended 31 December 2024, the Group had the following significant agreements with related parties.

Asset Sale and Purchase Agreement for the Energy Recovery Unit (ERU)

The Company has entered into the Asset Sale and Purchase Agreement for the ERU with a related company to support energy and utilities for Clean Fuel Project (CFP) whereby the purchase price is specified in the agreement. The Company will transfer ownership in the ERU to the purchaser upon satisfaction of all the conditions precedent set out in the agreement (Closing Date). Such conditions precedent include the Company's countersigning of the Provisional Acceptance Certificate (PAC) to the contractor and purchaser and seller receive all necessary certification from relevant authorities.

Fuel and Utilities Supply Agreement

The Company has entered into the Fuel and Utilities Supply Agreement with a related company to supply pitch, other fuels and utilities used in the operation of the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Power Purchase Agreement

The Company has entered into the Power Purchase Agreement with a related company to purchase electricity, steam and other by-products generated by the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Operation and Maintenance Services Agreement

The Company has entered into the Operation and Maintenance Services Agreement with a related company to provide the services of operation and maintenance of the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Master Agreement for Business Collaboration

The Company has entered into Master Agreement for Business Collaboration with a parent company in order to assign rules, conditions and guidelines for credit term extension of crude and condensate from 30 days to not exceeding 90 days. Term of the contract is 1 years which will be expired in 31 December 2024. The Company renewed the agreement for another year which will be expired on 31 December 2025.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Feedstock Supply Agreement

The Company has entered into Feedstock Supply Agreement with a parent company. A parent company will supply crude and condensate for the Company's refinery production including hire vessels to deliver crude. Term of the contracts is 3 years which will be expired on 31 December 2024. The Company renewed the agreement with an indefinite term until either party decides to terminate the agreement.

P1 Collaboration Agreement

The Company and subsidiaries have entered into P1 Collaboration Agreement to assign a collaboration guideline between PTT group, the Company and one of the Company's subsidiaries for supplying crude and condensate, petroleum product and petrochemical product, hire vessel, and derivatives related to an export and import of crude and condensate petroleum products and petrochemical products, including managing time charter vessel of the Company. These services will be managed by a related party in order to get a maximum benefit among PTT Group. The term of the contracts is 3 years which will be expired on 31 December 2024. The Company renewed the agreement with an indefinite term until either party decides to terminate the agreement.

7. Cash and cash equivalents

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash on hand	1	1	-	-
Deposits held at bank				
- savings and current accounts	21,009	26,461	17,540	21,767
- fixed deposit accounts less than 3 months	8,032	1,970	8,032	1,970
Total	29,042	28,432	25,572	23,737

As at 31 December 2024, the interest rates on deposits in saving accounts are 0.01% - 5.20% per annum (2023: 0.01% - 5.30% per annum).

As at 31 December 2024, the interest rates on deposits in fixed accounts less than 3 months are 4.67% - 4.92% per annum (2023: 6.01% per annum).

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

8. Short-term investments in financial assets

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Fixed deposit accounts held at bank	10,695	5,945	10,527	5,775
Total	10,695	5,945	10,527	5,775

As at 31 December 2024, fixed deposit accounts held at bank was denominated in US dollar amounting to US dollar 315 million (2023: US dollar 175 million) and bore interest at rates of 4.64% to 5.52% per annum (2023: 5.85% to 6.00% per annum).

9. Trade receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
<u>Trade receivables - related parties</u>				
Age of outstanding debts by due date				
Not yet due	13,239	15,273	19,803	22,948

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
<u>Trade receivables - non related parties</u>				
Age of outstanding debts by due date				
Not yet due	14,019	15,708	8,230	8,952
Past due				
Up to 3 months	343	170	-	-
3 - 6 months	45	7	-	-
Over 1 year	3	2	-	-
Total trade receivables - non related parties	14,410	15,887	8,230	8,952
Less: Allowance for expected credit losses	(48)	(6)	-	-
Total trade receivables - non related parties, net	14,362	15,881	8,230	8,952
Total	27,601	31,154	28,033	31,900

The normal credit term granted by the Group ranges from 7 days to 120 days.

10. Other receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other accounts receivables	1,721	1,835	2,024	2,114
Prepaid expenses	470	497	239	264
Current portion of long-term loans				
to savings co-operative of employees	21	21	21	20
Total	2,212	2,353	2,284	2,398

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

11. Inventories

(Unit: Million Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2024	2023	2024	2023	2024	2023
Crude oil and feedstock	12,844	17,979	(112)	-	12,732	17,979
Materials, spare parts and supplies	2,305	1,863	(13)	(13)	2,292	1,850
Finished and semi-finished oil products	9,703	13,124	(50)	(744)	9,653	12,380
Goods in transit						
Crude oil	15,783	20,298	-	-	15,783	20,298
Materials, spare parts and supplies	40	34	-	-	40	34
Finished and semi-finished oil products	77	115	-	-	77	115
Total	40,752	53,413	(175)	(757)	40,577	52,656

(Unit: Million Baht)

	Separated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2024	2023	2024	2023	2024	2023
Crude oil and feedstock	11,759	16,592	-	-	11,759	16,592
Materials, spare parts and supplies	1,769	1,317	-	-	1,769	1,317
Finished and semi-finished oil products	6,422	9,579	-	(644)	6,422	8,935
Goods in transit						
Crude oil	15,783	20,298	-	-	15,783	20,298
Materials, spare parts and supplies	17	32	-	-	17	32
Total	35,750	47,818	-	(644)	35,750	47,174

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

As at 31 December 2024, the inventories as stated above included a legal reserve amounting to Baht 13,708 million (2023: Baht 12,664 million).

As at 31 December 2024, a subsidiary has pledged inventories of approximately Baht 250 million (2023: Baht 250 million) to secure short-term loans from financial institutions.

Inventories recognised as expenses in cost of sale of goods for the year ended 31 December 2024 and 2023 are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cost of sale of goods	345,639	359,534	396,374	402,594
(Reversal) reduction of inventory to net realisable value	(582)	(55)	(644)	221
Net	345,057	359,479	395,730	402,815

12. Investments in subsidiaries

12.1 Movements of investments in subsidiaries are as follows:

(Unit: Million Baht)

	Separate financial statements	
	2024	2023
At 1 January	41,280	41,280
Increase in investment	-	-
At 31 December	41,280	41,280

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Significant transactions during the year ended 31 December 2024

Indirect subsidiaries

TOP Ventures Hong Kong Limited (TVHK)

In December 2024, Thailoil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, amounting to US dollar 0.84 million or equivalent to Baht 29 million and TTC has fully paid for the shares.

TOP Ventures America LLC (TVUS)

In December 2024, TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, has paid for additional shares to TOP Ventures America LLC ("TVUS"), amounting to US dollar 0.67 million or equivalent to Baht 23 million and TVHK has fully paid for the shares.

Significant transactions during the year ended 31 December 2023

Indirect subsidiaries

TOP Ventures Hong Kong Limited (TVHK)

During the year 2023, Thailoil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, amounting to US dollar 5.08 million or equivalent to Baht 176 million and TTC has fully paid for the shares.

TOP Venture America LLC (TVUS)

In September 2023, TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, has paid for additional shares to TOP Ventures America LLC ("TVUS"), amounting to US dollar 2.58 million or equivalent to Baht 91 million and TVHK has fully paid for the shares in September 2023.

TOP Ventures Company Limited (TVTH)

In December 2023, Thailoil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Company Limited ("TVTH"), an indirect subsidiary of the Group, amounting to Baht 10 million.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

12.2 The details of subsidiaries are as follows:

(Unit: Million Baht)

		Separate financial statements							
Country of incorporation	Nature of the business	Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
		2024 (percent)	2023 (percent)	2024	2023	2024	2023	2024	2023
Thai Paraxylene Co., Ltd. and its subsidiary	Thailand	99.99	99.99	2,572	2,572	2,161	2,161	1,945	-
- Subsidiary LABIX Co., Ltd.	Paraxylene manufacturing and distribution								
	Thailand	75.00	75.00	4,655	4,655	-	-	-	-
Thai Lube Base Public Company Limited	Linear Alkyl Benzene manufacturing and distribution								
	Thailand	99.99	99.99	1,758	1,758	1,979	1,979	1,143	2,792
Thaioil Energy Services Co., Ltd.	Lube base oil refining and distribution								
	Thailand	99.99	99.99	40	40	40	40	20	3
	Providing human resource management								

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

		Separate financial statements							
Country of incorporation	Nature of the business	Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
		2024 (percent)	2023 (percent)	2024	2023	2024	2023	2024	2023
Thaioil Solvent Co., Ltd. and its subsidiaries	Thailand	99.99	99.99	1,250	1,250	1,250	1,250	575	180
- Subsidiaries									
TOPNEXT International Company Limited and its subsidiaries	Thailand	99.99	99.99	1,200	1,200	-	-	-	-
Sak Chaisidhi Co., Ltd.	Thailand	80.52	80.52	190	190	-	-	-	-
TOP Solvent (Vietnam) LLC.	Socialist Republic of Vietnam	100.00	100.00	634	634	-	-	-	-
PT Tirta Surya Raya	Republic of Indonesia	77.71	77.71	50	50	-	-	-	-
JSKEM Private Limited and its subsidiary	Republic of Singapore	60.00	60.00	2	2	-	-	-	-
TOPNEXT India Private Limited	Republic of India	99.99	99.99	-(1)	-(1)	-	-	-	-

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements										
Country of incorporation	Nature of the business	Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year		
		2024 (percent)	2023 (percent)	2024	2023	2024	2023	2024	2023	
Thaioil Ethanol Co., Ltd. and its subsidiaries - Subsidiaries	Investment in ethanol businesses and alternative	99.99	99.99	1,450	1,450	1,450	1,450	-	-	5
Sapthip Co., Ltd. and its subsidiaries	Ethanol products manufacturing and distribution	50.00	50.00	800	800	-	-	-	-	-
Sapthip Green Energy Co., Ltd.	Biogas power generation and distribution	99.99	99.99	25	25	-	-	-	-	-
TOP SPP Co., Ltd.	Power and stream generation and distribution	99.99	99.99	3,500	3,500	3,500	3,500	2,243	3,360	3,360

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements										
Country of incorporation		Nature of the business	Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
			2024 (percent)	2023 (percent)	2024	2023	2024	2023	2024	2023
Thaioil Treasury Center Co., Ltd., and its subsidiaries	Thailand	Treasury centre services for the Group's business	99.99	99.99	956	956	956	956	151	147
- Subsidiaries										
TOP Ventures Company Limited	Thailand	Investment in venture capital and/or start-up business	99.99	99.99	29	29	-	-	-	-
TOP Ventures Hong Kong Limited and its subsidiaries	Hong Kong Special Administrative Region	Investment in venture capital and/or start-up business	100.00	100.00	762	733	-	-	-	-
TOP Ventures America LLC	United States of America	Investment in venture capital and/or start-up business	100.00	100.00	507	484	-	-	-	-
PT TOP Investment Indonesia	Republic of Indonesia	Investment in Olefins petrochemical business	100.00	100.00	29,944	29,944	29,944	29,944	-	-
Total investments in subsidiaries					41,280	41,280	41,280	41,280	6,077	6,487

⁽¹⁾ The balance is below Baht 1 million.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

12.3 Summarised financial information on subsidiaries with material non-controlling interests

Set out below are the summarised financial information for each subsidiary that has non-controlling interests and are material to the Group. The amounts disclosed for each subsidiary are before inter-company eliminations.

