



RATCH Group Public Company Limited

Management Discussion and Analysis

For the Year Ended 31 December, 2022

Abbreviation

The Company	RATCH Group Public Company Limited
The Group	RATCH Group Public Company Limited and its subsidiaries
PEA	Provincial Electricity Authority
EGAT	Electricity Generating Authority of Thailand
COD	Commercial Operation Date
EBITDA	Earnings before Interest, Tax, Depreciation and Amortization
FX	Foreign Exchange Rate
IPP	Independent Power Producer
PPA	Power Purchase Agreement
SPP	Small Power Producer

Projects/Companies

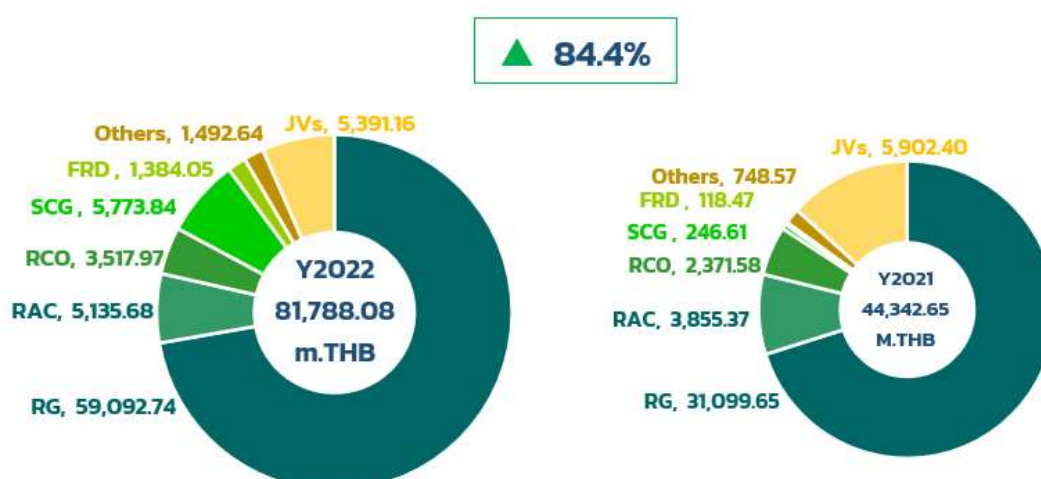
BAFS	Bangkok Aviation Fuel Services Public Company Limited, a direct associate in proportion of 15.53 percent
FRD	Fareast Renewable Development Pte. Ltd., RHIS in proportion of 90 percent
HKP	Hin Kong Power Company Limited, a direct joint venture in proportion of 51 percent
HPC	Hongsa Power Company Limited, an indirect joint venture in proportion of 40 percent
NEHBV	Nexif Energy Holding B.V., a wholly-owned indirect subsidiary
NNEG	Nava Nakorn Electricity Generating Company Limited, an indirect joint venture in proportion of 40 percent
NREI	Nexif Ratch Energy Investment Pte. Ltd., an indirect joint venture in proportion of 49 percent
NRER	Nexif Ratch Energy Rayong Company Limited, an indirect subsidiary wholly-owned by NRES
NRES	NEXIF RATCH ENERGY SINGAPORE PTE LTD, a wholly-owned subsidiary
PNPC	Xe-Pian Xe-Namnoy Power Company Limited, a direct joint venture in proportion of 25 percent
RAC	RATCH-Australia Corporation Pty Ltd, a wholly-owned indirect subsidiary
RCO	RATCH Cogeneration Company Limited, a wholly-owned subsidiary
RG	Ratchaburi Electricity Generating Company Limited, a wholly-owned subsidiary
RHIS	RH International (Singapore) Corporation Pte Ltd, a wholly-owned indirect subsidiary
RIAU	PT Medco Ratch Power RIAU, an indirect joint venture in proportion of 49 percent
RL	RATCH-Lao Services Company Limited, a wholly-owned subsidiary
SCG	Sahacogen (Chonburi) Public Company Limited, a subsidiary in proportion of 51.67 percent

Executive Summary

Unit : Million THB

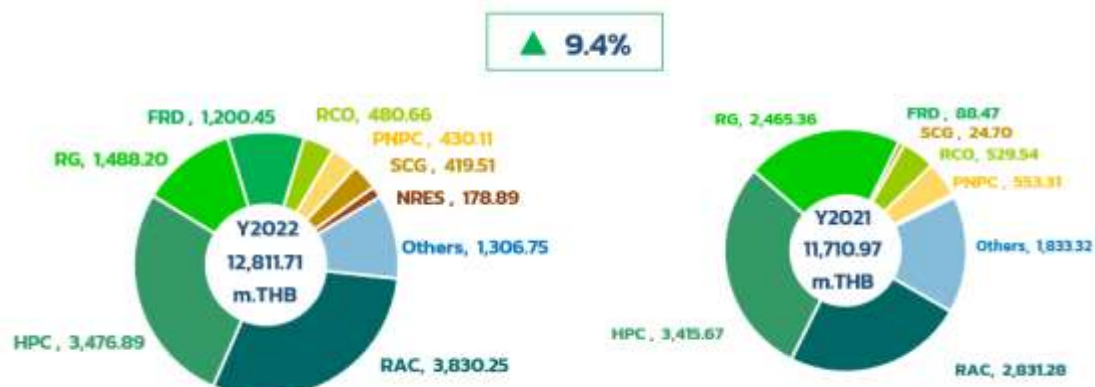
	2022	2021	Increase (Decrease)	%	2020
Total revenues	81,788.08	44,342.65	37,445.43	84.4	39,521.99
EBITDA	12,811.71	11,710.97	1,100.74	9.4	9,664.80
Profit to owner of the Company	5,782.07	7,818.80	(2,036.73)	(26.0)	6,286.68
Profit before FX	5,812.20	7,612.51	(1,800.31)	(23.6)	5,982.23

