

RATCH Group Public Company Limited

Management Discussion and Analysis

For the Three-month and Nine-month Periods Ended 30 September, 2022



Abbreviation	
The Company	RATCH Group Public Company Limited
The Group	RATCH Group Public Company Limited and its subsidiaries
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
NNEG	Nava Nakorn Electricity Generating Company Limited, an indirect joint venture in proportion of 40 percent
NRER	Nexif Ratch Energy Rayong Company Limited, an indirect joint venture wholly-owned by NRES
NRES	NEXIF RATCH ENERGY SINGAPORE PTE LTD, a direct joint venture in proportion of 49 percent
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

	Quarter 3		Increase		9-Month		Increase	
	2022	2021	(Decrease)	%	2022	2021	(Decrease)	%
Total revenues	24,871.29	10,606.65	14,264.64	134.5	61,570.65	29,824.13	31,746.52	106.4
Cost of sales and rendering of services	22,327.94	9,013.92	13,314.02	147.7	55,784.70	24,221.71	31,562.99	130.3
EBITDA	4,010.86	2,710.74	1,300.12	48.0	10,985.49	8,392.15	2,593.34	30.9
Finance costs	663.96	465.12	198.84	42.8	2,223.29	1,301.79	921.50	70.8
Tax expense	104.92	100.65	4.27	4.2	839.59	63.16	776.43	n.a.
Profit to owner of the Company	2,248.23	1,438.11	810.12	56.3	6,023.68	5,648.81	374.87	6.6
Profit before FX	2,514.77	1,592.76	922.01	57.9	5,898.37	5,602.43	295.94	5.3

Average natural gas price (THB/ MMBTU)

	2022	2021	Increase	%	2022	2021	Increase	%
Natural gas price (RG)	553.85	237.59	316.26	133.1	455.72	211.39	244.33	115.6
Natural gas price (SPP)	561.85	268.61	293.24	109.2	475.37	242.17	233.20	96.3

Total Revenues

- In the 3rd quarter of 2022 and the nine-month period of 2022, the total revenues increased as the Energy Payment of RG increased due to higher electricity generated than that of the same period 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 the 3rd quarter of 2022 and the nine-month period of 2022, the share of profit of HPC and PNPC increased since the revenue from sales increased. In contrast, the share of profit of NNEG decreased due to a significant rise in fuel price.

EBITDA

- In the 3rd quarter of 2022 and the nine-month period of 2022, the EBITDA increased since the total revenue increased as mentioned above. However, the cost of sales increased due to the rise of fuel price in response to global energy markets. Also, 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 for the 3rd quarter of 2022 and the nine-month period of 2022 showed the higher profit (attributable to owners of the Company), resulting from the increase in the EBITDA as mentioned above. In contrast, the finance cost and income tax increased. The main reason was 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 repayment extension in the 1st quarter of 2022. 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. Also, the finance costs of FRD and SCG have been consolidated.

1. Significant Events of the 3rd Quarter of 2022

1.1 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”) with shareholding proportion of 60, 20 and 20 percent respectively. SIA’s registered capital is 1,000 million kip, 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.

1.2 Signing of Share Purchase Agreement to acquire Nexif Energy Joint Venture

On August 17, 2022, RHIS has signed a Share Purchase Agreement with subsidiaries of Denham Capital Management LP (“Denham”) managed funds, and Nexif Energy Management Pte. Ltd., a subsidiaries of Netif Pte. Ltd. (“Netif”) to acquire 100 percent in Netif Energy Holding B.V. and NXF Holding 2 Limited (“Nexif Energy Joint Venture” or “NEJV”) which hold the asset of renewable energy power plant, gas turbine power plant, combined cycle power plant and battery energy storage system in Thailand, the Commonwealth of Australia, the Socialist Republic of Vietnam and the Republic of the Philippines. The value of the acquisition of shares is USD 605 million.

Such investment is in line with the Company’s investment plan, which the revenue can be recognized immediately after the share acquisition is completed. In addition, the Company and Nexif have discussed and agreed to set up a new Nexif-Ratch JV company to jointly develop potential of the projects in the Development Pipeline and seek new projects to expand the business of the Nexif-Ratch JV Company. This will create income stability and long-term benefits on the investment and growth for the Company through such continued development with total electricity generation capacity of operating power plants, construction, and development projects approximately of 1,500 MW after the JV company incorporation.