Summarised statement of financial position

(Unit: Million Baht)

	Other individually					
	LABIX Co., Ltd.		immaterial subsidiaries		Total	
	2024	2023	2024	2023	2024	2023
As at 31 December						
Non-controlling interest percentage	25	25				
Current assets	4,280	5,647				
Non-current assets	8,876	9,280				
Current liabilities	(2,798)	(4,189)				
Non-current liabilities	(2,346)	(3,051)				
Net assets	8,012	7,687				
Carrying amount of non-controlling interests	2,003	1,922	736	822	2,739	2,744

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Summarised statement of comprehensive income

(Unit: Million Baht)

	LABIX Co., Ltd.		Other individually immaterial subsidiaries		Total	
	2024	2023	2024	2023	2024	2023
For the year ended 31 December						
Revenue from sales	25,837	26,615				
Profit	325	630				
Other comprehensive income	-	-				
Total comprehensive income	325	630				
Profit allocated to non-controlling interests	81	158	(59)	(16)	22	142
Total comprehensive income allocated to non-controlling interests	81	158	(57)	(17)	24	141

Summarised statement of cash flows

(Unit: Million Baht)

	LABIX Co., Ltd.	
	2024	2023
For the year ended 31 December		
Cash flows from operating activities	936	1,479
Cash flows used in investing activities	(266)	(27)
Cash flows used in financing activities	(863)	(1,014)
Net increase (decrease) in cash and cash equivalents	(193)	438
Cash and cash equivalents at the beginning of the year	812	369
Exchange gains (losses) on cash and cash equivalents	(22)	5
Cash and cash equivalents at the end of the year	597	812

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

13. Investments in joint ventures and associates

13.1 Movements of investments in joint ventures and associates are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Net book value at beginning of year	32,039	32,603	982	982
Increase in investment	4	3	-	-
Share of profit (loss) of joint ventures and associates	(132)	84	-	-
Dividend income	(267)	(398)	-	-
Exchange differences on translation	(188)	(299)	-	-
Share of other comprehensive income of associates, net of tax	(27)	46	-	-
Share loss from the change in the net assets in an associate	(2)	-	-	-
Net book value at ending of year	31,427	32,039	982	982

Significant transactions during the year ended 31 December 2023

Indirect joint ventures

Chaibadan Community Power Plant 1 Co., Ltd. and Chaibadan Community Power Plant 2 Co., Ltd.

The extraordinary meeting of Chaibadan Community Power Plant 1 Co., Ltd. ("CCPP1") and Chaibadan Community Power Plant 2 Co., Ltd. ("CCPP2") have approved the dissolution of the companies. CCPP1 and CCPP2 were liquidated and closed on 27 March 2023.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

13.2 Investments in associates

The details of associates are as follows:

(Unit: Million Baht)

Consolidated financial statements										
Country of incorporation	Nature of business	Ownership interest held by the Group		Cost method		Equity method		Dividend received during the year		
		2024	2023	2024	2023	2024	2023	2024	2023	
		(percent)	(percent)							
PTT Digital Solutions Co., Ltd.	Thailand	Provide information technology and computer service activities	20.00	20.00	30	30	826	767	37	30
PTT Energy Solutions Co., Ltd.	Thailand	Provide technical and operational services	20.00	20.00	19	19	20	20	-	-
Thai Petroleum Pipeline Co., Ltd.	Thailand	Oil transportation through the pipeline	9.19	9.19	933	933	1,004	929	71	212
PT Chandra Asri Pacific Tbk ⁽¹⁾	Republic of Indonesia	Chemical products manufacturing and distribution	15.00	15.00	29,920	29,920	29,577	30,323	159	156
Total investments in associates					30,902	30,902	31,427	32,039	267	398

⁽¹⁾ On 29 December 2023, the Extraordinary General Meeting of Shareholders of PT Chandra Asri Petrochemical Tbk approved the change its company name to "PT Chandra AsriPacific Tbk". The change has been received approval on 3 January 2024.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements

	Country of incorporation	Nature of business	Ownership interest held by the Group		Cost method		Dividend received during the year	
			2024	2023	2024	2023	2024	2023
			(percent)	(percent)				
PTT Digital Solutions Co., Ltd.	Thailand	Provide information technology and computer service activities	20.00	20.00	30	30	37	30
PTT Energy Solutions Co., Ltd.	Thailand	Provide technical and operational services	20.00	20.00	19	19	-	-
Thai Petroleum Pipeline Co., Ltd.	Thailand	Oil transportation through the pipeline	9.19	9.19	933	933	71	212
Total investments in associates					982	982	108	242

As at 31 December 2024, the fair value of the Group and the Company's interest in PT Chandra Asri Pacific Tbk listed in the Stock Exchange of the Republic of Indonesia was Indonesian Rupiah 97,325 billion or equivalent to Baht 205,678 million (2023: Indonesian Rupiah 68,128 billion or equivalent to Baht 151,700 million).

Other associates are private companies and do not have a quoted market price available for their shares. There are no contingent liabilities relating to the Group's interest in these associates.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

13.3 Summarised financial information for associates

Set out below are the summarised financial information for the associates that are material to the Group. The information disclosed reflects the accounting presented in the financial statements of the relevant associates (not only the Group's shares of those amounts). They have been amended to reflect adjustments made using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Summarised statement of financial position

(Unit: Million Baht)

	PT Chandra Arsi Pacific Tbk	
	2024	2023
Current assets	98,694	107,557
Non-current assets	90,441	80,473
Current liabilities	(25,150)	(23,524)
Non-current liabilities	(64,187)	(61,824)
Net assets	99,798	102,682
Shareholding percentage (%)	15.00	15.00
Share of net assets	14,970	15,402
Adjustment and elimination entries	14,607	14,921
Carrying amounts of associates based on equity method	29,577	30,323

Summarised statement of comprehensive income

(Unit: Million Baht)

	PT Chandra Arsi Pacific Tbk	
	2024	2023
Revenue	67,971	75,379
Loss	(2,024)	(1,089)
Other comprehensive income	(151)	(56)
Total comprehensive income	(2,175)	(1,145)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in associates.

(Unit: Million Baht)

	PT Chandra Arsi Pacific Tbk	
	2024	2023
Group's interest in net assets of associates at 1 January	30,323	30,924
Addition of investment	4	3
Share of loss from investments in associates	(374)	(195)
Share of other comprehensive income from associates, net of income tax	(27)	46
Currency translation differences	(188)	(299)
Dividends received	(159)	(156)
Loss from the change in the net assets of an associate	(2)	-
Carrying amount of interest in associates at 31 December	29,577	30,323

13.4 Individually immaterial associates

In addition to the interests in associates disclosed above, the Group also has interests in a number of individually immaterial associates that are accounted for using the equity method.

(Unit: Million Baht)

	Individually immaterial associates	
	2024	2023
Aggregate carrying amount of individually immaterial associates	1,850	1,716
The total amount of the group's share in associates		
Profit	242	280
Other comprehensive income	-	-
Total comprehensive income	242	280

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

14. Investment properties

Investment properties of the Group is land and land improvement.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
As at 1 January				
Cost	103	103	1,185	1,124
<u>Less</u> Provision for impairment	-	-	-	-
Book value	103	103	1,185	1,124
For the year ended 31 December				
Beginning book value	103	103	1,185	1,124
Transfer to property, plant and equipment (Note 15)	-	-	-	61
Ending book value	103	103	1,185	1,185
As at 31 December				
Cost	103	103	1,185	1,185
<u>Less</u> Provision for impairment	-	-	-	-
Book value	103	103	1,185	1,185
Fair value	571	458	3,592	2,759

Fair value Measurement

The fair value of investment property was determined by external, independent property valuers, having appropriate recognised professional qualifications and experiences in valuing the property. The independent valuers provide the fair value of the Group's investment property portfolio on a regular basis.

The fair value measurement for all investment property has been categorised as a level 3 fair value based on the inputs to the valuation technique used.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
 For the year ended 31 December 2024

The following table shows the valuation technique used in measuring the fair value of investment property, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
- <u>Discounted cash flows</u> The valuation model considers the present value of net cash flows to be generated from the property, taking into account expected rental growth rate. The expected net cash flows are discounted using risk-adjusted discount rates. Among other factors, the discount rate estimation considers the quality of its location (prime vs secondary), tenant credit quality and lease terms.	<ul style="list-style-type: none"> Contractually agreed lease income over the remaining period. The risk-adjusted discount rates (6% - 7%) 	The estimated fair value increase (decrease) if: <ul style="list-style-type: none"> Expected market rental growth were higher (lower); The risk-adjusted discount rate were lower (higher).
- <u>Market approach</u>	The adjusted quoted price and the actual selling price of comparable investment properties	The estimated fair value increase (decrease) if land price was higher (lower).

Amounts recognised in profit and loss that related to investment property are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
For the year ended 31 December				
Rental income	22	22	92	92

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

15. Property, plant and equipment

Movements of property, plant and equipment for the years ended 31 December 2024 and 2023 are summarised below.

(Unit: Million Baht)

Consolidated financial statements											
	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Cost											
At 1 January 2023	7,358	5,109	212	118,034	36,135	17,752	7,801	1,102	16	137,602	331,121
Additions	-	1	-	258	-	27	15	10	-	17,466	17,777
Disposals and write-off	-	-	-	(1)	-	(462)	(5)	(2)	-	-	(470)
Transfers in (out)	-	36	-	1,998	24	3,612	102	54	-	(3,781)	2,045
Exchange differences	-	(4)	-	-	-	-	(30)	-	-	(1)	(35)
At 31 December 2023	7,358	5,142	212	120,289	36,159	20,929	7,883	1,164	16	151,286	350,438
Additions	-	-	-	650	95	-	24	18	-	11,786	12,573
Disposals and write-off	-	-	-	-	-	-	(1)	(3)	(1)	-	(5)
Transfers in (out)	-	715	-	3,920	52	83	252	65	-	(5,055)	32
Exchange differences	-	(5)	-	-	-	-	(41)	(1)	-	-	(47)
At 31 December 2024	7,358	5,852	212	124,859	36,306	21,012	8,117	1,243	15	158,017	362,991

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements

	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Accumulated depreciation											
At 1 January 2023	-	2,098	55	87,537	22,729	8,792	5,009	925	13	-	127,158
Depreciation charged during the year	-	233	8	3,071	1,173	701	342	59	1	-	5,588
Depreciation on disposals and write-off	-	-	-	(34)	-	(410)	(5)	(2)	-	-	(451)
Transfers in	-	2	-	-	-	-	-	-	-	-	2
Exchange differences	-	(1)	-	-	-	-	(11)	-	-	-	(12)
At 31 December 2023	-	2,332	63	90,574	23,902	9,083	5,335	982	14	-	132,285
Depreciation charged during the year	-	265	8	3,363	1,177	699	325	64	1	-	5,902
Depreciation on disposals and write-off	-	-	-	-	-	-	(1)	(3)	(1)	-	(5)
Transfers in	-	2	-	-	-	-	-	-	-	-	2
Exchange differences	-	(2)	-	-	-	-	(17)	-	-	-	(19)
At 31 December 2024	-	2,597	71	93,937	25,079	9,782	5,642	1,043	14	-	138,165

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements

	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Impairment allowance											
At 31 December 2023	-	-	-	-	674	-	-	-	-	-	674
At 31 December 2024	-	-	-	-	674	-	-	-	-	-	674
Net book value											
At 31 December 2023	7,358	2,810	149	29,715	11,583	11,846	2,548	182	2	151,286	217,479
At 31 December 2024	7,358	3,255	141	30,922	10,553	11,230	2,475	200	1	158,017	224,152
Depreciation for the year											
2023 (Baht 5,398 million included in manufacturing cost, and the balance in selling and administrative expenses)											5,588
2024 (Baht 5,584 million included in manufacturing cost, and the balance in selling and administrative expenses)											5,902

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements

	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Cost									
At 1 January 2023	4,941	3,747	109,246	5,784	1,588	711	1	135,177	261,195
Additions	-	-	259	-	5	6	-	16,708	16,978
Disposals and write-off	-	-	(1)	(462)	(2)	-	-	-	(465)
Transfers in (out)	(61)	-	1,696	-	-	49	-	300	1,984
At 31 December 2023	4,880	3,747	111,200	5,322	1,591	766	1	152,185	279,692
Additions	-	-	648	-	13	15	-	11,779	12,455
Disposals and write-off	-	-	-	-	-	(1)	-	-	(1)
Transfers in (out)	-	691	3,838	43	25	60	-	(4,625)	32
At 31 December 2024	4,880	4,438	115,686	5,365	1,629	840	1	159,339	292,178

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements

	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Accumulated depreciation									
At 1 January 2023	-	1,214	79,930	5,580	1,384	603	1	-	88,712
Depreciation charged during the year	-	173	2,918	52	46	52	-	-	3,241
Depreciation on disposals and write-off	-	-	(34)	(408)	(2)	-	-	-	(444)
At 31 December 2023	-	1,387	82,814	5,224	1,428	655	1	-	91,509
Depreciation charged during the year	-	203	3,207	-	39	56	-	-	3,505
Depreciation on disposals and write-off	-	-	-	-	-	(1)	-	-	(1)
At 31 December 2024	-	1,590	86,021	5,224	1,467	710	1	-	95,013
Impairment allowance									
At 31 December 2023	-	-	-	-	-	-	-	-	-
At 31 December 2024	-	-	-	-	-	-	-	-	-

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements

	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Net book value									
At 31 December 2023	4,880	2,360	28,386	98	163	111	-	152,185	188,183
At 31 December 2024	4,880	2,848	29,665	141	162	130	-	159,339	197,165
Depreciation for the year									
2023 (Baht 3,080 million included in manufacturing cost, and the balance in selling and administrative expenses)								3,241	
2024 (Baht 3,218 million included in manufacturing cost, and the balance in selling and administrative expenses)								3,505	

As at 31 December 2024, the Group had assets under construction for The Clean Fuel Project. The construction has been financed with loans. Borrowing costs amounting to Baht 4,022 million were capitalised during the year ended 31 December 2024 (the Company only: Baht 4,464 million). The weighted average rate of 2.47% - 5.39% per annum (The Company only: 3.69% - 5.99% per annum) has been used to determine the amount of borrowing costs eligible for capitalisation. The borrowing costs were included in 'Additions' during the year.