Total Revenues



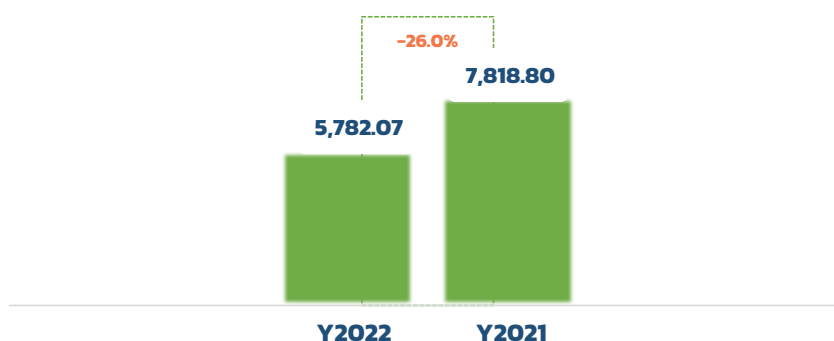
- In 2022, the total revenues increased 84.4 percent as the Energy Payment of RG increased due to higher electricity generated than that of the previous year. Also, the revenues of SCG and FRD have been consolidated since the acquisition in the 4th quarter of 2021. In addition, revenue from sales of RAC increased as Collector Power Plant has commenced COD in June 2021. Furthermore, the electricity price increased due to the increase in demand.
- In 2022, the share of profit of Nexif RATCH Energy Rayong combined cycle power plant increased since the project has achieved COD on April 30, 2022. In addition, the share of profit of HPC increased as the revenue from sales increased. In contrast, the share of profit of NNEG decreased due to a significant rise in fuel price.

EBITDA



- In 2022, the EBITDA increased 9.4 percent since the total revenue increased as mentioned above. However, the cost of sales increased due to the rise in fuel price in response to global energy markets. The Company has continuously enhanced the power plants' efficiency and emphasized on the cost and expense management to be more efficient in order to relieve the impact of the significant increase in fuel price in global market. Regarding SPP power plants, majority of electricity generation was sold to EGAT with the natural gas cost being entirely passed through in the energy payment to EGAT, and only 22 percent of the electricity is being sold to industrial users; as a result, the impact of the significant increase in fuel price to the Company's performance is limited.
- The EBITDA of SCG and FRD have been consolidated since the acquisition in the 4th quarter of 2021.

Profit to Owner of the Company



- The operating result 2022 showed the lower profit due to the increase in depreciation, finance costs, and tax expense in line with the increase in project investment during the year. In addition, the finance costs of FRD and SCG have been consolidated since the acquisition in the 4th quarter of 2021. Also, in the 1st quarter of 2022, FRD recorded the one-time write-off deferred debt fees in the amount of THB 225.73 million from debt refinancing which resulted in the interest saving and loan extension. In addition, FRD recorded the deferred tax expense due to tax rate change of its subsidiary in Indonesia in the amount of THB 337.70 million. These items, in the total amount of THB 563.43 million, were one-time accounting transaction which had no impact on cash flow of the Group.

1. Business Overview and Significant Events in 2022

Overall Business Performance and ESG (Environment, Social and Governance)

In 2022, the Company has expanded its businesses consecutively which resulted from power plants starting COD such as RIAU combined cycle power plants and Nexif Ratch Energy Rayong Cogeneration, as well as, new investment with Nexif Energy Invest Pte. Ltd. (Nexif Energy), mainly investing in renewable projects. Additionally, the Company also emphasized on the cost and expense management to be more efficient in order to relieve the impact of the significant increase in fuel price in global market and maintain the profit margin. The Company has been prepared to make progress in Non-Power Business to become a leading value-oriented energy and infrastructure company in Asia Pacific.

Regarding the implementation of ESG (Environment, Social and Governance), the Company has set the target to improve the management of greenhouse emission reduction to achieve Carbon Neutrality target which are consistent with the scope of ESG, since to set up the target increase the portion of renewable powerplant continually every year, diversify the investment into low carbon emission businesses, enhance the power plants' efficiency to reduce the fuel consumption, reforestation to absorb greenhouse gas, determine the proportion of the investment in each fuel type and also set the limit of the investment in coal fired business. According from these action plans, the Company believes that they could help to eliminate and reduce the greenhouse gas emission gradually.

Every year, the Company reviews changes of the stakeholders involved in the Company's businesses from electricity generation and energy-related to infrastructure businesses. The review is to ensure appropriate, transparent, and fair responses in all aspects to stakeholders. In addition, the Company also emphasized on employee development and employment compensation.

The Company has strictly complied with the Code of Conduct that was shaped by governance and sustainable development principles. The Company was recognized in Thailand Sustainability Investment 2021 (THSI 2021) by the Stock Exchange of Thailand for the eighth consecutive year.

Since the Covid-19 outbreak in 2020, the Company has continually controlled and monitored the pandemic situation in the Company. This year, the Company has been working closely with the strategic partners in business value chain both domestic and overseas to cope with the Covid-19 situations and evaluate the impacts to the business performance.

In addition, the back-up plans are prepared to ensure the smooth operations. The Company, partners, suppliers and customers have collaborated in establishing the commercially operating power plants the COVID-19 free zones, to avoid undisrupted production and delivery and satisfy customers and power users. Besides, the Company has continuously supported the public health effort against COVID-19 as well as communities.