Progress of Projects under Construction (as of September 30, 2022)



MRT Pink Line Project	
Technology	Monorail
Route	Khae Rai–Min Buri
Ownership	10%
Contract Term	30 Years
COD	Year 2023
Progress	Civil Works = 92.84% Railway System = 91.75%



MRT Yellow Line Project	
Technology	Monorail
Route	Lad Prao–Sam Rong
Ownership	10%
Contract Term	30 Years
COD	Year 2023
Progress	Civil Works = 96.96% Railway System = 96.57%



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	53.20%



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 5.46 Tons per Hour
Location	Pathum Thani Province
Ownership	100%
Customers	Navanakorn Industrial Promotion Zone, Pathum Thani Province
COD	Year 2022
Progress	98.35%



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	88.25%



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 2023
Progress	Signed Engineering, Procurement, and Construction (EPC) Contract

2. Operation Performance according to Consolidated Financial Statement

2.1 Analysis of Revenues

Unit : Million THB

	Quarter 3		Increase	%	9-Month		Increase	%
	2022	2021	(Decrease)		2022	2021	(Decrease)	
Revenue from sales and rendering of services	21,641.26	8,667.28	12,973.98	149.7	53,444.48	23,428.36	30,016.12	128.1
<i>RG</i>	17,526.45	6,878.65	10,647.80	154.8	42,640.08	19,040.55	23,599.53	123.9
<i>RAC</i>	1,437.69	1,205.14	232.55	19.3	3,859.71	2,778.31	1,081.40	38.9
<i>RCO</i>	1,011.34	565.80	445.54	78.7	2,599.93	1,558.03	1,041.90	66.9
<i>SCG</i>	1,613.25	-	1,613.25	-	4,199.65	-	4,199.65	-
<i>FRD</i>	17.71	-	17.71	-	72.21	-	72.21	-
<i>RL</i>	34.82	17.69	17.13	96.8	72.90	51.47	21.43	41.6
Revenue from leases contracts	710.33	475.19	235.14	49.5	2,161.62	1,502.72	658.90	43.8
Share of profit of associates and joint ventures	2,228.63	1,306.40	922.23	70.6	5,337.34	4,318.05	1,019.29	23.6
<i>IPPs</i>	1,505.34	784.92	720.42	91.8	3,693.41	2,955.90	737.51	25.0
<i>SPPs</i>	99.19	125.95	(26.76)	(21.2)	471.95	379.57	92.38	24.3
<i>Hydro Power Plants</i>	556.24	310.46	245.78	79.2	845.51	681.65	163.86	24.0
<i>Renewable Power Plants</i>	42.25	68.42	(26.17)	(38.2)	215.44	230.26	(14.82)	(6.4)
<i>Infrastructure and Others</i>	25.61	16.65	8.96	53.8	111.03	70.67	40.36	57.1
Other incomes	291.07	157.78	133.29	84.5	627.21	575.00	52.21	9.1
<i>Management service income</i>	82.13	58.44	23.69	40.5	213.16	165.49	47.67	28.8
<i>Interest income</i>	136.30	53.05	83.25	156.9	250.69	157.27	93.42	59.4
<i>Dividend income</i>	-	-	-	-	26.51	58.83	(32.32)	(54.9)
<i>Other income</i>	72.64	46.29	26.35	56.9	136.85	193.41	(56.56)	(29.2)
Total revenues	24,871.29	10,606.65	14,264.64	134.5	61,570.65	29,824.13	31,746.52	106.4

2.1.1 Revenue from Sales and Rendering of Services

Q3'2022 vs Q3'2021 and 9-month of 2022 vs 9-month of 2021

- **RG Power Plant**

Revenue from sales increased. The main reason was the increase in Energy Payment in the amount THB 10,809.08 million, due to higher electricity generation using natural gas, oil, and diesel than that of the same period 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 THB 161.28 million since Base Availability Credit in 2022 decreased, comparing to that of 2021, as specified in the PPA.

- **SCG Power Plant and Asahan-1 Hydro Power Plant (Held by FRD)**

Revenues from sales have been consolidated since the acquisition in the 4th quarter of 2021. Compared to the same period of the previous year, revenue from SCG increased due to the significant increase in fuel price of SPP Power Plant. However, revenue from FRD decreased since the Asahan-1 hydro power plant generated less electricity due to the power plant had planned maintenance during May 17-23, 2022.

- **RCO Power Plant**

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

- **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.

2.1.2 Share of Profit of Associates and Joint Ventures

Q3'2022 vs Q3'2021 and 9-month of 2022 vs 9-month of 2021

IPPs

- HPC - The share profit increased. The main reason was the higher availability than that the previous year since the thermal power plant unit 1 had planned maintenance during August 22 - October 13, 2021 and the thermal power plant unit 3 had planned maintenance during July 18 - August 9, 2021. In addition, HPC recorded gain on FX more than that of the previous year as USD appreciated.

SPPs

- NRES - The share profit increased as Nexif RATCH Energy Rayong combined cycle power plant, operated by NRER, has commenced COD on April 30, 2022.
- NNEG - The share profit decreased due to significant increase in fuel price, resulting in lower margin in selling electricity to industrial customers despite the Ft increase during the year.