The gross amounts of the Group's and the Company's fully depreciated plant and equipment that were still in use as at 31 December 2024, were Baht 75,636 million (2023: Baht 69,890 million) and Baht 61,526 million (2023: Baht 55,109 million), respectively.

As at 31 December 2024, certain subsidiaries mortgaged their land, building, petrochemical plant and machines as collateral for credit facilities. The book value of land, building, petrochemical plant, and machines amounted to Baht 6,716 million (2023: Baht 7,051 million).

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

16. Leases

The Group as a lessee

The Group has lease contracts for assets used in its operations.

a) Right-of-use assets

Movements of right-of-use assets for the years ended 31 December 2024 and 2023 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements					
	Land	Buildings	Equipment	Oil tankers	Motor vehicles	Total
1 January 2023	11,946	149	97	11,773	73	24,038
Additions	7	2	94	-	30	133
Lease modification	-	-	-	(14)	-	(14)
Exchange differences	(2)	-	-	-	-	(2)
Depreciation for the year	(429)	(62)	(66)	(1,332)	(42)	(1,931)
31 December 2023	11,522	89	125	10,427	61	22,224
Additions	235	73	115	-	86	509
Lease modification	-	-	2	(465)	-	(463)
Exchange differences	(2)	-	-	-	-	(2)
Depreciation for the year	(431)	(62)	(63)	(1,290)	(40)	(1,886)
31 December 2024	11,324	100	179	8,672	107	20,382

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements					
	Land	Buildings	Equipment	Oil tankers	Motor vehicles	Total
1 January 2023	11,303	50	74	11,773	66	23,266
Additions	7	-	94	-	22	123
Lease modification	(14)	-	-	(14)	-	(28)
Depreciation for the year	(411)	(27)	(46)	(1,332)	(36)	(1,852)
31 December 2023	10,885	23	122	10,427	52	21,509
Additions	256	70	116	-	71	513
Lease modification	-	-	2	(465)	-	(463)
Depreciation for the year	(412)	(26)	(60)	(1,290)	(34)	(1,822)
31 December 2024	10,729	67	180	8,672	89	19,737

The movements of right-of-use assets exclude the right-of-use assets which are classified as investment property which is presented in Note 14.

b) Lease liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Lease payments	28,503	30,440	28,910	30,793
Less: Deferred interest expenses	(8,946)	(9,350)	(9,162)	(9,571)
Total	19,557	21,090	19,748	21,222
Less: Portion due within one year	(1,445)	(1,402)	(1,423)	(1,355)
Lease liabilities - net of current portion	18,112	19,688	18,325	19,867

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Movements of the lease liability account during the years ended 31 December 2024 and 2023 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Balance at beginning of year	21,090	22,508	21,222	22,606
Additions	275	132	278	122
Interest expenses	777	753	784	757
Repayments	(2,059)	(2,156)	(2,013)	(2,103)
Lease modification	(463)	(14)	(463)	(28)
Unrealised gain on exchange	(60)	(132)	(60)	(132)
Contract termination	(1)	-	-	-
Exchange differences	(2)	1	-	-
Balance at end of year	19,557	21,090	19,748	21,222

A maturity analysis of lease payments is disclosed in Note 34.1.3 under the liquidity risk.

c) Expenses relating to leases that are recognised in profit or loss

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Depreciation expenses of right-of-use assets	1,886	1,931	1,822	1,852
Interest expenses on lease liabilities	777	753	784	757
Expenses relating to short-term leases	4	4	-	-
Expenses relating to leases of low-value assets	38	4	38	4

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

d) Group as a lessor

The Group has entered into operating leases for its investment property portfolio consisting of (see Note 14). During the year 2024, the Group has sublease income amounting to Baht 22 million (2023: Baht 22 million) (The Company only: Baht 92 million, 2023: Baht 92 million).

17. Goodwill

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
At 1 January		
Cost	826	849
Book value	826	849
For the year ended 31 December		
Book value at the beginning of year	826	849
Exchange differences	(28)	(23)
Book value at end of year	798	826
At 31 December		
Cost	798	826
Book value	798	826

Goodwill is allocated to the Group's cash-generating units (CGUs) identified according to business segment which is solvent segment.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Impairment testing for goodwill

The Group tests goodwill impairment on an annual basis. The recoverable amount was based on its value-in-use, determined by discounting future cash flows to be generated in the future from the continuing use of CGU which based on the management approved five-year financial budget. Those cash flows are determined by annual earnings before interest, taxes, depreciation, and amortisation (EBITDA) estimated by management, adjusted by corporate income tax, change in working capital and relevant capital expenditures. The estimate also included a long-term growth rate with reference to gross domestic product (GDP) growth rates for the countries in which the CGUs operates and experiences by management.

The key assumptions used for value-in-use calculations are as follows:

	Goodwill - Thailand	Goodwill - Vietnam
	%	%
Gross margin	7.01 - 7.48	5.46 - 6.47
Long-term growth rate	3.00	6.23
Discount rate from weighted average cost of capital (WACC)	8.69	11.87

The recoverable amount of CGU in which goodwill is allocated is estimated to exceed the carrying amount of the CGU. Management has considered the above and believes that there is no occurrence of impairment of goodwill.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

18. Intangible assets

The net book value of intangible assets as at 31 December 2024 and 2023 are presented below.

(Unit: Million Baht)

	Consolidated financial statements				
	License fee	Computer software	Patent	Intangible assets under processing	Total
As at 31 December 2023					
Cost	3,577	1,485	2	293	5,357
<u>Less</u> Accumulated amortisation	(1,969)	(983)	(1)	-	(2,953)
Net book value	1,608	502	1	293	2,404
As at 31 December 2024					
Cost	3,634	1,688	2	358	5,682
<u>Less</u> Accumulated amortisation	(2,069)	(1,155)	(1)	-	(3,225)
Net book value	1,565	533	1	358	2,457

(Unit: Million Baht)

	Separate financial statements				
	License fee	Computer software	Patent	Intangible assets under processing	Total
As at 31 December 2023					
Cost	966	1,237	2	292	2,497
<u>Less</u> Accumulated amortisation	(869)	(766)	(1)	-	(1,636)
Net book value	97	471	1	292	861
As at 31 December 2024					
Cost	989	1,435	2	357	2,783
<u>Less</u> Accumulated amortisation	(886)	(917)	(1)	-	(1,804)
Net book value	103	518	1	357	979

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

19. Income tax

Income tax expenses for the years ended 31 December 2024 and 2023 are summarised as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Current income tax:				
Income tax for the year	2,373	4,788	1,465	4,035
Deferred tax:				
Relating to origination and reversal of temporary differences	(90)	(116)	(529)	(337)
Income tax expense reported in profit or loss	2,283	4,672	936	3,698

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2024 and 2023 are presented in the movement in deferred tax assets and liabilities.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

The reconciliation between accounting profit and income tax expense are shown below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Accounting profit before tax	12,264	24,257	10,821	25,211
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	2,453	4,851	2,164	5,042
Decrease in deferred tax in current year	29	91	-	-
Adjustment from prior period	(46)	(59)	(59)	(48)
Effects of:				
Promotional privileges and dividends	(180)	(350)	(1,288)	(1,381)
Non-deductible expenses	264	210	125	150
Additional expense deductions allowed	(237)	(71)	(6)	(65)
Total	(153)	(211)	(1,169)	(1,296)
Income tax expense reported in profit or loss	2,283	4,672	936	3,698

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Revenue, profit before finance costs and income tax expenses and income tax expenses from overseas operations of the Group for the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Revenue ⁽¹⁾	Profit (loss) before finance costs and income tax expenses	Income tax expense
Thailand	460,188	12,686	2,255
Vietnam	4,325	53	12
Indonesia	4,003	(455)	15
Singapore	1,847	12	1
Hong Kong ⁽²⁾	9	8	-
United States of America ⁽²⁾	(40)	(40)	-
Total	470,332	12,264	2,283

Note:

⁽¹⁾ Taxable income consists of: Sales, Subsidy from oil fuel fund, Dividend Income, Gain (loss) from hedging derivatives, Foreign exchange gain (loss) and Other income etc.

⁽²⁾ No income tax expenses due to income tax loss.

The analysis of deferred tax assets and deferred tax liabilities is as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Deferred tax assets, net	3,460	2,503	3,291	1,907
Deferred tax liabilities, net	(18)	(16)	-	-
Deferred tax, net	3,442	2,487	3,291	1,907

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

The movements in deferred tax assets and liabilities during the year are as follows:

(Unit: Million Baht)

Consolidated financial statements										
	Employee benefit obligation	Impairment losses on assets	Unused tax losses	Lease liabilities	Cash flow hedges	Borrowing cost	Loss from exchange rate in construction in progress	Unrealised loss on changes in fair value of investment FVOCI	Others	Total
Deferred tax assets										
At 1 January 2023	560	140	624	303	157	227	2,498	-	77	4,586
Charged (credited) to profit or loss	(10)	(23)	(182)	17	235	19	-	-	55	111
Charged (credited) to other comprehensive income	1	-	-	-	(197)	-	-	-	-	(196)
Reclassification	-	-	-	-	-	-	-	1,073	-	1,073
Exchange differences	1	-	-	-	-	-	-	-	-	1
At 31 December 2023	552	117	442	320	195	246	2,498	1,073	132	5,575
At 1 January 2024	552	117	442	320	195	246	2,498	1,073	132	5,575
Charged (credited) to profit or loss	(17)	(25)	(423)	(29)	48	19	72	-	8	(347)
Charged to other comprehensive income	-	-	-	-	277	-	-	590	-	867
Reclassification	-	-	-	-	-	-	-	-	11	11
Exchange differences	-	-	(1)	-	-	-	-	-	-	(1)
At 31 December 2024	535	92	18	291	520	265	2,570	1,663	151	6,105

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements						
	Accumulated depreciation	Deferred cost of debentures	Gain on reclassification of investments	Unrealised gain on changes in fair value of investment FVOCI	Others	Total
Deferred tax liabilities						
At 1 January 2023	(396)	(51)	(2,052)	(373)	(592)	(3,464)
(Charged) credited to profit or loss	(81)	2	-	-	83	4
Credited to other comprehensive income	-	-	-	1,446	-	1,446
Reclassification	-	-	-	(1,073)	-	(1,073)
Exchange differences	-	(1)	-	-	-	(1)
At 31 December 2023	(477)	(50)	(2,052)	-	(509)	(3,088)
At 1 January 2024	(477)	(50)	(2,052)	-	(509)	(3,088)
(Charged) credited to profit or loss	(56)	(8)	-	-	500	436
Reclassification	-	-	-	-	(11)	(11)
At 31 December 2024	(533)	(58)	(2,052)	-	(20)	(2,663)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements

	Employee benefit obligation	Impairment losses on assets	Lease liabilities	Cash flow Hedges	Borrowing cost	Loss from exchange rate in construction in progress	Unrealised loss on changes in fair value of investment FVOCI	Others	Total
Deferred tax assets									
At 1 January 2023	542	2	247	146	227	2,498	-	63	3,725
Charged (credited) to profit or loss	(8)	-	12	235	19	-	-	54	312
Credited in other comprehensive income	-	-	-	(186)	-	-	-	-	(186)
Reclassification	-	-	-	-	-	-	917	-	917
At 31 December 2023	534	2	259	195	246	2,498	917	117	4,768
At 1 January 2024	534	2	259	195	246	2,498	917	117	4,768
Charged (credited) to profit or loss	(14)	-	(35)	48	19	73	-	8	99
Credited in other comprehensive income	-	-	-	276	-	-	578	-	854
Reclassification	-	-	-	-	-	-	-	5	5
At 31 December 2024	520	2	224	519	265	2,571	1,495	130	5,726

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Separate financial statements

	Accumulated depreciation	Deferred cost of debentures	Gain on reclassification of investments	Unrealised gain on changes in fair value of investment FVOCI	Others	Total
Deferred tax liabilities						
At 1 January 2023	(288)	(57)	(1,947)	(465)	(593)	(3,350)
(Charged) credited to profit or loss	(59)	2	-	-	81	24
Credited to other comprehensive income	-	-	-	1,382	-	1,382
Reclassification	-	-	-	(917)	-	(917)
At 31 December 2023	(347)	(55)	(1,947)	-	(512)	(2,861)
At 1 January 2024	(347)	(55)	(1,947)	-	(512)	(2,861)
(Charged) credited to profit or loss	(34)	(7)	-	-	472	431
Reclassification	-	-	-	-	(5)	(5)
At 31 December 2024	(381)	(62)	(1,947)	-	(45)	(2,435)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Deferred income tax assets are recognised for tax loss carried forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. As at 31 December 2024, the Group did not recognise deferred income tax assets of Baht 36 million (2023: Baht 26 million) in respect of losses that can be carried forward against future taxable income amounting to Baht 180 million which will expire during 2025 to 2029 (2023: Baht 130 million will expire during 2024 to 2028).