 **Goals correspondent to the concept of ESG**

Environmental

- Increase renewable energy by 4,000 megawatts of total production capacity in 2035
- Enhance production efficiency and conserve the use of energy and resources
- Study about solutions on use of hydrogen and carbon capture and storage technology in order to reduce the amount of greenhouse gas
- Carbon offset by reforestation and conservation of community forest

Social

Safety

- “Zero” accident

Human Rights

- Inspect the human rights in all dimensions with risk and impact assessment every three years
- “Zero” violation of human rights

Community and Society

- Maintain of community relationship
- Zero complaint that affects business continuity

Governance

- Follow good corporate governance principles (CG Code) and internationally-recognized practices of ESG
- Continuous being the membership of Thai Private Sector Collective Action Against Corruption
- Align with the governance practices for listed companies at the 5-star level

Awards of the Year 2022

- Sustainability Disclosure Award 2022) for 4 consecutive years
- “Best” 2022 Corporate Governance Report of Thai Listed Companies (CGR) organized by the Thai Institute of Directors Association (IOD) and the Stock Exchange of Thailand, 15 consecutive years
- ASEAN CG Scorecard Virtual Awards 2021
- Full score in the evaluation of Annual Shareholders General Meeting’s quality in 2022 conducted by the Thai Investors Association
- Listed in the 2022 Thailand Sustainability Investment (THSI) by the Stock Exchange of Thailand for 8 consecutive years
- Miss Choosri Kietkajornkul, Chief Executive Officer, was granted “Outstanding Commerce and Accountancy, Chulalongkorn Alumnae Year 2022” from Faculty of Commerce and Accountancy Alumni Association, Chulalongkorn University.
- Mrs. Wadeerat Charoencoop, Chief Finance Officer, was granted “Asia’s Greatest CFO Award 2022 – 2023” which was granted for outstanding executives from 1,200 companies in 16 industrial sectors in Asia.



Significant Events of the Year 2022

1.1 Additional Purchase of Ordinary Shares of Sahacogen (Chonburi) Public Company Limited

On December 13, 2021, the Company has purchased the ordinary shares of Sahacogen (Chonburi) Public Company Limited (SCG) in the total amount of 593.48 million ordinary shares in SCG, equivalent to 51 percent of the total issued shares in SCG, resulting in SCG to become a subsidiary of the Company. On January 31, 2022, the Company has additionally purchased the ordinary shares of SCG in the total amount of 7.80 million shares, equivalent to 0.67 percent of the total issued and paid-up shares, amounting to Baht 44.83 million. After such transaction is completed, the Company hold the total of 601.28 million shares or equivalent to 51.67 percent of the total issued shares.

SCG operates the business of producing and selling electricity and stream. It has a total power generation capacity of 214 megawatts and 96 tons per hour using natural gas fuel. In addition, SCG has invested in 2 biomass power plants, one of which located in the Saha Group Industrial Park-Lamphun, Lamphun Province with a capacity of 9.6 megawatts and the other one located in Kamphaeng Phet province with a capacity of 7.5 megawatts.

1.2 Commercial Operation of Riau Combined-Cycle Power Plant in the Republic of Indonesia

PT Medco Ratch Power Riau, an operator of Riau Combined-Cycle Power Plant Project with the installed capacity of 296.23 megawatts in the Republic of Indonesia which the Company held a 49 percent stake through RHIS, has received the official confirmation of Application for Commercial Operation Date from Indonesian State Electricity Company (PT PLN (Persero)) which approved the commercial operation on February 10, 2022.

1.3 Signing of a Shareholders Agreement to invest in PRINC Healthcare – Sakon Nakhon Company Limited

On March 28, 2022, the Company has signed a Shareholders Agreement with Principal Healthcare Company Limited (“PRINH”) and another local investor to invest in Principal Healthcare – Sakon Nakhon Company Limited to invest in a private hospital under the name of PRINC Sakon Nakhon Hospital. In this regard, the shareholding proportions of the Company, PRINH and the local investor are at 25, 70 and 5 percent respectively. The Company’s investment is in the amount of THB 75 million.

PRINC Sakon Nakhon Hospital is located in Sakon Nakhon Province. It is a secondary private hospital with 59 beds, consisting of hospital building, examination rooms, patient rooms and modern medical equipment. It has opened for service since February 2023.

1.4 Investment in the Expansion of Electricity and Steam Generation Capacity of Nava Nakorn Electricity Generating Company Limited (NNEG)

On May 5, 2022, the Company reported to the Stock Exchange of Thailand that NNEG will invest in an expansion for an addition of 30 megawatts of electricity generating capacity and 5 tons per hour of steam generation capacity with the project cost of approximately THB 1,724 million. The capacity expansion project is expected to be completed and commence commercial operation approximately in June 2024. After the expansion, NNEG will have the total electricity generation capacity of approximately 215 megawatts and the net steam generation capacity of approximately 45 tons per hour.

1.5 Commercial Operation of Nexif RATCH Energy Rayong Combined Cycle Power Plant Project

Nexif RATCH Energy Rayong Combined Cycle Power Plant project with an installed capacity of 98 megawatts and 25-year Power Purchase Agreement with EGAT, held by NRER through NRES, has officially started commercial operation since April 30, 2022.

1.6 The Publication PPO and Capital Increase

At the Annual General Meeting of the shareholders of the Company held on April 27, 2022, the shareholders approved the increase of the registered capital of the Company from THB 14,500.00 million to THB 22,192.31 million by issuing new ordinary shares in the amount of 769.23 million shares at par value of THB 10 each, totaling THB 7,692.31 million for issuing and offering the shares in proportion to the shareholding of existing shareholders. On May 12, 2022, the Company considered and determined the final offering price at THB 34.48 per share, number of the final offered shares of 725 million shares in the total amount THB 24,998.00 million, and the final offering ratio per share at 2 existing ordinary shares to 1 new ordinary share. The Company registered the change in the paid-up capital increase from this issuance and offering of new ordinary shares with the Ministry of Commerce on June 22, 2022.

