

**RATCH Group Public Company Limited**

**Management Discussion and Analysis**

**For the Three-month and Six-month Periods Ended 30 June, 2022**



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

Projects/Companies	
<b>BAFS</b>	Bangkok Aviation Fuel Services Public Company Limited, a direct associate in proportion of 15.53 percent
<b>FRD</b>	Fareast Renewable Development Pte. Ltd., RHIS in proportion of 90 percent
<b>HKP</b>	Hin Kong Power Company Limited, a direct joint venture in proportion of 51 percent
<b>HPC</b>	Hongsa Power Company Limited, an indirect joint venture in proportion of 40 percent
<b>NNEG</b>	Nava Nakorn Electricity Generating Company Limited, an indirect joint venture in proportion of 40 percent
<b>NRER</b>	Nexif Ratch Energy Rayong Company Limited, an indirect joint venture wholly-owned by NRES
<b>NRES</b>	NEXIF RATCH ENERGY SINGAPORE PTE LTD, a direct joint venture in proportion of 49 percent
<b>PNPC</b>	Xe-Pian Xe-Namnoy Power Company Limited, a direct joint venture in proportion of 25 percent
<b>RAC</b>	RATCH-Australia Corporation Pty Ltd, a wholly-owned indirect subsidiary
<b>RCO</b>	RATCH Cogeneration Company Limited, a subsidiary in proportion of 99.97 percent
<b>RG</b>	Ratchaburi Electricity Generating Company Limited, a wholly-owned subsidiary
<b>RHIS</b>	RH International (Singapore) Corporation Pte Ltd, a wholly-owned indirect subsidiary
<b>RIAU</b>	PT Medco Ratch Power RIAU, an indirect joint venture in proportion of 49 percent
<b>RL</b>	RATCH-Lao Services Company Limited, a wholly-owned subsidiary
<b>SCG</b>	Sahacogen (Chonburi) Public Company Limited, a subsidiary in proportion of 51.67 percent
<b>Yandin</b>	Yandin WF Holding Pty Ltd., an associate in proportion of 70 percent by RAC

## Executive Summary

Unit : Million THB

	Quarter 2		Increase		6-Month		Increase	
	2022	2021	(Decrease)	%	2022	2021	(Decrease)	%
Total revenues	18,449.70	10,516.14	7,933.56	75.4	36,699.36	19,217.47	17,481.89	91.0
Cost of sales and rendering of services	14,551.32	7,604.23	6,947.09	91.4	30,045.74	13,707.41	16,338.33	119.2
EBITDA	3,979.98	3,031.36	948.62	31.3	6,974.62	5,681.40	1,293.22	22.8
Finance costs	751.00	425.63	325.37	76.4	1,559.32	836.67	722.65	86.4
Tax expense	266.12	(57.91)	324.03	559.5	734.69	(37.49)	772.18	n.a.
Profit to owner of the Company	2,196.10	2,122.84	73.26	3.5	3,775.45	4,210.70	(435.25)	(10.3)
Profit before FX	2,217.22	2,189.47	27.75	1.3	3,383.60	4,009.67	(626.07)	(15.6)

### Total Revenues

- In the 2<sup>nd</sup> quarter of 2022 and the six-month period of 2022, the total revenues increased since 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 4<sup>th</sup> quarter of 2021. In addition, revenue from sales of RAC increased as Collector Power Plant has commenced COD in June 2021. In addition, the electricity price increased due to the increase in demand.
- In the 2<sup>nd</sup> quarter of 2022 and the six-month period of 2022, the share of profit of HPC and PNPC increased since the revenue from sales increased. In addition, RIAU Combined-Cycle Power Plant and Nexif RATCH Energy Rayong Combined Cycle Power Plant (held by NRER) have commenced COD on February 10, 2022 and April 30, 2022, respectively.

### EBITDA

- In the 2<sup>nd</sup> quarter of 2022 and the six-month period of 2022, the EBITDA increased since the total revenue increased as mentioned above. Although, the cost of sales increased since the rising of fuel price in response to global energy markets. Also, the EBITDAs of SCG and FRD have been consolidated since the acquisition in the 4<sup>th</sup> quarter of 2021.

### Profit to Owner of the Company

- The operating result for the 2<sup>nd</sup> quarter of 2022 showed the profit (attributable to owners of the Company), increasing from the increase in the EBITDA as mentioned above. In contrast, the finance cost increased since the finance costs of FRD and SCG have been consolidated. Also, income tax increased due to the tax profit of RG and RAC increased.
- The operating result for the six-month period of 2022 showed the profit (attributable to owner of the Company), decreasing from the increase in the finance cost and income tax. The main reason was FRD recorded the one-time write-off deferred debt fees of its existing loans from debt refinancing in the amount of THB 225.73 million, which resulted in the interest saving and loan repayment extension in the 1<sup>st</sup> 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.