Hydro Power Plants

- PNPC – The share profit increased. The main reason was PNPC recorded gain on FX from loans from financial institutions as USD appreciated. In contrast, the power plant generated less electricity due to the lower water level in the 3rd quarter of 2022. However, in the nine-month period of 2022, the power plant generated more electricity as the power plant had planned maintenance during January 31 – February 26, 2021.

Infrastructure and Others

- BAFS – The operating result 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.

2.2 Analysis of Cost and Expenses

Unit : Million THB

	Quarter 3		Increase (Decrease)	%	9-Month		Increase (Decrease)	%
	2022	2021			2022	2021		
Cost of sales and rendering of services	21,107.34	8,029.62	13,077.72	162.9	51,153.07	21,737.03	29,416.04	135.3
RG	17,766.76	6,778.18	10,988.58	162.1	42,573.83	18,618.03	23,955.80	128.7
RAC	621.14	613.38	7.76	1.3	1,807.03	1,552.40	254.63	16.4
RCO	977.94	626.39	351.55	56.1	2,470.54	1,531.79	938.75	61.3
SCG	1,717.72	-			4,252.35	-	4,252.35	-
RL	23.78	11.67	12.11	103.8	49.32	34.81	14.51	41.7
Administrative expenses	605.02	497.25	107.77	21.7	1,775.48	1,249.14	526.34	42.1
(Gain) Loss on fair value adjustment of derivatives	(153.30)	(78.72)	(74.58)	n.a.	(206.73)	(129.41)	(77.32)	n.a.
Finance costs	663.96	465.12	198.84	42.8	2,223.29	1,301.79	921.50	70.8
Tax expense	104.92	100.65	4.27	4.2	839.59	63.16	776.43	n.a.
Total Cost and expenses	22,327.94	9,013.92	13,314.02	147.7	55,784.70	24,221.71	31,562.99	130.3

2.2.1 Cost of Sales and Rendering of Services

Q3'2022 vs Q3'2021 and 9-month of 2022 vs 9-month of 2021

- **RG Power Plant** - Cost of sales increased as the power plants generated higher electricity using natural gas, oil, and diesel than that of the same period of the previous year, corresponding to higher dispatch instruction by EGAT and the fuel price significantly increased.
- **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 since the fuel price significantly increased.
- **RAC Power Plant** - Cost of sales increased since Collector Power Plant has commenced COD in June 2021.

2.2.2 Finance Costs

Q3'2022 vs Q3'2021 and 9-month of 2022 vs 9-month of 2021

- 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 period for the purpose of investment in projects such as Asahan-1 and Ecowin.

- 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 repayment 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.

2.2.3 Income Tax

Q3'2022 vs Q3'2021

- The income tax of FRD and SCG have been consolidated after the acquisition in the 4th quarter of 2021.
- RAC – The income tax increased in the amount of THB 61.94 million due to the increase in the tax profit.
- RG – The income tax decreased in the amount of THB 66.53 million due to the decrease in the tax profit.

9-month of 2022 vs 9-month of 2021

- The income tax of FRD and SCG have been consolidated after the acquisition in the 4th quarter of 2021.
- RG – The income tax increased in the amount of THB 210.73 million as, in 2021, RG received tax benefit from the sale of Tri Energy Power Plant.
- RAC – The income tax increased in the amount of THB 188.55 million due to the increase in the tax profit.
- FRD – The income tax increased as the deferred tax expense has been recorded due to tax rate change of its subsidiary in Indonesia in the amount 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.

2.3 The Effect of Exchange Rate of the Company and its Subsidiaries

Q3'2022 vs Q3'2021

The Company recorded loss on FX in the amount of THB 266.54 million. The main reason was loan to related parties in AUD. As AUD depreciated in relative to USD, the asset value in AUD decreased. This was the same reason of loss on FX in year 2021.

9-month of 2022 vs 9-month of 2021

The Company recorded gain on FX in the amount of THB 125.31 million. The main reason was from JPY Bond. As JPY depreciated in relative to USD, the liability value in JPY decreased. This was the same reason of gain on FX in year 2021.

3. Analysis of Statement of Financial Position

3.1 Analysis of Assets

As at September 30, 2022, the total assets were THB 203,248.64 million, increasing by THB 46,233.18 million or 29.4 percent from THB 157,015.46 million as at December 31, 2021. The details were as follows:

Unit : Million THB

	Sep 30, 2022	Dec 31, 2021	Increase (Decrease)	%
Current assets	58,878.69	25,315.77	33,562.92	132.6
Non-current assets	144,369.95	131,699.69	12,670.26	9.6
Total Assets	203,248.64	157,015.46	46,233.18	29.4

3.1.1 Cash and cash equivalents increased in the amount of THB 25,465.21 million. The main reason was the capital increase in the amount THB of 24,998.00 million.