1.7 Establishment of Subsidiary for Supporting the investment of Xekong 4A and 4B Hydroelectric Power Projects in Lao PDR

On July 8, 2022, the Company together with B.Grimm Power Public Company Limited (B.GRIMM) and another business partner registered the establishment of Sekong Investment Advisory Co., Ltd. (SIA) for supporting the investment of Xekong 4A and 4B Hydroelectric Power Projects in Lao PDR with shareholding proportion of 60, 20 and 20 percent respectively. SIA's registered capital is LAK 1,000 million, divided into 100,000 ordinary shares, valuing at 10,000 kip each.

The Xekong 4A and 4B Hydroelectric Power Projects with installed capacity of 355 megawatts is located in Xekong Province, Lao PDR, Xaysettha District, Vientiane Capital, Lao PDR.

1.8 Purchase of Ordinary Shares to Invest and Jointly Develop a Hydroelectric Power Project in the Republic of Indonesia

On November 23, 2022, FRD has invested by purchasing 100 percent of all ordinary shares in Malacca Eco Investment Holdings Pte. Ltd. (MEI), a company incorporated in Singapore, from Eco Energy Holdings Pte. Ltd. (EEH), the existing shareholder, to invest and jointly develop Sibundong Hydroelectric Power Plant in the proportion of 55.56 percent, operating by PT Tapanuli Hydro Energy (THE). This share purchase will make the Group become the Project's shareholder in the proportion of 50 percent. The value of the acquisition of shares is USD 16.70 million or equivalent to approximately THB 577.29 million.

Sibundong Hydroelectric Power Plant Project is a run-of-river hydroelectric power plant with the generation capacity of 73.7 megawatts, located on Sibundong river, North Sumatra Province in the Republic of Indonesia. The project has been developed by EEH's affiliate, the existing partner who jointly operate Asahan-1 Hydroelectric Power Plant. Sibundong is currently in development phase with a plan of Commercial Operation Date in 2029.

1.9 Share Acquisition of Nexif Energy Holding B.V. and Nexif Ratch Energy Investments Pte. Ltd. (Nexif Portfolio)

On December 20, 2022, RHIS acquired shares in Nexif Energy Holding B.V. (NEHBV) which hold the asset of renewable energy power plants, gas turbine power plant, combined cycle power plant and battery energy storage system in Thailand, the Commonwealth of Australia and the Socialist Republic of Vietnam in proportion of investment of 100% amounting to US Dollars 480.78 million or equivalent to THB 16,617 million.

In addition, on 20 December 2022, RHIS, an indirect subsidiary of the Company, acquired shares in NXF Holdings 2 Limited (NXF2) and restructured by establishing Nexif Ratch Energy Investments Pte. Ltd. (NREI) with Nexif Energy Invest Pte. Ltd. ("Nexif Energy"). RHIS hold 49% shares of NREI for investing in renewable energy power plants project in the Socialist Republic of Vietnam and the Public of the Philippines and seeking new projects in Southeast Asia and Australia. The investment in NREI is amounting to USD 135.88 million or equivalent to THB 4,696 million together with loans to Nexif Energy amounting to USD 49.90 million or equivalent to THB 1,725 million.

Progress of Projects under Construction (as of December 31, 2022)



MRT Pink Line Project	
Technology	Monorail
Route	Khae Rai–Min Buri
Ownership	10%
Contract Term	30 Years
COD	Year 2023
Progress	Civil Works = 94.43% Railway System = 94.49%



MRT Yellow Line Project	
Technology	Monorail
Route	Lad Prao–Sam Rong
Ownership	10%
Contract Term	30 Years
COD	Year 2023
Progress	Civil Works = 98.04% Railway System = 98.15%



Hin Kong Power Plant (HKP)	
Type of Power Plant	IPP
Type of Fuel	Natural Gas
Install Capacity (MW)	1,540
Location	Ratchaburi Province
Ownership	51%
PPA	25 Years with EGAT
COD	Year 2024 and 2025
Progress	71.5%



Ratch Cogeneration Power Plant (RCO) - Extension	
Type of Power Plant	Firm-Cogeneration SPP Power Plant
Type of Fuel	Natural Gas
Install Capacity (MW)	Power Generating Capacity 31.2 MW Steam Generating Capacity 7.15 Tons per Hour
Location	Pathum Thani Province
Ownership	100%
Customers	Navanakorn Industrial Promotion Zone, Pathum Thani Province
COD	February 1, 2023
Progress	100%



Thanh Phong Wind-Turbine Power Plant (ECOWIN)	
Install Capacity (MW)	29.7
Location	Ben Tre Province, Vietnam
Ownership	51%
PPA	20 Years with Vietnam Electricity
COD	Year 2023
Progress	93.62%



R E N Korat Energy Power Plant (R E N)	
Type of Power Plant	Cogeneration IPS Power Plant
Type of Fuel	Natural Gas
Install Capacity (MW)	31.2
Location	Nakhon Ratchasima Province
Ownership	40%
Customers	Industrial Promotion Zone, Nakhon Ratchasima Province
COD	Year 2024
Progress	Began Building Base Constuction