Effect from international tax reform - Pillar Two model rules

The Group is within the scope of the Pillar Two model rules published by the Organisation for Economic Co-operation and Development (OECD). Accordingly, the Group has applied the mandatory exception requiring that entities shall neither recognise nor disclose information about deferred tax assets and liabilities related to Pillar Two income taxes.

The Group operates in Vietnam where Pillar Two legislation has been enacted and is effective for fiscal years beginning on or after 1 January 2024. However, no current tax expense related to Pillar Two income taxes was recognised in 2024 because the Group benefits from the “Transitional Safe Harbour” relief under the Pillar Two legislation.

In addition, the Group operates in several countries where Pillar Two legislation have been enacted or substantially enacted and will be effective for fiscal years beginning on or after 1 January 2025. The management of the Group is currently in the process of assessing the potential exposure to Pillar Two income taxes in the financial statements. Based on the preliminary assessment, the Group might not have significant top-up taxes related to the Pillar Two legislation for the year ended 31 December 2025.

20. Short-term loans from financial institutions

Short-term loans from financial institutions for the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
Short-term loans from financial institutions		
- Secured	515	515
- Unsecured	2,210	2,683
Total short-term loans from financial institutions	2,725	3,198

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Movements of short-term loans from financial institutions for the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
Opening balance	3,198	1,892
<u>Cash flows:</u>		
Proceeds from short-term loans	12,184	11,480
Repayments of short-term loans	(12,634)	(10,150)
<u>Other non-cash movements:</u>		
Exchange differences	(23)	(24)
Closing balance	2,725	3,198

As at 31 December 2024, short-term loans from financial institutions represented promissory notes of the subsidiaries which denominated in Thai Baht amounting to Baht 2,165 million, Vietnamese Dong 173,000 million (equivalent to Baht 231 million) and Indonesian Rupiah currency amounting to 155,658 million Indonesian Rupiahs (equivalent to Baht 329 million), and bore interest at rates of 2.50% - 10.00% per annum (2023: subsidiaries' short-term loans denominated in Thai Baht amounting to Baht 2,515 million, Vietnamese Dong 357,700 million (equivalent to Baht 503 million) and Indonesian Rupiah currency amounting to 81,224 million Indonesian Rupiahs (equivalent to Baht 181 million) with bore interest rates of 2.00% to 10.00% per annum). These short-term loans of a subsidiary are secured by the pledge of inventories, the mortgage of land, buildings and machines. The short-term credit facilities of a subsidiary is guaranteed by another subsidiary, and jointed collateral with the short-term loans under the terms and condition in the Credit Facilities Agreement.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

21. Trade payables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Related parties (Note 6)	50,306	48,786	54,041	53,330
Other parties	1,273	1,398	984	1,165
Total	51,579	50,184	55,025	54,495

22. Other payables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other payables	1,289	1,717	1,190	1,405
Accrued interest	1,031	1,187	1,107	1,260
Accrued operating expenses	340	320	151	116
Oil Fuel Fund payable	526	156	526	156
Others	512	530	311	281
Total	3,698	3,910	3,285	3,218

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

23. Long-term loans from financial institutions and a third party

Long-term loans from financial institutions and a third party are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Current portion of long-term loans from financial institutions, net				
- Secured	611	611	-	-
- Unsecured	3,166	2,450	3,101	2,374
Long-term loans from financial institutions, net of current portion				
- Secured	1,208	1,887	-	-
- Unsecured	18,018	14,148	17,738	13,838
Long-term loans from a third party				
- Unsecured	179	191	-	-
Total long-term loans	23,182	19,287	20,839	16,212

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Movements of long-term loans from financial institutions and a third party are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Opening balance	19,287	22,907	16,212	11,906
<u>Cash flows:</u>				
Proceeds from long-term loans	7,054	6,012	7,000	6,000
Repayments of long-term loans	(3,172)	(9,676)	(2,400)	(1,700)
Financing fee	(4)	(28)	(4)	(28)
<u>Other non-cash movements:</u>				
Amortisation of deferred financing fee	35	90	31	34
Exchange differences	(18)	(18)	-	-
Closing balance	23,182	19,287	20,839	16,212

The weighted average effective interest rate of the long-term loans of the Group were 4.13% per annum (2023: 4.21% per annum), the Company was 4.20 % per annum (2023: 4.37% per annum).

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

The detail of long-term loans of the Group are as follows:

No.	Loans by	As at 31 December									
		2024					2023				
		Currency in agreement	Original currency (Million)	Equivalent to Million Baht	Original currency (Million)	Equivalent to Million Baht	Interest rate per annum (%)	Principal repayment term	Interest payment period		
1	Subsidiaries	Baht	21	21	31	31	THOR plus a certain margin	Semi-Annual	Semi-Annual		
2	Subsidiaries	Baht	3	3	6	6	THOR plus a certain margin	Semi-Annual	Semi-Annual		
3	Subsidiaries	Baht	-	-	12	12	MLR minus a certain margin	Semi-Annual	Semi-Annual		
4	Subsidiaries	Baht	-	-	1	1	MLR minus a certain margin	Semi-Annual	Semi-Annual		
5	Subsidiaries	Baht	-	-	2	2	THOR plus a certain margin	Semi-Annual	Monthly		
6	Subsidiaries	Baht	1,795	1,795	2,460	2,460	THOR plus a certain margin	Semi-Annual	Monthly		
7	Subsidiaries	Baht	179	179	191	191	THOR plus a certain margin	A specified in the agreement	A specified in the agreement		
8	Subsidiaries	Vietnamese Dong	258,199	345	264,438	371	COF plus a certain margin	Semi-Annual	Semi-Annual		
9	The Company	Baht	4,868	4,868	6,247	6,247	MLR minus a certain margin	Quarterly	Quarterly		
10	The Company	Baht	3,494	3,494	3,989	3,989	6MBIBOR plus a certain margin	Semi-Annual	Semi-Annual		
11	The Company	Baht	497	497	497	497	3MBIBOR plus a certain margin	End of the contract	Quarterly		
12	The Company	Baht	499	499	499	499	THOR plus a certain margin	End of the contract	Quarterly		
13	The Company	Baht	995	995	994	994	THOR plus a certain margin	Quarterly	Quarterly		
14	The Company	Baht	2,495	2,495	2,994	2,994	THOR plus a certain margin	Semi-Annual	Quarterly		
15	The Company	Baht	995	995*	993	993*	MLR minus a certain margin	Quarterly	Quarterly		
16	The Company	Baht	1,000	1,000	-	-	THOR plus a certain margin	End of the contract	Quarterly		
17	The Company	Baht	1,498	1,498	-	-	1MBIBOR plus a certain margin	End of the contract	Quarterly		
18	The Company	Baht	1,498	1,498*	-	-	THOR plus a certain margin	End of the contract	Monthly		
19	The Company	Baht	3,000	3,000	-	-	MLR minus a certain margin	End of the contract	Semi-Annual		
Total				23,182		19,287					

* Long-term loans associated with sustainability initiatives (Sustainability-Linked Loans), are subject to interest rate reductions upon fulfilment of predetermined conditions outlined within the agreement, contingent upon the achievement of specified Sustainability Performance Targets.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

In November 2023, the Company entered into long-term loan facility agreements with various financial institutions in Thailand totalling of Baht 7,000 million, with the drawdown on 8 March 2024 with interest rates and repayment schedule for 5 - 7 years as stipulated in such agreements to be used in normal business operations. Under the terms, the Company agrees to maintain certain financial ratios and comply with conditions stipulated in the agreements.

The Group's long-term loans are secured by collateral of land, building, petrochemical plants, and machinery (Note 15) in accordance with the Credit Facilities Agreement.

The Group is required to comply with certain criteria and conditions; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage.

24. Debentures

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Debentures	129,622	141,423	35,387	42,429
Less: Discount on/ Issuance of debentures	(730)	(791)	(130)	(137)
Total	128,892	140,632	35,257	42,292
Less: Current portion of debentures, net	(1,400)	(7,000)	(1,400)	(7,000)
Debentures, net	127,492	133,632	33,857	35,292

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Movements of debentures of the Group and the Company are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Beginning balance	140,632	148,952	42,292	39,871
<u>Cash flows:</u>				
Additions	-	10,000	-	10,000
Redemption and repurchase of debentures	(10,303)	(16,381)	(7,000)	(7,109)
Financing fee	-	(4)	-	(4)
<u>Other non-cash movements:</u>				
Interest of discount on debenture	58	36	6	-
Exchange differences	(361)	(1,971)	(41)	(466)
Gain on repurchase of debentures	(1,134)	-	-	-
Ending balance	128,892	140,632	35,257	42,292

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Debentures issued by the Group are owned by the Company and a subsidiary, which are unsecured and unsubordinated. The debentures issued by a subsidiary are fully guaranteed by the Company. Detail are as follows:

Consolidated financial statements

Issuance date	Maturity date	Years	Currency	2024 (Million)	2023 (Million)	Interest rate (% p.a.)	Interest payment term
23 March 2012	23 March 2027	15	Baht	7,500	7,500	5.05	Semi-annual basis
23 January 2013	23 January 2043	30	US dollar	172.4	172.4	4.875	Semi-annual basis
12 March 2014	12 March 2024	10	Baht	-	7,000	4.84	Semi-annual basis
10 April 2018	23 January 2043	30	US dollar	327.6	327.6	4.875	Semi-annual basis
20 November 2018	20 November 2028	10	US dollar	400	400	4.625	Semi-annual basis
20 November 2018	20 November 2048	30	US dollar	600	600	5.375	Semi-annual basis
17 October 2019	17 October 2049	30	US dollar	565	565	3.50	Semi-annual basis
18 June 2020	18 June 2030	10	US dollar	400	400	2.50	Semi-annual basis
18 June 2020	18 June 2050	30	US dollar	480	600	3.75	Semi-annual basis
11 November 2022	11 November 2025	3	Baht	1,400	1,400	2.99	Semi-annual basis
11 November 2022	11 November 2027	5	Baht	600	600	3.64	Semi-annual basis
11 November 2022	11 November 2029	7	Baht	2,000	2,000	4.13	Semi-annual basis
11 November 2022	11 November 2032	10	Baht	1,700	1,700	4.49	Semi-annual basis
11 November 2022	11 November 2034	12	Baht	3,100	3,100	4.79	Semi-annual basis
11 November 2022	11 November 2037	15	Baht	3,200	3,200	5.09	Semi-annual basis
3 May 2023	3 May 2028	5	Baht	2,800	2,800	3.32	Semi-annual basis
3 May 2023	3 May 2033	10	Baht	2,300	2,300	3.84	Semi-annual basis
3 May 2023	3 May 2038	15	Baht	4,900	4,900	4.24	Semi-annual basis

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Separate financial statements

Issuance date	Maturity date	Years	Currency	2024 (Million)	2023 (Million)	Interest rate (% p.a.)	Interest payment term
23 March 2012	23 March 2027	15	Baht	7,500	7,500	5.05	Semi-annual basis
23 January 2013	23 January 2043	30	US dollar	172.4	172.4	4.875	Semi-annual basis
12 March 2014	12 March 2024	10	Baht	-	7,000	4.84	Semi-annual basis
11 November 2022	11 November 2025	3	Baht	1,400	1,400	2.99	Semi-annual basis
11 November 2022	11 November 2027	5	Baht	600	600	3.64	Semi-annual basis
11 November 2022	11 November 2029	7	Baht	2,000	2,000	4.13	Semi-annual basis
11 November 2022	11 November 2032	10	Baht	1,700	1,700	4.49	Semi-annual basis
11 November 2022	11 November 2034	12	Baht	3,100	3,100	4.79	Semi-annual basis
11 November 2022	11 November 2037	15	Baht	3,200	3,200	5.09	Semi-annual basis
3 May 2023	3 May 2028	5	Baht	2,800	2,800	3.32	Semi-annual basis
3 May 2023	3 May 2033	10	Baht	2,300	2,300	3.84	Semi-annual basis
3 May 2023	3 May 2038	15	Baht	4,900	4,900	4.24	Semi-annual basis

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Repurchase and cancellation of debentures

During the year 2024, Thailoil Treasury Center Co., Ltd. ("TTC"), a subsidiary of the Company, has repurchased and cancelled of a portion of debentures as below;

- For the unsecured and unsubordinated debentures of US dollar 600 million with 30-year tenor and fixed coupon rate of 3.75% per annum, which were issued and offered to investors and foreign institutional investors in June 2020, TTC has partially repurchased and cancelled debentures in the principal amount of US dollar 120 million for the aforementioned debentures, totalling US dollar 87.84 million from the secondary market. As at 31 December 2024, TTC has an outstanding balance of the debentures due in the year 2050 amounted to US dollar 480 million.