## 1. Significant Events of the 2<sup>nd</sup> Quarter of 2022

### 1.1 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 planned to begin construction in December 2022 and 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.

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

Nexif RATCH Energy Rayong Combined Cycle Power Plant project with a capacity of 92 megawatts and 25-year Power Purchase Agreement with EGAT, held by NRER through NRES, has officially started commercial operation since April 30, 2022.

### 1.3 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, exclude shareholders whose holding would subject the Company to obligations under the law of other jurisdictions. 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.

Progress of Projects under Construction (as of June 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 = 91.01 % Railway System = 87.90%



MRT Yellow Line Project	
Technology	Monorail
Route	Lad Prao–Sam Rong
Ownership	10%
Contract Term	30 Years
COD	Year 2023
Progress	Civil Works = 94.18 % Railway System = 93.23%



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	41.10%



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	84.37%



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 2022
Progress	87.96%



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	Under preparing for construction licenses

## 2. Operation Performance according to Consolidated Financial Statement

### 2.1 Analysis of Revenues

Unit : Million THB

	Quarter 2		Increase (Decrease)	%	6-Month		Increase (Decrease)	%
	2022	2021			2022	2021		
Revenue from sales and rendering of services	15,620.79	8,167.06	7,453.73	91.3	31,803.22	14,761.08	17,042.14	115.5
<i>RG</i>	12,068.03	6,745.52	5,322.51	78.9	25,113.63	12,161.90	12,951.73	106.5
<i>RAC</i>	1,421.87	870.75	551.12	63.3	2,422.02	1,573.17	848.85	54.0
<i>RCO</i>	810.54	533.85	276.69	51.8	1,588.59	992.23	596.36	60.1
<i>SCG</i>	1,282.33	-	1,282.33	-	2,586.40	-	2,586.40	-
<i>FRD</i>	19.87	-	19.87	-	54.50	-	54.50	-
<i>RL</i>	18.15	16.94	1.21	7.1	38.08	33.78	4.30	12.7
Revenue from leases contracts	718.52	499.95	218.57	43.7	1,451.29	1,027.52	423.77	41.2
Share of profit of associates and joint ventures	1,922.44	1,600.02	322.42	20.2	3,108.71	3,011.65	97.06	3.2
<i>IPPs</i>	1,395.01	1,218.37	176.64	14.5	2,187.17	2,165.25	21.92	1.0
<i>SPPs</i>	181.02	113.86	67.16	59.0	372.75	253.62	119.13	47.0
<i>Hydro Power Plants</i>	245.96	183.14	62.82	34.3	289.27	371.19	(81.92)	(22.1)
<i>Renewable Power Plants</i>	63.22	51.18	12.04	23.5	173.17	161.83	11.34	7.0
<i>Infrastructure and Others</i>	37.23	33.47	3.76	11.2	86.35	59.76	26.59	44.5
Other incomes	187.95	249.11	(61.16)	(24.6)	336.14	417.22	(81.08)	(19.4)
<i>Management service income</i>	63.14	53.54	9.60	17.9	131.03	107.04	23.99	22.4
<i>Interest income</i>	67.29	51.95	15.34	29.5	114.39	104.22	10.17	9.8
<i>Dividend income</i>	26.51	58.83	(32.32)	(54.9)	26.51	58.83	(32.32)	(54.9)
<i>Other income</i>	31.01	84.79	(53.78)	(63.4)	64.21	147.13	(82.92)	(56.4)
<b>Total revenues</b>	<b>18,449.70</b>	<b>10,516.14</b>	<b>7,933.56</b>	<b>75.4</b>	<b>36,699.36</b>	<b>19,217.47</b>	<b>17,481.89</b>	<b>91.0</b>

#### 2.1.1 Revenue from Sales and Rendering of Services

##### Q2'2022 vs Q2'2021 and 6-month of 2022 vs 6-month of 2021

- **RG Power Plant**

Revenue from sales increased. The main reason was the increase in Energy Payment due to higher electricity generated 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 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 4<sup>th</sup> quarter of 2021. Comparing to the same period of the previous year, revenue from SCG increased due to the 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.

- **RAC Power Plant**

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

- **RCO Power Plant**

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

### **2.1.2 Share of Profit of Associates and Joint Ventures**

#### Q2'2022 vs Q2'2021 and 6-month of 2022 vs 6-month of 2021

##### **IPPs**

- **HPC** - The share profit increased. The main reason was the higher availability and gain on FX than that of the same period of the previous year.

##### **SPPs**

- **NRES** - The share profit increased as Nexif RATCH Energy Rayong combined cycle power plant has commenced COD on April 30, 2022.