2. Operation Performance according to Consolidated Financial Statement

Analysis of Revenues

Unit : Million THB

	2022	2021	Increase (Decrease)	%	2020
Revenue from sales and rendering of services	71,882.03	35,231.48	36,650.55	104.0	31,652.54
<i>RG</i>	57,426.91	28,992.37	28,434.54	98.1	26,839.80
<i>RAC</i>	5,016.70	3,734.35	1,282.35	34.3	2,684.83
<i>RCO</i>	3,517.84	2,219.38	1,298.46	58.5	2,065.88
<i>SCG</i>	5,740.48	239.41	5,501.07	<i>n.a.</i>	-
<i>Others</i>	180.10	45.97	134.13	291.8	62.03
Revenue from leases contracts	2,843.19	2,095.30	747.89	35.7	2,553.21
Share of profit of associates and joint ventures	5,391.16	5,902.40	(511.24)	(8.7)	4,600.34
<i>IPPs</i>	3,962.02	3,843.25	118.77	3.1	3,288.76
<i>SPPs</i>	354.25	435.80	(81.55)	(18.7)	426.26
<i>Hydro Power Plants</i>	707.08	1,092.98	(385.90)	(35.3)	69.02
<i>Renewable Power Plants</i>	228.12	427.77	(199.65)	(46.7)	403.13
<i>Infrastructure and Others</i>	139.69	102.60	37.09	36.2	413.17
Other incomes	1,671.70	1,113.47	558.23	50.1	715.90
<i>Management service income</i>	275.44	224.30	51.14	22.8	276.31
<i>Interest income</i>	499.61	205.35	294.26	143.3	159.41
<i>Dividend income</i>	26.51	58.83	(32.32)	(54.9)	61.18
<i>Gain from change in proportion of investment in joint ventures</i>	661.08	-	661.08	-	-
<i>Gain on bargain purchase</i>	-	227.03	(227.03)	(100.0)	-
<i>Other income</i>	209.06	397.96	(188.90)	(47.5)	219.00
Total revenues	81,788.08	44,342.65	37,445.43	84.4	39,521.99

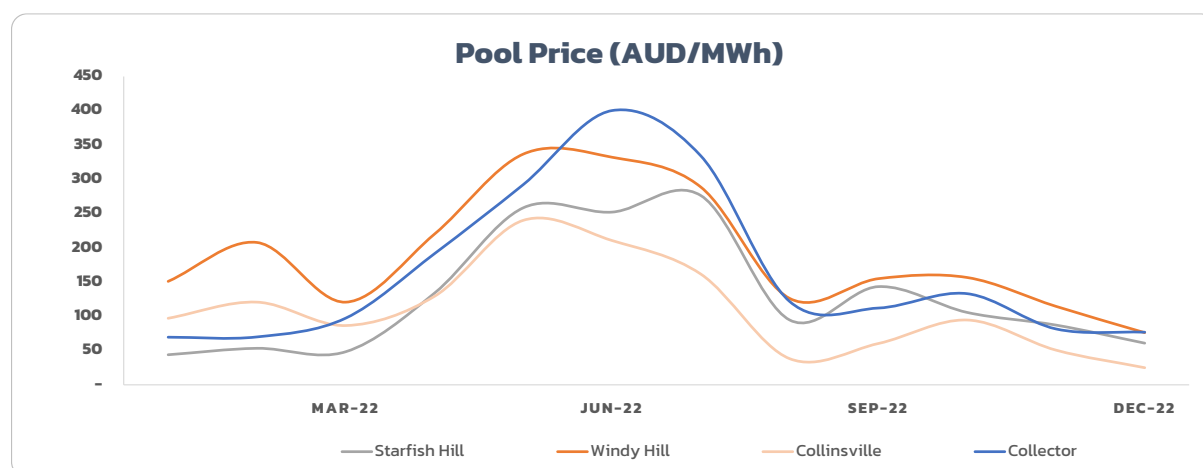
Revenue from Sales and Rendering of Services

- RG Power Plant**

Key Revenue Drivers	2022	2021	Increase (Decrease)	%
Electricity Sale Volume to EGAT (GWh)				
Natural Gas	13,453.99	11,518.75	1,935.24	16.8
Heavy Oil	1,167.42	597.99	569.43	95.2
Diesel Oil	81.82	26.84	54.98	204.8
	14,703.23	12,143.58	2,559.65	21.1
Average Fuel Price				
Natural Gas (THB/mmBTU)	498.59	276.82	221.77	80.1
Heavy Oil (THB/Litre)	18.96	14.68	4.28	29.2
Diesel (THB/Litre)	27.05	23.94	3.11	13.0

Revenue from sales increased. The main reason was the increase in Energy Payment in the amount of THB 29,108.66 million, due to higher electricity generation using natural gas, oil, and diesel than that of the previous year, corresponding to higher dispatch instruction by EGAT and the increase in fuel price. In contrast, Availability Payment decreased in the amount of THB 674.12 million as Base Availability Credit in 2022 decreased, comparing to that of 2021, as specified in the PPA.

- RAC Power Plant**



Revenue from sales increased as Collector Power Plant has commenced COD in June 2021. In addition, the electricity price increased, especially during March and July 2022, due to the increase in demand in Australia relatively driven by lower temperatures during winter season than that of the previous year.