The Company and a subsidiary are required to comply with certain criteria and conditions; for example, maintaining shareholders' portion at the level as specified in the contract.

25. Provision for long-term employee benefits

The movement in the provision for long-term employee benefits during the year is as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
At 1 January	2,714	2,753	2,070	2,173
Current service cost	152	155	84	88
Interest cost	77	75	55	57
Actuarial loss	-	3	-	-
Benefits paid during the year	(298)	(272)	(275)	(248)
At 31 December	2,645	2,714	1,934	2,070

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Actuarial loss (gain) recognised in other comprehensive income arising from:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Experience	-	(1)	-	-
Demographic assumptions	-	8	-	-
Financial assumptions	-	(4)	-	-
Total	-	3	-	-

The principal actuarial assumptions used were as follows:

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Discount rate	2.5% - 3.9%	2.5% - 3.9%	2.5% - 2.8%	2.5% - 2.8%
Salary increases rate	5.0% - 6.0%	5.0% - 6.0%	5.0%	5.0%
Employee turnover	0.2% - 5.7%	0.2% - 5.7%	0.2% - 2.3%	0.2% - 2.3%

Assumptions regarding future mortality have been based on published statistics and mortality tables.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

The result of sensitivity analysis for significant assumptions that affect the present value of the provision for long-term employee benefit as at 31 December 2024 and 2023 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2024	2023	2024	2023	2024	2023
Discount rate	1%	1%	(353)	(350)	438	405
Salary growth rate	1%	1%	306	340	(377)	(299)

(Unit: Million Baht)

	Separate financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2024	2023	2024	2023	2024	2023
Discount rate	1%	1%	(267)	(271)	301	308
Salary growth rate	1%	1%	229	272	(313)	(243)

The above sensitivity analysis is based on a change in an assumption while all other assumptions remain 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 which is the present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period has been applied when calculating the pension liability recognised within the consolidated statement of financial position. The methods and types of assumptions used in preparing the sensitivity analysis did not change when compared to the previous period.

The weighted average reserve long-term employee benefit of the Group is 10 years (2023: 10 years).

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Expected maturity analysis of undiscounted retirement benefits are as follows:

(Unit: Million Baht)

	Consolidated financial statements				
	Less than 1 year	Between 1 - 2 years	Between 2 - 5 years	Over 5 years	Total
At 31 December 2024					
Retirement benefits	208	310	289	2,918	3,725
At 31 December 2023					
Retirement benefits	234	376	309	3,040	3,959

(Unit: Million Baht)

	Separate financial statements				
	Less than 1 year	Between 1 - 2 years	Between 2 - 5 years	Over 5 years	Total
At 31 December 2024					
Retirement benefits	199	296	242	2,169	2,906
At 31 December 2023					
Retirement benefits	229	360	279	2,267	3,135

26. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside a statutory reserve at least 5 percent of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution. At present, the statutory reserve has fully been set aside.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

27. Other income

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Interest income	1,317	786	1,709	1,087
Service income and others	422	352	2,408	2,390
Total	1,739	1,138	4,117	3,477

28. Expenses by nature

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Changes in finished goods and work in progress	3,126	(91)	2,513	110
Purchase and raw materials used	354,100	356,343	403,232	406,039
Natural gas used	11,016	12,847	2,359	3,166
Employee benefit expenses	4,450	4,366	2,008	2,074
Depreciation and amortisation	8,106	7,799	5,445	5,175
Excise tax	58,826	36,935	58,782	36,901
Oil fuel fund contribution/ Energy conservation fund contribution	8,536	16,502	8,536	16,502

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

29. Promotional privileges

Certain local subsidiaries have been granted privileges by the Board of Investment relating to power and steam generation, petrochemical product production and chemical product production. The summary of privileges granted are as follows:

- a) an exemption from payment of import duty and tax on machinery and equipment as approved by the Board of Investment.
- b) an exemption from payment of corporate income tax for promoted operations for periods of 3 to 8 years from the dates on which the income is first derived from such operations or 3 years from the date on which the income is received subsequent to when the privileges were granted.
- c) a 50% reduction in the normal corporate income tax rate on the net profit derived from certain promotional operations for a period of 5 years, commencing from the expiry date in (b) above.

As promoted companies, the Company and its subsidiaries must comply with certain conditions and restrictions provided for in the promotional certificates.

Revenues from promoted businesses were as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Revenues from promoted businesses	213,214	15,803	207,804	-

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

30. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares that issue during the year.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Profit for the year attributable to equity holders of the Company (Million Baht)	9,959	19,443	9,886	21,513
Weighted average number of ordinary shares (Million shares)	2,234	2,234	2,234	2,234
Basic earnings per share (Baht/share)	4.46	8.70	4.43	9.63

31. Segment information

Segment information is presented in respect of the Group's business segments. The primary format, business segments, is based on the Group's management and the internal reporting structure provided to the chief operating decision maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as President and Chief Executive Officer who make strategic decisions.

Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Reportable segments

The Group is organised into business units based on their products and services. During the current period, the Group has not changed the organisation of their reportable segments from the last annual financial statements.

Segment 1: Oil refinery

Segment 2: Lube base oil refinery

Segment 3: Aromatics and LAB

Segment 4: Power generation

Segment 5: Solvent

Segment 6: Ethanol

Segment 7: Olefins

Segment 8: Others

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

The following tables present assets, revenue, and operating results information regarding the Group's operating segments for the years ended 31 December 2024 and 2023:

(Unit: Million Baht)

Consolidated financial statements for the year ended 31 December 2024

	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Revenue from sales										
- External customers	388,097	18,527	24,243	4,483	19,567	940	-	-	-	455,857
- Inter - segment	98,513	7,212	56,286	7,342	158	741	4	7,350	(177,606)	-
Subsidy from oil fuel fund	10,920	-	-	-	-	-	-	-	-	10,920
Cost of sales of goods	(490,182)	(23,850)	(77,700)	(9,516)	(17,999)	(1,676)	-	(6,997)	177,910	(450,010)
Gross Profit	7,348	1,889	2,829	2,309	1,726	5	4	353	304	16,767
Dividend income	6,442	-	-	-	-	8	-	4	(6,185)	269
Gain (loss) from financial instruments	298	-	122	-	(23)	-	-	(36)	-	361
Gain (loss) on exchange	25	-	32	1	(5)	-	(1)	1	-	53
Gain on repurchase of debentures	-	-	-	-	-	-	-	1,134	-	1,134
Other income	4,117	206	305	99	86	7	5	18	(3,103)	1,740
Selling and distribution expenses	(190)	(110)	(384)	-	(677)	(17)	-	-	237	(1,141)
Administrative expenses	(3,219)	(76)	(118)	(39)	(451)	(112)	(10)	(74)	1,364	(2,735)
Share of profit (loss) from investments in joint ventures and associates	-	-	-	-	-	-	(374)	-	242	(132)
Profit (loss) before finance costs and income tax expense	14,821	1,909	2,786	2,370	656	(109)	(376)	1,400	(7,141)	16,316
Finance cost	(3,999)	(50)	(163)	(442)	(154)	(32)	-	-	788	(4,052)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements for the year ended 31 December 2024

	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Profit (loss) before income tax expense	10,822	1,859	2,623	1,928	502	(141)	(376)	1,400	(6,353)	12,264
Income tax income (expenses)	(936)	(372)	(530)	(280)	(123)	15	-	(57)	-	(2,283)
Profit (loss) for the year	9,886	1,487	2,093	1,648	379	(126)	(376)	1,343	(6,353)	9,981
Profit (loss) for the year attributable to:										
- Equity holder of the Company	9,886	1,487	2,012	1,648	386	(74)	(376)	1,343	(6,353)	9,959
- Non-controlling interests of the subsidiaries	-	-	81	-	(7)	(52)	-	-	-	22
Profit (loss) for the year	9,886	1,487	2,093	1,648	379	(126)	(376)	1,343	(6,353)	9,981
Timing of revenue recognition										
- At a point in time	486,610	25,739	80,529	10,401	19,725	1,681	4	7,350	(177,033)	455,006
- Over time	-	-	-	1,424	-	-	-	-	(573)	851
Total Revenue	486,610	25,739	80,529	11,825	19,725	1,681	4	7,350	(177,606)	455,857

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements for the year ended 31 December 2023

	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Revenue from sales										
- External customers	391,432	18,208	24,372	5,230	19,225	935	-	-	-	459,402
- Inter - segment	100,623	7,107	54,602	7,558	156	944	5	7,068	(178,063)	-
Subsidy from oil fuel fund	9,842	-	-	-	-	-	-	-	-	9,842
Cost of sales of goods	(477,488)	(22,768)	(77,387)	(10,402)	(17,817)	(1,831)	-	(6,781)	178,310	(436,164)
Gross Profit	24,409	2,547	1,587	2,386	1,564	48	5	287	247	33,080
Dividend income	6,906	-	-	-	-	20	-	4	(6,729)	201
Gain (loss) from financial instruments	(2,874)	-	168	(108)	15	-	-	(51)	-	(2,850)
Gain (loss) on exchange	254	(1)	(66)	11	14	-	1	-	-	213
Other income	3,477	147	272	54	76	14	-	14	(2,916)	1,138
Selling and distribution expenses	(109)	(104)	(376)	-	(583)	(21)	-	-	243	(950)
Administrative expenses	(3,097)	(72)	(102)	(40)	(399)	(115)	(10)	(72)	1,336	(2,571)
Share of profit (loss) from investments in joint ventures and associates	-	-	-	-	-	-	(195)	279	-	84
Profit (loss) before finance costs and income tax expense	28,966	2,517	1,483	2,303	687	(54)	(199)	461	(7,819)	28,345
Finance cost	(3,755)	(50)	(181)	(489)	(157)	(23)	-	-	567	(4,088)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements for the year ended 31 December 2023

	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Profit (loss) before income tax expense	25,211	2,467	1,302	1,814	530	(77)	(199)	461	(7,252)	24,257
Income tax expenses	(3,698)	(483)	(271)	(76)	(104)	(16)	-	(24)	-	(4,672)
Profit (loss) for the year	21,513	1,984	1,031	1,738	426	(93)	(199)	437	(7,252)	19,585
Profit (loss) for the year attributable to:										
- Equity holder of the Company	21,513	1,984	873	1,738	402	(53)	(199)	437	(7,252)	19,443
- Non-controlling interests of the subsidiaries	-	-	158	-	24	(40)	-	-	-	142
Profit (loss) for the year	21,513	1,984	1,031	1,738	426	(93)	(199)	437	(7,252)	19,585
Timing of revenue recognition										
- At a point in time	492,055	25,315	78,974	11,439	19,381	1,879	5	7,068	(177,578)	458,538
- Over time	-	-	-	1,349	-	-	-	-	(485)	864
Total Revenue	492,055	25,315	78,974	12,788	19,381	1,879	5	7,068	(178,063)	459,402

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements for the year ended 31 December 2024

	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Segment assets	391,372	9,940	25,270	16,041	9,929	2,080	371	107,893	(185,313)	377,583
Investments in associated companies	-	-	-	-	-	-	29,577	982	868	31,427
Total segment assets	391,372	9,940	25,270	16,041	9,929	2,080	29,948	108,875	(184,445)	409,010
Total segment liabilities	248,991	3,597	9,620	11,779	5,050	610	124	105,462	(142,407)	242,826

(Unit: Million Baht)

Consolidated financial statements for the year ended 31 December 2023

	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Segment assets	397,830	9,142	27,282	17,303	11,168	2,309	220	111,414	(188,714)	387,954
Investments in associated companies	-	-	-	-	-	-	30,323	982	734	32,039
Total segment assets	397,830	9,142	27,282	17,303	11,168	2,309	30,543	112,396	(187,980)	419,993
Total segment liabilities	253,726	3,143	11,781	12,446	6,000	661	122	110,097	(146,295)	251,681

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Major customer

Revenue from two customers represents Baht 277,460 million (2023: revenue from two customers represented Baht 273,222 million) of the Group's revenue from sales.