- **NNEG** - The share profit decreased due to increase in fuel price.

##### **Hydro Power Plants**

- **PNPC** - The share profit increased. The main reason was, in the 2<sup>nd</sup> quarter of 2022, PNPC recorded gain on FX from loans from financial institutions. In addition, the power plant had planned maintenance during January 31 – February 26, 2021.

##### **Renewable Power Plants**

- **Yandin** - The share profit increased as the power plant has commenced COD on March 19, 2021.

##### **Infrastructure and Others**

- **BAFS** - The share profit increased due to the acquisition in the 1<sup>st</sup> quarter of 2021 and the increase in flight volume and refueling volume.



## 2.2 Analysis of Cost and Expenses

Unit : Million THB

	Quarter 2		Increase (Decrease)	%	6-Month		Increase (Decrease)	%
	2022	2021			2022	2021		
Cost of sales and rendering of services	14,551.32	7,604.23	6,947.09	91.4	30,045.74	13,707.41	16,338.33	119.2
RG	11,928.82	6,616.60	5,312.22	80.3	24,807.07	11,839.85	12,967.22	109.5
RAC	601.34	490.73	110.61	22.5	1,185.89	939.01	246.88	26.3
RCO	762.13	485.57	276.56	57.0	1,492.60	905.40	587.20	64.9
SCG	1,245.55	-			2,534.64	-	2,534.64	-
RL	13.48	11.33	2.15	19.0	25.54	23.15	2.39	10.3
Administrative expenses	668.92	406.79	262.13	64.4	1,170.46	751.89	418.57	55.7
(Gain) Loss on fair value adjustment of derivatives	(78.92)	(52.08)	(26.84)	n.a.	(53.43)	(50.69)	(2.74)	n.a.
Finance costs	751.00	425.63	325.37	76.4	1,559.32	836.67	722.65	86.4
Tax expense	266.10	(57.91)	324.01	559.5	734.67	(37.49)	772.16	n.a.
<b>Total Cost and expenses</b>	<b>16,158.42</b>	<b>8,326.66</b>	<b>7,831.76</b>	<b>94.1</b>	<b>33,456.76</b>	<b>15,207.79</b>	<b>18,248.97</b>	<b>120.0</b>

### 2.2.1 Cost of Sales and Rendering of Services

#### Q2'2022 vs Q2'2021 and 6-month of 2022 vs 6-month of 2021

- **RG Power Plant** - Cost of sales increased since 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 increased more than 70% during the period.
- **SCG Power Plant** - Cost of sales has been consolidated after the acquisition in the 4<sup>th</sup> quarter of 2021.
- **RCO Power Plant** - Cost of sales increased since the fuel price increased.
- **RAC Power Plant** - Cost of sales increased since Collector Power Plant has commenced COD in June 2021.

### 2.2.2 Finance Costs

#### Q2'2022 vs Q2'2021

- The finance costs of FRD and SCG have been consolidated after the acquisition in the 4<sup>th</sup> quarter of 2021.
- **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.

#### 6-month of 2022 vs 6-month of 2021

- **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 1<sup>st</sup> 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**

##### Q2'2022 vs Q2'2021

- **RG** – The income tax increased in the amount of THB 177.48 million since, in 2021, RG received tax benefit from the sale of Tri Energy Power Plant.

- **RAC** – The income tax increased in the amount of THB 105.87 million due to the increase in the tax profit.

##### 6-month of 2022 vs 6-month of 2021

- **FRD** – The income tax increased since the deferred tax expense has been recorded due to tax rate change of its subsidiary in Indonesia at the amount THB 337.70 million in the 1<sup>st</sup> 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**

##### Q2'2022 vs Q2'2021

The Company recorded loss on FX in the amount of THB 21.12 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.

##### 6-month of 2022 vs 6-month of 2021

The Company recorded gain on FX in the amount of THB 391.85 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 June 30, 2022, the total assets were THB 188,519.68 million, increasing by THB 33,664.37 million or 21.7 percent from THB 154,855.31 million as at December 31, 2021. The details were as follows:

**Unit : Million THB**

	Jun 30, 2022	Dec 31, 2021	Increase (Decrease)	%
Current assets	52,397.37	25,315.77	27,081.60	107.0
Non-current assets	136,122.31	129,539.54	6,582.77	5.1
<b>Total Assets</b>	<b>188,519.68</b>	<b>154,855.31</b>	<b>33,664.37</b>	<b>21.7</b>

3.1.1 Cash and cash equivalents increased in the amount of THB 25,366.00 million. The main reason was the capital increase in the amount THB of 24,998 million, as described in no.1.3.