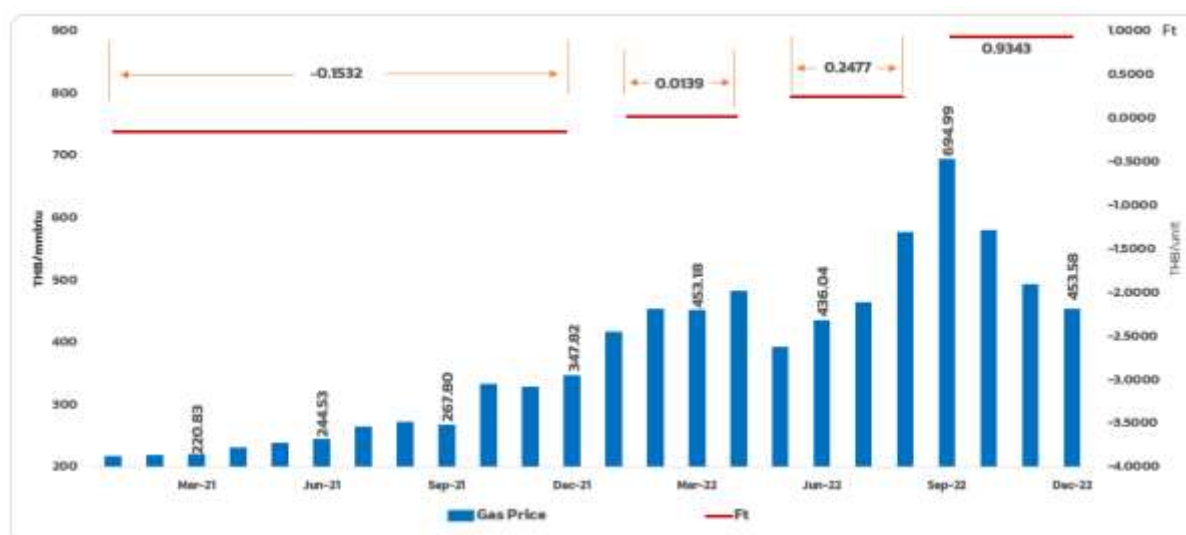
- RCO Power Plant

Key Revenue Drivers	2022	2021	Increase (Decrease)	%
Electricity Sale Volume to EGAT (GWh)	629.08	610.05	19.03	3.1
Electricity Sale Volume to Industrial Users (GWh)	88.40	85.87	2.53	2.9
Steam Sale Volume (Ton)	23,628.98	23,814.30	(185.32)	(0.8)

Revenue from sales increased as the power plant generated more electricity and the fuel price significantly increased.

- SCG Power Plant

Key Revenue Drivers	2022	2021	Increase (Decrease)	%
Electricity Sale Volume to EGAT (GWh)	607.89	622.78	(14.89)	(2.4)
Electricity Sale Volume to PEA (GWh)	123.67	109.76	13.91	12.7
Electricity Sale Volume to Industrial Users (GWh)	390.67	428.92	(38.25)	(8.9)
Steam Sale Volume (Ton)	392,461.07	410,624.15	(18,163.08)	(4.4)



The Company has consolidated the revenues from sales of SCG since the acquisition in the 4th quarter of 2021. In 2022, compared to the previous year, although the electricity volume and steam sale volume decreased, the revenue from sales of SCG increased due to the significant increase in energy payment. Meanwhile, gas price has also increased significantly, resulting in lower margin in selling electricity to industrial customers despite the Ft increase from -0.1532 THB to 0.9343 THB.

Share of Profit of Associates and Joint Ventures

IPPs

- Hongsa Thermal Powerplants (HPC)

Key Revenue Drivers	2022	2021	Increase (Decrease)	%
Commercial Equivalent Availability Factor (% C-EAF)	85.87	84.54	1.33	1.6
EGAT Dispatch Factor (% DF)	103.79	101.56	2.23	2.2
EDL Dispatch Factor (% DF)	86.33	110.07	(23.74)	(21.6)
Average Fx (THB/USD)	35.20	32.12	3.08	9.6

Planned Maintenance	2022	2021
Power Plant – Unit 1	November 20 – December 11, 2022 (22 days)	August 22 – October 13, 2021 (53 days)
Power Plant – Unit 2	January 14 – February 26, 2022 (44 days)	January 18 – February 15, 2021 (29 days)
Power Plant – Unit 3	October 16 – November 6, 2022 (22 days)	July 18 – August 9, 2021 (23 days)

The share profit of HPC increased as the power plants had planned maintenance less than that of the previous year. In addition, THB depreciated in relative to USD, resulting in the increase in Availability Payment.

SPPs

- Nava Nakorn SPP Power Plant (NNEG)

The share profit of NNEG decreased due to the significant increase in fuel price, resulting in lower margin in selling electricity to industrial customers despite the Ft increase from -0.1532 THB to 0.9343 THB.

- Nexif RATCH Energy Rayong SPP Power Plant (NRER)

The share profit of NRES increased as Nexif RATCH Energy Rayong combined cycle power plant (NRER) has commenced COD on April 30, 2022.

Hydro Power Plants

- Xe-Pian Xe-Namnoy Hydro Power Plant (PNPC)

Key Revenue Drivers	2022	2021	Increase (Decrease)	%
Electricity Sale Volume to EGAT (GWh)	1,859.53	1,653.24	206.29	12.5
Electricity Sale Volume to EDL (GWh)	206.00	96.80	109.20	112.8
Average Water Level (Metres)	780.03	775.96	4.07	0.5

The share profit of Xe-Pian Xe-Namnoy Hydro Power Plant (PNPC) decreased although electricity sale volume and average water level increased. The main reason was PNPC recorded gain on FX from loans from financial institutions less than that of last year. In addition, the finance cost increased due to the rise in LIBOR and MLR Rates.

Infrastructure and Others

- The operating result of BAFS increased due to the acquisition in the 1st quarter of 2021 and the increase in flight volume and refueling volume after the Centre for COVID-19 Situation Administration (CCSA) has eased the level of COVID-19 restrictions since the beginning of July 2022.

Gain from Change in Proportion of Investment in Joint Ventures / Gain on Bargain Purchase

- On December 20, 2022, RHIS has acquired shares of NEHBV; as a result, the Company and RHIS owned NRES in the portion of 100 percent. The Company recognized gain from change in proportion of investment in joint ventures in the amount of THB 661.08 million.

- In the 4th quarter of 2021, RHIS has additionally invested in FRD in a total of 90 percent (previously 50 percent). As a result, the Company recognized gain on bargain purchase from such transaction in the amount of THB 177.67 million.

- In the 4th quarter of 2021, the Company has acquired 51 percent shares of SCG. As a result, the Company recognized gain on bargain purchase from such transaction in the amount of THB 49.36 million.