Geographical segments

In presenting geographical information by segments, segment revenue is based on the geographical location of customers and segment assets are based on the geographical location of the assets.

Geographical information

(Unit: Million Baht)

	For the year ended 31 December		As at 31 December	
	Revenue		Non-current assets	
	2024	2023	2024	2023
Thailand	437,164	429,057	265,325	262,375
Indonesia	4,070	3,430	29,614	30,371
Other countries	25,543	36,757	1,850	1,875
Total	466,777	469,244	296,789	294,621

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

32. Dividends

Dividends	Approved by	Total dividends (Million Baht)	Dividend per share (Baht)
Final dividends for 2022	Annual General Meeting of the shareholders on 10 April 2023	3,798	1.70
The Interim dividends for 2023	Board of Directors' meeting on 25 August 2023	1,451	0.65
Total for 2023		5,249	2.35
Final dividends for 2023	Annual General Meeting of the shareholders on 11 April 2024	6,142	2.75
The Interim dividends for 2024	Board of Directors' meeting on 30 August 2024	2,681	1.20
Total for 2024		8,823	3.95

33. Commitments and contingent liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Capital commitments				
Project construction agreements	11,376	13,629	10,912	13,170
Total	11,376	13,629	10,912	13,170
Other commitments				
Letters of guarantee issued by financial institutions	1,850	1,830	1,230	1,224
Crude oil and raw material purchase agreements	58,156	73,383	58,156	73,383
Total	60,006	75,213	59,386	74,607

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Interest Rate Swap Contracts

The Company has entered into interest rate swap contracts with various financial institutions to manage exposure and fluctuations in interest rate on partial long-term loans in Thai Baht. On March 2024, interest rate swap contracts amounting to Baht 7,000 has completely due according to the contract. As at 31 December 2024, the Company had contracts with a notional amount of Baht 7,500 million to exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum. (2023: Baht 14,500 million, exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum) The swap contracts are effective from July 2021 to March 2027.

Cross Currency Swap Contracts

The Company has entered into cross currency swap contracts with local financial institutions for hedging foreign exchange and interest rate exposure of long-term debts in US dollar currency. As at 31 December 2024, the Company had notional amount totalling US dollar 623 million (2023: US dollar 623 million). A counterparty agrees to pay the interest and the notional amount according to the terms and conditions in the contracts. The swap contracts are effective from March 2020 to October 2035. The contract that hedges against foreign exchange and interest rate risks, which is linked to sustainability operations, will have its interest payments reduced upon meeting the conditions specified in the contract, if the sustainability performance targets (Sustainability Performance Targets) are achieved.

Forward Foreign Exchange Contracts

The Company has entered into a Forward Foreign Exchange Contract with several financial institutions in the country to hedge against the risk of exchange rate fluctuations on long-term financial liabilities denominated in US dollars, which had an outstanding balance of US dollars 200 million as of 31 December 2024. The contracting parties have agreed to settle payments between each other according to the conditions and terms specified in the contract. The contract period is from September 2024 to November 2028. Some parts of the Forward Foreign Exchange Contract that are linked to sustainability operations will have their exchange rates reduced when the conditions specified in the contract are met, if the sustainability performance targets (Sustainability Performance Targets) are achieved.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Oil Price Crack Spread Swap Contracts

The Group and the Company have oil price crack spread swap and time spread swap contracts with foreign companies and related parties (counterparties). The Company has or the counterparties have commitments to make payments for the differences between the fixed price and floating price of each period.

As at 31 December 2024, the Group had oil volume under the contracts totalling 1.58 million barrels and the Company had oil volume totalling 1.58 million barrels (2023: The Group had oil volume under the contracts totalling 9.80 million barrels and 0.13 million metric tons and the Company had oil volume totalling 9.81 million barrels and 0.27 million metric tons).

34. Financial risk management

34.1 Financial risk factors

The Group is exposed to a variety of financial risks, which are market risk (including foreign exchange risk and 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 adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain exposures.

Risk management is integral to the whole business of the Group. The Group has a control system in place to create an acceptable balance between the cost of risks and the cost to manage the risks. The management continually monitors the Group's risk management process to ensure that an appropriate balance between risk and control is achieved.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item. This will effectively result in recognising interest expense at a fixed interest rate for the hedged floating rate loans and financial liabilities at the fixed foreign currency rate for the hedged liabilities.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Hedging reserve

The Group and the Company's hedging reserves comprise of the followings:

(Unit: Million Baht)

	Consolidated financial statements			
	Cash flow hedge reserve			
	Cross currency swaps	Cost of hedging reserve	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2024	(1,332)	(660)	(2,472)	(4,464)
Add: Change in fair value of hedging instrument recognised in OCI	(551)	-	715	164
Costs of hedging deferred and recognised in OCI	-	(833)	-	(833)
Less: Deferred tax	110	167	(83)	194
Closing balance 31 December 2024	(1,773)	(1,326)	(1,840)	(4,939)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements					
	Cash flow hedge reserve					Total hedge reserves
	Cross currency swaps	Cost of hedging reserve	Forward foreign exchange contracts	Interest rate swaps	Hedge on foreign currency proceeds	
Opening balance 1 January 2023	(2,051)	(671)	(16)	(47)	(3,172)	(5,957)
Add: Change in fair value of hedging instrument recognised in OCI	899	-	20	59	819	1,797
Costs of hedging deferred and recognised in OCI	-	14	-	-	-	14
Less: Deferred tax	(180)	(3)	(4)	(12)	(119)	(318)
Closing balance 31 December 2023	(1,332)	(660)	-	-	(2,472)	(4,464)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements			
	Cash flow hedge reserve			
	Cross currency swaps	Cost of hedging reserve	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2024	(1,332)	(660)	(2,472)	(4,464)
Add: Change in fair value of hedging instrument recognised in OCI	(551)	-	715	164
Costs of hedging deferred and recognised in OCI	-	(833)	-	(833)
Less: Deferred tax	110	167	(83)	194
Closing balance 31 December 2024	(1,773)	(1,326)	(1,840)	(4,939)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements				
	Cash flow hedge reserve				Total hedge reserves
	Cross currency swaps	Cost of hedging reserve	Forward foreign exchange contracts	Hedge on foreign currency proceeds	
Opening balance 1 January 2023	(2,051)	(671)	(16)	(3,172)	(5,910)
Add: Change in fair value of hedging instrument recognised in OCI	899	-	20	819	1,738
Costs of hedging deferred and recognised in OCI	-	14	-	-	14
Less: Deferred tax	(180)	(3)	(4)	(119)	(306)
Closing balance 31 December 2023	(1,332)	(660)	-	(2,472)	(4,464)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

34.1.1 Market risk

a) Foreign exchange risk

The Group is exposed to foreign exchange risk from future commercial transactions, net monetary assets and liabilities that are denominated in a currency that is not the entity's functional currency.

The Group uses forward foreign exchange contracts, cross currency swaps in a consistent manner and hedge on foreign currency proceeds to hedge and anticipated foreign exchange commitments and manage their foreign exchange risk arising from future commercial transactions. The Group are required to manage their foreign exchange risk against their functional currency. Foreign currency borrowings are swapped into the entity's functional currency using cross-currency 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 and loss account of the Group.

The Group hedges the foreign currency proceeds by hedging the fluctuations arisen from the foreign exchange rate occurring from the certain revenue in US dollar with the long-term loans which has the same currency as revenue occurred. Under the Group's policy, the critical terms of the forwards and options must align with the hedged items.

The Group uses a combination of forward foreign exchange contracts and cross currency swaps to hedge its exposure to foreign currency risk. Under the Group's policy, the critical terms of the forwards and options must align with the hedged items.

The Group only designates the spot component of forward foreign exchange contracts in hedge relationships. The spot component is determined with reference to relevant spot market exchange rates. The differential between the contracted forward rate and the spot market exchange rate is defined as the forward points and include currency basis spread fees. It is discounted based on time period of the contract where material.

The changes in the forward element of the forward foreign exchange contracts and foreign currency basis spreads that relate to hedged items are deferred in the costs of hedging reserve.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

As at 31 December 2024 and 2023, the Group and the Company were exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
US dollar				
Cash and cash equivalents	10,710	8,327	9,295	6,238
Short-term investments in financial assets	10,695	5,944	10,527	5,775
Trade receivables	3,226	4,630	893	3,185
Other receivables	873	1,027	881	1,058
Derivative assets	55	188	55	188
Trade payables	(318)	(326)	(146)	(194)
Other payables	(178)	(548)	(748)	(1,063)
Loans and debentures	(99,522)	(104,151)	(101,152)	(104,463)
Derivative liabilities	3	-	(3)	(19)
	(74,456)	(84,909)	(80,398)	(89,295)
Other currencies				
Cash and cash equivalents	804	1,223	668	1,087
Trade receivables	1,328	1,112	-	-
Other receivables	42	21	-	-
Trade payables	(187)	(136)	-	-
Other payables	(41)	(92)	(9)	(60)
Loans	(280)	(309)	-	-
	1,666	1,819	659	1,027
Gross exposure in the statement of financial position	(72,790)	(83,090)	(79,739)	(88,268)
Cross currency swaps	25,102	25,279	25,102	25,279
Hedge on foreign currency proceed with the loans denominated in foreign currency	58,586	58,846	58,586	58,846
Net exposure	10,898	1,035	3,949	(4,143)

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Effects of hedge accounting on the financial position and performance

The effects of the foreign currency-related hedging instruments on the Group and the Company's financial position and performance are as follows:

(Unit: Million Baht)

	Consolidated and Separate financial statements	
	2024	2023
<i>Cross currency swaps contracts</i>		
Carrying amount (liability) (Million Baht)	(2,408)	(960)
Notional amount (Million US dollar)	623	623
Maturity date	October 2030 to October 2039	October 2030 to October 2035
Hedge ratio	1 : 1	1 : 1
Weighted average hedged rate for outstanding hedging instruments (including forward points)	31.77	31.77

In term of the hedge on foreign currency proceed with the loans denominated in foreign currency, as at 31 December 2024, the Company's fully drawdown loans amounted to Baht 58,586 million were used in the hedging activities. The loans notional amount was US dollar 1,716 million with maturity from November 2028 to November 2048. The Company's exchange rate for hedge instrument was Baht 32.193 per one US dollar.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Sensitivity

As shown in the table above, the Group is primarily exposed to changes in Baht and US dollar exchange rates. The sensitivity of profit or loss to changes in the exchange rates arises mainly from financial assets and financial liabilities denominated in US dollar and the impact on other components of equity arises from foreign forward exchange contracts and cross currency swap designated as cash flow hedges.

(Unit: Million Baht)

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2024	2023	2024	2023
Baht to US dollar exchange rate				
- increase 10% *	1,027	(156)	(3,859)	(3,918)
Baht to US dollar exchange rate				
- decrease 10% *	(1,027)	156	3,859	3,918

* Holding all other variables constant

(Unit: Million Baht)

	Separate financial statements			
	Impact to net profit		Impact to other components of equity	
	2024	2023	2024	2023
Baht to US dollar exchange rate				
- increase 10% *	812	(386)	(6,388)	(6,465)
Baht to US dollar exchange rate				
- decrease 10% *	(812)	386	6,388	6,465

* Holding all other variables constant

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

b) Cash flow and fair value interest rate risk

The Group's main interest rate risk arises from long-term borrowings with variable rates, which expose the Group to cash flow interest rate risk. Generally, the Group enters into long-term borrowings at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly. During 2023 and 2024, the Group's borrowings at variable rate were mainly denominated in Baht and US dollar.

The borrowings are carried at amortised cost. The borrowings rate is based on market interest rates which detailed in Note 23 Therefore, the Group is exposed to the risk of future changes in market interest rates.

The exposure of long-term loans interest rate changes at the end of the reporting period are as follows:

	Consolidated financial statements			
	2024		2023	
	Million Baht	% of total loans	Million Baht	% of total loans
Variable rate borrowings	23,182	20	19,287	12

As at 31 December 2024, the percentage of total loans shows the proportion of long-term loans that are currently at variable rates in relation to the total amount of long-term loans 152,073 million (2023: Baht 159,920 million). An analysis by maturities is provided in note 34.1.3.