3.1.2 Investments in joint ventures and associates increased in the amount of THB 6,187.56 million. The main reasons were from the share of profit contributed during the period in the total amount of THB 3,108.71 million, additional investments in joint ventures and associates in the total amount of THB 703.15 million, and exchange rate adjustment in the amount of THB 1,837.49 million.

3.1.3 Trade accounts receivable from related parties of RG increased in the amount of THB 1,521.77 million as the electricity sales in May and June 2022 were higher than those in November and December 2021, and the fuel price increased.

### 3.2 Analysis of Liabilities and Equity

As at June 30, 2022, the total liabilities and equity were THB 188,519.68 million, increasing by THB 33,664.37 million or 21.7 percent from THB 154,855.31 million as at December 31, 2021. The details were as follows:

**Unit : Million THB**

	Jun 30, 2022	Dec 31, 2021	Increase (Decrease)	%
Liabilities	79,104.32	77,045.77	2,058.55	2.7
Equity	109,415.36	77,809.54	31,605.82	40.6
<b>Total Liabilities and Equity</b>	<b>188,519.68</b>	<b>154,855.31</b>	<b>33,664.37</b>	<b>21.7</b>

3.2.1 Liabilities increased in the amount of THB 2,058.55 million, the main reasons were as follows:

(1) Loan from financial institutions increased in the net amount of THB 2,876.02 million since RHIS, FRD, and SCG received loans from financial institutions during the period.

(2) Trade accounts payable of RG increased in the amount of THB 1,729.17 million as the fuel consumption in May and June 2022 were higher than that in November and December 2021 due to the increase in electricity generation and the fuel price increased.

(3) RG repaid the debenture in March 2022 in the amount of THB 2,000.00 million.

3.2.2 Equity increased in the amount of THB 31,605.82 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. The main reason was the capital increase, as described in no.1.3.

(2) Other components of equity increased in the amount of THB 5,027.14 million. The main reasons were due to translation reserve in the amount of THB 2,165.43 million, share of other comprehensive income (expense) of associates and joint ventures in the amount of THB 1,778.99 million, and hedging reserve in the amount of THB 970.57 million.

(3) The Company had the profit of the six-month period of 2022 in the amount of THB 3,775.45 million.

(4) The dividend payment in accordance with shareholders' resolution in the Annual General Meeting of Shareholders in April 2022 decreased retained earnings in the amount of THB 1,957.50 million.

#### 4. Analysis of Cash Flows

Cash and cash equivalents of the Company and its subsidiaries as at June 30, 2022 were THB 32,327.49 million, increasing by THB 25,366.00 million from THB 6,961.49 million on December 31, 2021. The details were summarized below:

	<b>Unit : Million THB</b>
	<b>6-Month</b>
Net cash from operating activities	3,496.73
Net cash from investing activities	453.53
Net cash from financing activities	21,668.34
Effect of exchange rate changes on cash and cash equivalents	(252.60)
<b>Net cash increase during the period</b>	<b>25,366.00</b>

4.1 Net cash from operating activities increased cash flow in the amount of THB 3,496.73 million. The reason was the operating result of the six-month period of 2022 improved cash position by THB 3,699.53 million, adjusted by the change in operating assets and liabilities in the amount of THB -202.80 million.

4.2 Net cash from investing activities increased cash flow in the amount of THB 453.53 million. The main reasons were as follows:

4.2.1 The Company received dividends in the total amount of THB 1,263.33 million.

4.2.2 The Company received net cash from financial assets in the amount of THB 892.13 million.

4.2.3 The Company paid for plant and equipment in the amount of THB 1,004.24 million.

4.2.4 The Company paid for additional investment in joint ventures and associates in the amount of THB 703.15 million.

4.3 Net cash from financing activities increased cash flow in the amount of THB 21,668.34 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, as described in no.1.3.

4.3.2 Net cash received from financial institutions in the amount of THB 2,367.58 million. The main reason was FRD, RHIS and SCG received loans from financial institutions during the period.

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

4.3.4 The Company paid dividend to owners in the amount of THB 1,956.26 million.

4.3.5 The Company paid for interest expenses during the period in the amount of THB 1,276.38 million.

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

Ratios		Quarter 2	
		2022	2021
Current Ratio	(Times)	3.05	1.47
Profit to Total Revenue (excluded fuel costs)	(%)	31.28	47.23
Return on Equity **	(%)	8.25	11.88
Return on Assets **	(%)	6.54	7.10
EBITDA *	(Million THB)	3,980	3,031
Debt to Equity Ratio	(Times)	0.72	0.86
Debt Service Coverage Ratio	(Times)	1.53	6.39
Book Value per Share	(THB)	46.95	45.60

\* Not included the change in lease receivable (Million THB) 743.82 634.98

\*\* Data for 12-month period