Analysis of EBITDA and Profit to Owner of the Company

Unit : Million THB

	2022	2021	Increase (Decrease)	%	2020
Total Revenue	81,788.08	44,342.65	37,445.43	84.4	39,521.99
Cost of Sales (Excl. Depreciation and Amortization)	66,420.38	31,174.23	35,246.15	113.1	28,388.25
<i>RG</i>	57,422.45	28,475.63	28,946.82	101.7	26,341.11
<i>RAC</i>	735.23	641.77	93.46	14.6	513.53
<i>RCO</i>	3,005.67	1,812.97	1,192.70	65.8	1,490.60
<i>SCG</i>	5,181.83	200.06	4,981.77	<i>n.a.</i>	-
<i>RL</i>	75.20	43.80	31.40	71.7	43.01
Administrative expenses (Excl. Depreciation and Amortization)	2,555.99	1,457.45	1,098.54	75.4	1,468.94
Total Expenses	68,976.37	32,631.68	36,344.69	111.4	29,857.19
EBITDA	12,811.71	11,710.97	1,100.74	9.4	9,664.80
Le: Depreciation and Amortization	3,088.93	2,192.62	896.31	40.9	1,972.59
(Gain) Loss on Fair Value Adjustment of Derivatives	102.46	(143.51)	245.97	171.4	130.24
Finance Costs	2,976.67	1,868.07	1,108.60	59.3	1,551.35
Tax Expense	937.34	177.17	760.17	429.1	28.36
Profit before Fx	5,706.31	7,616.62	(1,910.31)	(25.1)	5,982.26
Gain (Loss) on Fx	(30.13)	206.29	(236.42)	(114.6)	304.45
Profit for the Period	5,676.18	7,822.91	(2,146.73)	(27.4)	6,286.71
Non-Controlling Interests	(105.89)	4.11	(110.00)	(2,676.4)	0.03
Profit to Owner of the Company	5,782.07	7,818.80	(2,036.73)	(26.0)	6,286.68
Effect of Gain (Loss) on Fx	(30.13)	206.29	(236.42)	(114.6)	304.45
Profit to Owner of the Company before Fx	5,812.20	7,612.51	(1,800.31)	(23.6)	5,982.23

In 2022, EBITDA was THB 12,811.71 million, increasing by THB 1,100.74 million from THB 11,710.97 million in 2021. The main reason was the increase in total revenue, as described above. However, cost of sales and administrative expenses also increased. The details were as follows:

Cost of Sales

- **RG Power Plant** - Cost of sales increased as the power plants generated higher electricity using natural gas, oil, and diesel than that of the previous year, corresponding to higher dispatch instruction by EGAT and the fuel price increase.
- **SCG Power Plant** - Cost of sales has been consolidated after the acquisition in the 4th quarter of 2021.
- **RCO Power Plant** - Cost of sales increased as the fuel price significantly increased.
- **RAC Power Plant** - Cost of sales increased since Collector Power Plant has commenced COD in June 2021.

While the increase in EBITDA as described above, depreciation and amortization, fair value adjustment of derivatives, finance costs, and tax expense also increased. As a result, profit to owner of the Company was THB 5,782.07 million, decreasing by THB 2,036.73 million from THB 7,818.80 million in the year 2021. The significant expenses were as follows:

Depreciation and amortization

The depreciation and amortization of SCG increased in the amount of THB 677.72 million since after the acquisition in the 4th quarter of 2021. In addition, the depreciation of RAC increased in the amount of THB 176.40 million as Collector Power Plant has commenced COD in June 2021.

The effect of fair value adjustment of derivatives

In 2022, the Company recorded loss on fair value adjustment of derivatives according to the adopted accounting policies for derivatives and hedge accounting. The main reason was the change in fair value adjustment of PPA value of RAC's power plant. However, in 2021, the Company recorded gain on fair value adjustment of cross currency swap contract between JPY and AUD currencies to manage the exposure of fluctuations in foreign exchange risk on borrowings.

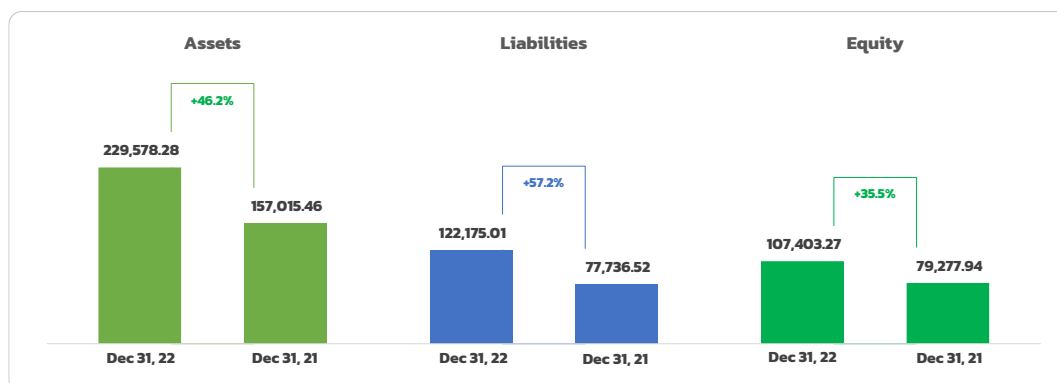
Finance Costs

- The finance costs of FRD and SCG have been consolidated after the acquisition in the 4th quarter of 2021.
- The Company and RHIS – The finance cost increased from loan drawdown from financial institutions during the year for the purpose of investment in projects such as Asahan-1, Ecowin, Nexif Portfolio, etc.
- FRD – The finance cost increased due to one-time write-off deferred debt fees of its existing loans from debt refinancing in the amount THB 225.73 million in the 1st quarter of 2022, which resulted in the interest saving and loan extension for the Asahan-1 Hydro Power Plant. This item was one-time accounting transaction, which had no impact on cash flow of the Group.