The Company has low interest rate risk since the Company's borrowings are at a fixed interests rate. The sensitivity impact to the increase or decrease in interest expenses from borrowings, as a result of changes in interest rates is immaterial on separate financial statements.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Sensitivity

Profit or loss is sensitive to higher or lower interest expenses from borrowings as a result of changes in interest rates. Other components of equity changes as a result of an increase or decrease in the fair value of the cash flow hedges of borrowings.

(Unit: Million Baht)

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2024	2023	2024	2023
Interest rate - increase 1% *	(305)	(342)	(2)	(4)
Interest rate - decrease 1% *	305	342	2	4

* Holding all other variables constant

c) Price risk of petroleum products

The Group's and the Company's exposure to price risk arises from time to time by volatility and cyclical movement in the market prices for crude oil, petroleum, and petrochemical products. The Group manages this risk by using derivative financial instruments, for example, oil price crack spread swap and time spread swap as appropriated.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Sensitivity

The table below summarises the impact of increases or decreases of the index on net profit for the year.

(Unit: Million Baht)

	Impact to net profit			
	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Price increases by 1 % *	(5)	(12)	(5)	(12)
Price decreases by 1 % *	5	12	5	12

* Holding all other variables constant

34.1.2 Credit risk

The Group's credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at FVPL, derivative financial instruments as well as credit exposures to customers, including outstanding receivables.

a) Risk management

The Group manages its credit risk by categorising into level of risks. For banks and financial institutions, the Group only transacts with those that are rated at least within investment grade accredited by a reliable independence credit rating agency.

For transaction with other customers, the Group will consider the credit rating accredited by a reliable independence credit rating agency. If the credit rating is not available, the Group assesses the creditability of the customer by considering its financial position, past experience and other factors. Individual credit limits are set based on these assessments and in accordance with credit limits set by the Board of Director. The compliance with credit limits by customers is regularly monitored by line management.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

The Group has no significant credit risk with any single counterparty or group of counterparties since the Group maintains business with large customers in petroleum and power industries and requires first class collateral for the rest.

The Group's investments in debt instruments are considered to be low risk investments. The Group regularly monitors the credit ratings of the investments for credit deterioration.

b) Security

For some trade receivables the Group may obtain security in the form of guarantees or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

c) Impairment of financial assets

The Group considers that impairment of financial assets does not have significant financial impact.

Other financial assets measured at amortised cost

Other financial assets measured at amortised cost include short-term investment which the Group considered that short-term investment's credit risk is low.

Debt investments

Debt investments are measured at amortised cost include other receivables and loans to related parties.

All of the debt investments at amortised cost and FVOCI are considered to have low credit risk, and the loss allowance recognised during the year was therefore limited to 12 months expected losses. Management consider 'low credit risk' for listed bonds to be an investment grade credit rating with at least one major rating agency. Other instruments are considered to have low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Financial asset measured at fair value through profit or loss (FVPL)

The Group is also exposed to credit risk in relation to debt investments that are measured at FVPL. The maximum exposure at the end of the reporting period is the carrying amount of these investments of Baht 686 million (2023: Baht 722 million).

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

34.1.3 Liquidity risk

Prudent liquidity risk management is to maintaining sufficient cash and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. At the end of the reporting period the Group held deposits at call of Baht 29,042 million (2023: Baht 28,432 million) that are expected to readily generate cash inflows for managing liquidity risk.

Due to the dynamic nature of the underlying businesses, the Group Treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Management regularly monitors i) rolling forecasts of the Group's liquidity reserve (comprising the undrawn borrowing facilities); and ii) cash and cash equivalents. In addition, the Group's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets and monitoring balance sheet liquidity ratios and maintaining appropriate financing plans.

a) Financing arrangements

The Group has undrawn credit facilities as at 31 December as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Floating rate				
Expiring within one year				
- Short-term committed credit facilities	8,841	7,200	6,700	6,700
- Short-term uncommitted credit facilities	12,413	11,420	5,790	6,198
Expiring beyond one year				
- Long-term loans credit facilities	110	7,099	-	7,000
	21,364	25,719	12,490	19,898

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

b) Maturity of financial liabilities

The tables below analyse the Group's financial liabilities into relevant maturity based on their contractual maturities for:

- a) all non-derivative financial liabilities; and
- b) net and gross settled derivative financial instruments for which the contractual maturities are essential for an understanding of the timing of the cash flows.

The tables below present the maturity of financial liabilities classified by their contractual maturities. The amounts disclosed are the contractual undiscounted cash flows. Balances due within 12 months equals their carrying balances as the impact of discounting is not significant. For interest rate swaps and cross currency swap, the cash flows have been estimated using forward interest rates applicable at the end of the reporting period.

(Unit: Million Baht)

	Consolidated financial statements				
Maturity of financial liabilities as at 31 December 2024	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	2,725	-	-	2,725	2,725
Trade and other payables	52,867	-	-	52,867	52,867
Accrued interest	7,449	22,524	62,090	92,063	1,030
Lease liabilities	2,189	7,958	18,356	28,503	19,557
Long-term loans from financial institutions	3,803	16,225	3,040	23,068	23,003
Long-term loans from related and other parties	-	-	179	179	179
Debentures	1,400	26,495	101,726	129,621	128,891
Other financial liabilities	340	3,269	35	3,644	3,644
Total non-derivatives	70,773	76,471	185,426	332,670	231,896

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Maturity of financial liabilities as at 31 December 2024	Consolidated financial statements				Carrying amount of (Assets/ Liabilities)
	Within 1 year	1 - 5 years	Over 5 years	Total	
Derivatives					
Forward foreign exchange contracts					
- trading (assets)	(3)	-	-	(3)	(3)
Oil price crack spread swap and time spread swap					
- trading (assets)	(55)	-	-	(55)	(55)
Oil price crack spread swap and time spread swap					
- trading (liabilities)	3	-	-	3	3
Forward foreign exchange contracts					
(Cash inflows)	-	(6,829)	-	(6,829)	50
Cash outflows	-	6,346	-	6,346	-
Interest rate swaps					
(Cash inflows)	(379)	(472)	-	(851)	188
Cash outflows	504	628	-	1,132	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(844)	(3,379)	(23,561)	(27,784)	2,408
Cash outflows	727	2,910	21,753	25,390	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,904)	(33,419)	(67,272)	(103,595)	-
Cash outflows	2,737	23,035	71,897	97,669	-
Total derivatives	(214)	(11,180)	2,817	(8,577)	2,591
Total	70,559	65,291	188,243	324,093	234,487

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Maturity of financial liabilities as at 31 December 2023	Consolidated financial statements				Carrying amount of (Assets/ Liabilities)
	Within 1 year	1 - 5 years	Over 5 years	Total	
Non-derivatives					
Short-term loan from financial institutions	3,198	-	-	3,198	3,198
Trade and other payables	51,901	-	-	51,901	51,901
Accrued interest	7,764	24,367	70,249	102,380	1,187
Lease liabilities	1,723	8,381	20,337	30,441	21,091
Long-term loans from financial institutions	3,090	19,941	16,160	39,191	19,095
Long-term loans from related and other parties	-	-	191	191	191
Debentures	7,000	25,989	108,434	141,423	140,632
Other financial liabilities	320	3,268	31	3,619	3,619
Total non-derivatives	74,996	81,946	215,402	372,344	240,914

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements				
Maturity of financial liabilities as at 31 December 2023	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Derivatives					
Forward foreign exchange contracts					
- trading (assets)	(46)	-	-	(46)	(46)
Forward foreign exchange contracts					
- trading (liabilities)	1	-	-	1	1
Oil price crack spread swap and time spread swap					
- trading (assets)	(173)	-	-	(173)	(173)
Interest rate swaps					
(Cash inflows)	(468)	(851)	-	(1,319)	177
Cash outflows	619	1,120	-	1,739	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(852)	(3,402)	(24,578)	(28,832)	960
Cash outflows	747	2,984	22,640	26,371	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(25,316)	(79,011)	(107,252)	-
Cash outflows	2,738	23,700	73,969	100,407	-
Total derivatives	(359)	(1,765)	(6,980)	(9,104)	919
Total	74,637	80,181	208,422	363,240	241,833

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Maturity of financial liabilities as at 31 December 2024	Separate financial statements				Carrying amount of (Assets/ Liabilities)
	Within 1 year	1 - 5 years	Over 5 years	Total	
Non-derivatives					
Short-term loan from financial institutions	7,648	-	-	7,648	7,648
Trade and other payables	56,214	-	-	56,214	56,214
Accrued interest	7,973	24,348	69,028	101,349	1,107
Lease liabilities	2,176	7,968	18,766	28,910	19,748
Long-term loans from financial institution	3,125	14,813	2,962	20,900	20,840
Long-term loans from related party	-	13,525	81,740	95,265	94,983
Debentures	1,400	12,900	21,087	35,387	35,257
Other financial liabilities	151	3,129	28	3,308	3,308
Total non-derivatives	78,687	76,683	193,611	348,981	239,105

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Maturity of financial liabilities as at 31 December 2024	Separate financial statements				Carrying amount of (Assets/ Liabilities)
	Within 1 year	1 - 5 years	Over 5 years	Total	
Derivatives					
Oil price crack spread swap and time spread swap					
- trading (assets)	(55)	-	-	(55)	(55)
Oil price crack spread swap and time spread swap					
- trading (liabilities)	3	-	-	3	3
Forward foreign exchange contracts					
(Cash inflows)	-	(6,829)	-	(6,829)	50
Cash outflows	-	6,346	-	6,346	-
Interest rate swaps					
(Cash inflows)	(379)	(472)	-	(851)	188
Cash outflows	504	628	-	1,132	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(844)	(3,379)	(23,561)	(27,784)	2,408
Cash outflows	727	2,910	21,753	25,390	-
Hedging foreign currency income - cash flow hedge					
Cash inflows)	(2,904)	(33,419)	(67,272)	(103,595)	-
Cash outflows	2,738	23,035	71,897	97,670	-
Total derivatives	(210)	(11,180)	2,817	(8,573)	2,594
Total	78,477	65,503	196,428	340,408	241,699

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Maturity of financial liabilities as at 31 December 2023	Separate financial statements				Carrying amount of (Assets/ Liabilities)
	Within 1 year	1 - 5 years	Over 5 years	Total	
Non-derivatives					
Short-term loan from financial institutions	5,186	-	-	5,186	5,186
Trade and other payables	55,900	-	-	55,900	55,900
Accrued interest	8,231	26,130	77,042	111,403	1,260
Lease liabilities	1,682	8,362	20,749	30,793	21,222
Long-term loans from financial institution	2,400	12,218	1,682	16,300	16,212
Long-term loans from related party	-	13,621	85,338	98,959	98,652
Debentures	7,000	12,300	23,129	42,429	42,292
Other financial liabilities	116	3,130	28	3,274	3,274
Total non-derivatives	80,515	75,761	207,968	364,244	243,998

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Maturity of financial liabilities as at 31 December 2023	Separate financial statements				Carrying amount of (Assets/ Liabilities)
	Within 1 year	1 - 5 years	Over 5 years	Total	
Derivatives					
Forward foreign exchange contracts - trading	(15)	-	-	(15)	(15)
Oil price crack spread swap and time spread swap					
- trading (assets)	(173)	-	-	(173)	(173)
Oil price crack spread swap and time spread swap					
- trading (liabilities)	19	-	-	19	19
Interest rate swaps					
(Cash inflows)	(468)	(851)	-	(1,319)	177
Cash outflows	619	1,120	-	1,739	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(852)	(3,403)	(24,578)	(28,833)	960
Cash outflows	747	2,984	22,640	26,371	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(25,316)	(79,012)	(107,253)	-
Cash outflows	2,738	23,700	73,969	100,407	-
Total derivatives	(310)	(1,766)	(6,981)	(9,057)	968
Total	80,205	73,995	200,987	355,187	244,966

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries
For the year ended 31 December 2024

34.2 Capital management

Risk management

The objectives when managing capital are to:

- safeguard the ability to continue as a going concern, to provide returns for shareholders and benefits for other stakeholders, and
- maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital based on gearing ratio which is determined by dividing net debt with equity.