3.1.2 Investments in joint ventures and associates increased in the amount of THB 10,784.22 million. The main reasons were from the share of profit contributed during the period in the total amount of THB 5,337.34 million, additional investments in joint ventures and associates in the total amount of THB 827.09 million, and exchange rate adjustment in the amount of THB 4,550.09 million.

3.1.3 Trade accounts receivable from related parties of RG increased in the amount of THB 7,158.05 million as the electricity sales in August and September 2022 were higher than those in November and December 2021, and the fuel price increased.

3.2 Analysis of Liabilities and Equity

As at September 30, 2022, the total liabilities and equity were THB 203,248.64 million, increasing by THB 46,233.18 million or 29.4 percent from THB 157,015.46 million as at December 31, 2021. The details were as follows:

Unit : Million THB

	Sep 30, 2022	Dec 31, 2021	Increase (Decrease)	%
Liabilities	87,490.67	77,737.52	9,753.15	12.5
Equity	115,757.97	79,277.94	36,480.03	46.0
Total Liabilities and Equity	203,248.64	157,015.46	46,233.18	29.4

3.2.1 Liabilities increased in the amount of THB 9,753.15 million, the main reasons were as follows:

(1) Trade accounts payable of RG increased in the amount of THB 6,653.24 million as the fuel consumption in August and September 2022 were higher than that in November and December 2021 due to the increase in electricity generation and the fuel price increased.

(2) Debenture increased in the amount of THB 3,566.10 million since SCG issued the debenture in the amount THB 2,650.00 million. In addition, the value of USD bond increased as USD appreciated during the period.

(3) Loan from financial institutions increased in the net amount of THB 1,592.60 million as RHIS, RAC, FRD, and SCG received loans from financial institutions during the period.

(4) RG repaid the debenture in March 2022 in the amount of THB 2,000 million.

3.2.2 Equity increased in the amount of THB 36,480.03 million. The main reasons were as follows:

(1) 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.

(2) Other components of equity increased in the amount of THB 9,251.26 million. The main reasons were due to translation reserve in the amount of THB 5,505.18 million, share of other comprehensive income (expense) of associates and joint ventures in the amount of THB 2,391.29 million, and hedging reserve in the amount of THB 1,228.21 million.

(3) The Company had the profit of the nine-month period of 2022 in the amount of THB 6,023.68 million.

4. Analysis of Cash Flows

Cash and cash equivalents of the Company and its subsidiaries as at September 30, 2022 were THB 32,426.70 million, increasing by THB 25,465.21 million from THB 6,961.49 million on December 31, 2021. The details were summarized below:

	Unit : Million THB
	9-Month
Net cash from operating activities	5,378.11
Net cash from investing activities	26.64
Net cash from financing activities	19,993.70
Effect of exchange rate changes on cash and cash equivalents	66.76
Net cash increase during the period	25,465.21

4.1 Net cash from operating activities increased cash flow in the amount of THB 5,378.11 million. The reason was the operating result of the nine-month period of 2022 improved cash position by THB 5,140.51 million, adjusted by the change in operating assets and liabilities in the amount of THB 237.60 million.

4.2 Net cash from investing activities increased cash flow in the amount of THB 26.64 million. The main reasons were as follows:

4.2.1 The Company received dividends in the total amount of THB 2,303.14 million.

4.2.2 The Company received interest in the total amount of THB 132.49 million.

4.2.3 The Company paid for plant and equipment in the amount of THB 1,478.25 million.

4.2.4 The Company paid for additional investment in joint ventures and associates in the amount of THB 827.09 million.

4.3 Net cash from financing activities increased cash flow in the amount of THB 19,993.70 million. The main reasons were as follows:

4.3.1 Cash received from the capital increase in the amount of THB 24,998.00 million.

4.3.2 SCG issued the debenture in the amount THB 2,650 million.

4.3.3 Net cash received from financial institutions in the amount of THB 698.55 million. The main reason was RHIS, RAC, SCG and FRD received loans from financial institutions during the period.

4.3.4 The Company paid dividend to owners in the amount of THB 3,693.65 million.

4.3.5 The Company paid for interest expenses during the period in the amount of THB 2,137.88 million.

4.3.6 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)

Ratios		Quarter 3		
		2022	2021	
Current Ratio	(Times)	2.59	1.61	
Profit to Total Revenue (excluded fuel costs)	(%)	32.34	34.47	
Return on Equity	(%)	8.98	11.88	
Return on Assets	(%)	6.84	7.04	
EBITDA *	(Million THB)	4,011	2,711	
Debt to Equity Ratio	(Times)	0.76	0.86	
Debt Service Coverage Ratio	(Times)	1.69	2.90	
Book Value per Share	(THB)	49.16	46.96	
* Not included the change in lease receivable		(Million THB)	829.63	634.95