Income Tax

- The income tax of FRD and SCG have been consolidated after the acquisition in the 4th quarter of 2021.
- The income tax of RAC increased due to the increase in the tax profit.
- The income tax of RG increased as, in 2021, RG received tax benefit from the sale of Tri Energy Power Plant.
- The income tax of FRD increased as the deferred tax expense has been recorded due to tax rate change of its subsidiary in Indonesia in the amount of THB 337.70 million in the 1st quarter of 2022. This item was the accounting transaction, which had no impact on cash flow of the Group.

3. Analysis of Statement of Financial Position



Assets

- Cash and cash equivalents increased in the amount of THB 27,379.68 million. The main reason was the capital increase in the amount THB of 24,998.00 million.
- Assets of the companies in NEHBV have been consolidated in the amount of THB 25,491.76 million and goodwill of Nexif Portfolio has been recognized in the amount of THB 9,765.36 million.
- Investments in joint ventures and associates increased in the amount of THB 10,297.89 million. The main reasons were from additional investments in joint ventures and associates in the total amount of THB 6,205.78 million and the share of profit contributed during the year in the total amount of THB 5,391.16 million.
- Trade accounts receivable from related parties of RG increased in the amount of THB 2,177.88 million as the energy payment increased.
- Lease receivables decreased in the amount of THB 2,575.04 million.

Liabilities and Equity

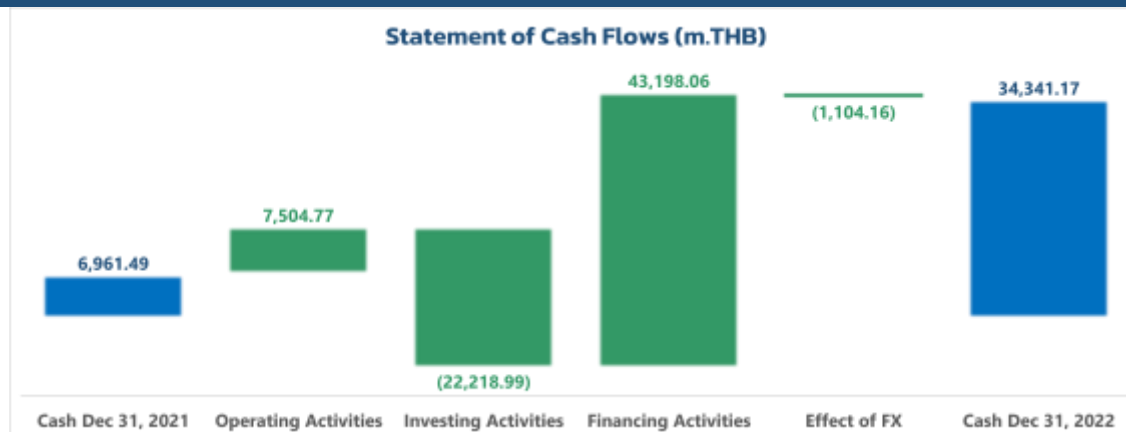
 Liabilities increased in the amount of THB 44,437.49 million, the main reasons were as follows:

- Loan from financial institutions increased in the amount of THB 35,564.39 million as loans from the companies in NEHBV have been consolidated after the acquisition. In addition, the Company, including RHIS, RAC, and FRD received loans from financial institutions during the year.
- Trade accounts payable of RG increased in the amount of THB 1,363.55 million as the fuel price increased.


 Equity increased in the amount of THB 28,125.33 million. The main reasons were as follows:


- The issued and paid-up share capital increased by THB 7,250.00 million and the share premium on ordinary shares increased by THB 17,748.00 million, totaling THB 24,998.00 million.
- The Company had the profit of 2022 in the amount of THB 5,782.07 million.
- The dividend payment during the year decreased retained earnings in the amount of THB 3,697.50 million.

4. Analysis of Cash Flows



Cash and cash equivalents of the Company and its subsidiaries as at December 31, 2022 were THB 34,341.17 million, increasing by THB 27,379.68 million from THB 6,961.49 million on December 31, 2021. The details were summarized below:

 Net cash from operating activities increased cash flow in the amount of THB 7,504.77 million. The reason was the operating result of 2022 improved cash position by THB 6,082.56 million, adjusted by the change in operating assets and liabilities in the amount of THB 1,422.21 million.

 Net cash used in investing activities decreased cash flow in the amount of THB 22,218.99 million. The main reasons were as follows:

- RHIS invested in NEHBV in the amount of USD 480.78 million or equivalent to THB 16,617 million and NREI in the amount of USD 135.88 million or equivalent to THB 4,696 million together with loans to Nexif Energy amounting to USD 49.90 million or equivalent to THB 1,725 million.

- The Company received dividends in the total amount of THB 2,810.20 million.
- The Company paid for plant and equipment in the amount of THB 2,375.50 million.

 Net cash from financing activities increased cash flow in the amount of THB 43,198.06 million. The main reasons were as follows:

- Cash received from the capital increase in the amount of THB 24,998.00 million.
- Net cash received from financial institutions in the amount of THB 24,971.74 million. The main reason was the Company, including RHIS, RAC, SCG and FRD received loans from financial institutions during the year.

- SCG issued the debenture in the amount THB 2,650 million.
- The Company paid dividend to the shareholders in the amount of THB 3,697.02 million.
- The Company paid for interest expenses during the year in the amount of THB 3,199.98 million.

- RG repaid the debenture in March 2022 in the amount of THB 2,000 million.

5. Significant financial ratios (excluded the effect of foreign exchange rate of the Company and its subsidiaries)