During the year 2024, the Group's strategy, which remains unchanged, was to maintain a gearing ratio within 1.0 time and a Baa3 credit rating for Moody's, BBB credit rating for S&P Global Rating and A+(Tha) for Fitch Ratings (Thailand). In order to increase the strength of capital structure and to maintain an investment grade credit rating. As at 31 December 2024 and 2023, the gearing ratios of the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
Net debt (including lease liabilities)	134,617	149,832
Equity (including non-controlling interests)	166,185	168,312
Net debt to equity ratio	0.8 times	0.9 times

Loan covenants

Under the terms of the major borrowing facilities, the Group and the Company are required to comply with certain criteria and condition; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage. As at 31 December 2024, the Group and the Company has complied with certain criteria and condition as specified in the contract.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

35. Fair Value

The following table presents fair value of financial assets and liabilities recognised or disclosed by their fair value hierarchy excluding those with the carrying amount approximates fair values.

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2024				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	686	274	-	412	686
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	11,106	11,106	-	-	11,106
Equity investments of non-listed company	207	-	-	207	207
Derivatives					
Current					
Oil price crack spread swap and time spread swap	55	-	55	-	55
Forward foreign exchange contracts	3	-	3	-	3

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2024				
	Carrying amount	Level 1	Level 2	Level 3	Total
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	3	-	3	-	3
Non-current					
Forward foreign exchange contracts	50	-	50	-	50
Interest rate swap	188	-	188	-	188
Derivatives used for hedge accounting					
Cross currency swap	2,408	-	2,408	-	2,408
Financial liabilities not measured at fair value					
Debentures	128,891	-	108,398	-	108,398

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

Consolidated financial statements as at 31 December 2023					
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	722	314	-	408	722
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	14,059	14,059	-	-	14,059
Equity investments of non-listed company	194	-	-	194	194
Derivatives					
Current					
Oil price crack spread swap and time spread swap	173	-	173	-	173
Forward foreign exchange contracts	46	-	46	-	46
Liabilities					
Derivatives					
Current					
Interest rate swap	28	-	28	-	28
Forward foreign exchange contracts	1	-	1	-	1
Non-current					
Interest rate swap	149	-	149	-	149
Derivatives used for hedge accounting					
Cross currency swap	960	-	960	-	960
Financial liabilities not measured at fair value					
Debentures	140,632	-	123,170	-	123,170

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements as at 31 December 2024				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	274	274	-	-	274
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	10,785	10,785	-	-	10,785
Equity investments of non-listed company	2	-	-	2	2
Derivatives					
Current					
Oil price crack spread swap and time spread swap	55	-	55	-	55

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements as at 31 December 2024				
	Carrying amount	Level 1	Level 2	Level 3	Total
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	3	-	3	-	3
Non-current					
Forward foreign exchange contracts	50	-	50	-	50
Interest rate swap	188	-	188	-	188
Derivatives used for hedge accounting					
Cross currency swap	2,408	-	2,408	-	2,408
Financial liabilities not measured at fair value					
Long-term loans from related party	94,983	-	73,272	-	73,272
Debentures	35,256	-	36,067	-	36,067

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements as at 31 December 2023				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	314	314	-	-	314
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	13,676	13,676	-	-	13,676
Equity investments of non-listed company	2	-	-	2	2
Derivatives					
Current					
Oil price crack spread swap and time spread swap	173	-	173	-	173
Forward foreign exchange contracts	15	-	15	-	15

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

(Unit: Million Baht)

	Separate financial statements as at 31 December 2023				
	Carrying amount	Level 1	Level 2	Level 3	Total
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	19	-	19	-	19
Interest rate swap	28	-	28	-	28
Non-current					
Interest rate swap	149	-	149	-	149
Derivatives used for hedge accounting					
Cross currency swap	960	-	960	-	960
Financial liabilities not measured at fair value					
Long-term loans from related party	98,652	-	81,416	-	81,416
Debentures	42,292	-	42,040	-	42,040

During the current year, there were no changes in the methods and the assumptions used to estimate the fair value of financial instruments and there were no transfers between the levels of the fair value hierarchy.

Fair value measurement of financial assets and liabilities is in accordance with accounting policy disclosed in Note 4.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Valuation techniques used in measuring level 2 fair values

Type	Valuation technique
Interest rate swap	Future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date.
Forward foreign exchange contracts	Future cash flow projection discounted by the market yield which based on commercial bank report for short-term transactions and future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date for long-term transactions.
Cross currency swap	Future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date.
Oil price crack spread swap and time spread swap	Market comparison technique: The fair values are based on broker quotes. Similar contracts that are traded in an active market and the quotes reflect the actual transactions in similar financial instruments.
Debt investment measure at fair value through profit or loss	Thai Bond Market Association Government Bond Yield Curve as of the reporting date.
Debentures and Long-term loans	Market comparison technique: The valuation model is based on ask prices or latest price of comparable market securities.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Valuation techniques used in measuring level 3 fair values

Changes in level 3 financial instruments for the period ended 31 December 2024 is as follows:

(Unit: Million Baht)

	Consolidated financial statements		
	Debt investment	Equity investment	Total
Beginning balance as at 1 January 2024	408	194	602
Additions	43	22	65
Loss recognised in profit or loss	(36)	(7)	(43)
Exchange differences	(3)	(2)	(5)
Ending balance as at 31 December 2024	412	207	619

The Group considers the significant unobservable inputs used in level 3 fair value measurements and concludes that fair value approximates carrying amount. For the fair value measurement of contingent consideration from the investment acquisitions, the Group considers by using future cash flow projection discounted with cost of debt and the assumptions of relating probabilities of conditions in the share purchase agreements.

The Group did not have any transfers between levels during the year.

The following table shows financial assets and liabilities measured at amortised cost with the carrying amount approximates fair value. The carrying amount of long-term loans from financial institutions, long-term loans from a third party, and long-term loans from a related party approximates their fair value, since their interest rates are close to market rate.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

Consolidated financial statements

Financial assets

- Cash and cash equivalents
- Deposits at a financial institution used as collaterals
- Short-term investments
- Trade receivables
- Other receivables
- Finance lease receivables
- Other non-current assets

Financial liabilities

- Short-term loans from financial institutions
- Trade payables
- Other payables
- Long-term loans from financial institutions
- Long-term loans from a third party
- Long-term loans from a related party
- Lease liabilities
- Other non-current liabilities

Separate financial statements

Financial assets

- Cash and cash equivalents
- Short-term investments
- Trade receivables
- Other receivables
- Finance lease receivables
- Short-term loan to related parties
- Current portion of long-term loans to related parties
- Other non-current assets

Financial liabilities

- Short-term loans from related parties
- Trade payables
- Other payables
- Long-term loans from financial institutions
- Long-term loans from related parties
- Lease liabilities
- Other non-current liabilities

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

36. Oil spill incident

On 3 September 2023, incident resulting in an oil spill during the oil discharge occurred at the Single Buoy Mooring of the Company's refinery. The Company has paid for the compensation to the impacted parties, environmental rehabilitation and related expenses occurring from the case. The Company recognised the related expenses in the statement of income for the year 2024, approximately Baht 75 million, as part of the administrative expenses.

In 2024, the Company received compensation from the insurer totalling Baht 85 million under its insurance policy coverage and recognized such compensation as other income in the statement of income for the year 2024. In January and February 2025, the Company received additional compensation from the insurer totalling Baht 59 million.

37. Investment in Clean Fuel Project

The Company entered into the Engineering, Procurement and Construction Contract (the "EPC Contract") with the main contractor for the construction of the Clean Fuel Project (CFP), which was approved at the Extraordinary General Meeting of Shareholders on 27 August 2018. The total investment value of the project is approximately US dollar 4,825 million, or equivalent to approximately Baht 160,279 million, including interest during construction of approximately US dollar 151 million, or equivalent to approximately Baht 5,016 million. The project cost also includes the investment in the Energy Recovery Unit (ERU), an electrical power plant with a designed generating capacity of 250 megawatts, which will supply electricity and steam to the production process of the CFP.

Due to the COVID-19 pandemic, which affected the CFP Project from the commencement of the engineering design stage, the procurement of equipment and materials and on-site construction, requiring compliance with COVID-19 prevention measures, operational plans had to be adjusted to reflect the prevailing circumstances and address problems to ensure the continued progress of the CFP Project. These factors led to an increase in the CFP Project costs and an extension of the construction timeline beyond the original schedule. Accordingly, the Board of Directors Meeting No. 9/2021 resolved to approve an increase in interest during construction of the CFP Project from US dollar 151 million, or equivalent to approximately Baht 5,016 million, by an additional US dollar 422 million, or equivalent to approximately Baht 14,278 million. Subsequently, the Board of Directors Meeting No. 4/2022 approved an additional budget for the development of the CFP Project and the execution of an amendment agreement to the EPC Contract with the Main Contractor. This approval increased the budget of the CFP Project by approximately US dollar 550 million, or equivalent to approximately Baht 18,165 million, and extended the project completion timeline by 24 months under the EPC Contract to ensure the best interests of the Company and the successful completion of the CFP Project.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

During 2024, the Main Contractor's failure to pay overdue payments to its subcontractors working on the CFP Project resulted in work stoppages or workforce reductions. As a result, the Company had to explore various options to ensure the completion of the CFP Project. In this regard, the Company engaged a technical advisor to review and analyse the remaining construction work of the CFP Project and considered recommendations and opinions provided by the Company's technical advisor, legal advisor and independent financial advisor. At the Board of Directors Special Meeting No. 6/2024 of the Company, held on 19 December 2024, the Board of Directors approved an increase of the investment cost of the CFP Project and approved the convening of the Extraordinary General Meeting of Shareholders No. 1/2025 of the Company, scheduled for 21 February 2025, to propose an increase in the investment cost in the CFP Project by approximately US dollar 1,776 million, or equivalent to approximately Baht 63,028 million and an increase in interest during construction of approximately US dollar 505 million, or equivalent to approximately Baht 17,922 million. The additional investment will be used for the construction of the CFP Project, procurement of remaining equipment and materials and payment of other expenses related to the development of the CFP Project, including advisory fees, to support the completion of the CFP Project.

The Enforcement of security in respect of the Clean Fuel Project (CFP)

The Company has enforced security provided under the EPC contract between the Company and the Consortium of PSS Netherlands B.V. (Offshore Contractor) and an unincorporated joint venture of Samsung E&A (Thailand) Co., Ltd., Petrofac South East Asia Pte. Ltd., and Saipem Singapore Pte. Ltd. (Onshore Contractor), in accordance with the contract and in the interest of the Company and its shareholders, in an amount of approximately Baht 12,339 million, approximately equivalent to US dollar 358 million. The Company received such enforcement proceeds in January 2025 and will record the transaction in the first quarter of 2025, deducting the cost of construction in progress of the CFP Project amounting to approximately Baht 12,241 million, and recording other income amounting to approximately Baht 98 million.

Notes to financial statements

Thai Oil Public Company Limited and its subsidiaries

For the year ended 31 December 2024

38. Events after the reporting period

The Company's dividend announcement

At the Board of Directors' meeting of the Company held on 14 February 2025, the Company's Board of Directors passed a resolution to propose to the Annual General Meeting of Shareholders to consider and approve the dividend payment for the year 2024 at the rate of Baht 1.90 per share, totaling Baht 4,244 million. Such a dividend included the interim dividends of Baht 1.20 per share, which the Company has already paid to the shareholders of the Company in September 2024. Therefore, the additional dividend of Baht 0.70 per share, totaling Baht 1,564 million. The dividends were scheduled to be paid on 28 April 2025. The dividend payment is subject to the approval of the Company's Annual General Meeting of Shareholders which is to be held on 9 April 2025.

39. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Director on 14 February 2025.

Auditors' Fees for 2024

1. Audit Fee

The Company, subsidiaries and the Member Companies of Thai Oil Group-Registered Provident Fund paid for the audit fees to the auditors' company for the latest period amounting to THB 7.48 million.

2. Non-Audit Fee

The Company and Subsidiaries also paid for other services, including verification of compliance with the BOI Investment Promotion Certificate to the auditor's company for the latest period amounting to THB 0.20 million and Non-Audit Fee amounting to 5.78 million.



● Professionalism

● Ownership and Commitment

● Social Responsibility

● Integrity

● Teamwork and Collaboration

● Innovation

● Vision Focus

● Excellence Striving

**Bangkok Office**

555/1 Energy Complex Building A, 11th Floor,
Vibhavadi Rangsit Road, Chatuchak, Chatuchak,
Bangkok 10900, Thailand
Tel : +66(0) -2797-2999, +66(0) -2299-0000

Sriracha Office and Refinery

42/1 Moo 1, Sukhumvit Road Km. 124, Tungsukla,
Sriracha, Chonburi 20230, Thailand
Tel : +66(0) -3840-8500, +66(0) -3835-9000, +66(0) -3835-1555

www.thaioilgroup.com



Annual Report 2024
(Form 56-1 One Report)