

RATCH



RATCHABURI
ELECTRICITY GENERATING
HOLDING PCL.

Ratchaburi Electricity Generating Holding PCL

Management Discussion and Analysis

For the Year Ended 31 December, 2017



(Translation)

1. Significant events of the year 2017

1.1 The Progress of Projects

1.1.1 Collinsville Solar Power Project in Australia ("The Project")

On May 5, 2017, RATCH-Australia Corporation Limited ("RAC") (an indirect subsidiary in which the Company holds 80 percent stake) has achieved its financial close and started the construction of Collinsville Solar Power Project (100 percent owned by RAC) with the installed capacity of 42.50 megawatts in Australia. The Project has contracted 70 percent of its generated electricity under the Power Purchase Agreement with Braemar Power Projects Company, a subsidiary of Alinta Energy Company. Such Power Purchase Agreement will be expired on December 31, 2030. The other 30 percent of the generated electricity will be sold in Australia's National Electricity Market (NEM). The Project has also entered into EPC Contract, Electrical Connection Agreement, Operation and Maintenance Agreement and other related agreements. RATCH-Australia Collinsville Solar PV Pty Limited, a subsidiary of RAC, signed Financial Agreement with Clean Energy Finance Corporation (CEFC), with the total loan amount of AUD 57 million.

Collinsville Solar Power Project is supported by the grant fund for solar power project development from Australian Renewable Energy Agency (ARENA) in an amount of AUD 9.50 million. The Project is located in a closed coal mine area in the north of Queensland, Australia. Its commercial operation is expected to be in July 2018.

1.1.2 Ancillary Service Deed System Restart Service of Kemerton Power Plant in Australia

On October 31, 2017, RATCH-Australia Corporation Limited (“RAC”) (an indirect subsidiary in which the Company held 80 percent stake) has reached and entered into an agreement for Ancillary Service Deed System Restart Service in order to install diesel generators used for Black Start at Kemerton Power Plant (which was operated by RATCH-Australia Kemerton Pty Limited, an indirect subsidiary of the Company which RAC held 100 percent stake).

The installation, which accounted for the total of 7 megawatts installed capacity, will be done with the budget of approximately AUD 10 million. It is expected to commence commercial operation within December 2018.

1.1.3 Riau Combined-Cycle Power Plant Project in the Republic of Indonesia

On April 7, 2017, RH International (Singapore) Corporation Pte. Limited. (“RHIS”), an indirect subsidiary, entered into a Joint Venture Agreement to establish PT Medco Ratch Power Riau, an indirect joint venture, in order to invest in Riau Combined-Cycle Power Plant Project in the Republic of Indonesia. The registered capital of such indirect joint venture was Indonesian Rupiah 12,000 million. Subsequently in April 2017, RHIS paid 25 percent initial paid-up capital in the proportion of investment of 49 percent amounting to Indonesian Rupiah 1,470 million or equivalent to Baht 3.80 million.

Riau Combined-Cycle Power Plant Project is located in the Republic of Indonesia, with the production capacity of 275 megawatts and 20-year Power Purchase Agreement. The Commercial Operation Date is expected to be within the year 2021.

1.1.4 MRT Pink Line (Khae Rai – Min Buri) and the MRT Yellow Line (Lat Phrao – Samrong)

As the Company together with BTS Group Holding Public Company Limited (“BTS”) and Sino-Thai Engineering & Construction Public Company Limited (“STEC”) have jointly invested in the MRT Pink Line Project (Khae Rai - Min Buri) and the MRT Yellow Line Project (Lat Phrao - Samrong);

On June 12, 2017, the Company, BTS, and STEC jointly established companies namely Northern Bangkok Monorail Company Limited (“NBM”) and Eastern Bangkok Monorail Company Limited (“EBM”), in which the Company, BTS and STEC held 10 percent stake, 75 percent stake and 15 percent stake of shares in each company, respectively. The registered capitals of NBM and EBM were Baht 3,500 million each. The Company paid for paid-up share capital, in a portion of 10 percent, in the total amount of Baht 700 million (Baht 350 million each).

On June 16, 2017, NBM and EBM have entered into the Concession Contracts including of the obligation for extensions of the MRT Pink Line Project and the MRT Yellow Line Project with Mass Rapid Transit Authority of Thailand (“MRTA”). On October 9, 2017, the Company entered into a Sponsor Support Agreement with NBM and EBM to provide financial support in the form of shareholders’ loans or the provision of shareholders guarantee in proportion of investment 10 percent.

The MRT Pink Line Project (Khae Rai - Min Buri), having a total track length of 34.5 kilometers, and the MRT Yellow Line Project (Lat Phrao - Samrong), having a total track length of 30.4 kilometers. Both projects are under the Public-Private Partnership (PPP) framework.

1.1.5 Berkprai Cogeneration SPP Project

On March 7, 2017, Berkprai Cogeneration Company Limited (an indirect joint venture in which Ratchaburi Electricity Generating Company Limited, the Company’s direct subsidiary, holds 35 percent stake), the operator of Berkprai Cogeneration SPP Project, has entered into the Engineering, Procurement, and Construction Contract (EPC Contract) with the Consortium of Thai Jurong Engineering Limited and Jurong Engineering Limited.

On June 6, 2017, Berkprai Cogeneration Company Limited has signed Facilities Agreement with Bangkok Bank Public Company Limited. The loan amount is Baht 4,000 million for the period of 20 years from the agreement signing date.

During the year 2017, Ratchaburi Electricity Generating Company Limited has paid for additional share capital, by its proportion, in the total amount of Baht 349.39 million. As a result, the total paid up capital is Baht 465.85 million, in a portion of 35 percent.

Berkprai Cogeneration SPP Project has approximately 100 megawatts electricity generating capacity and steam generating capacity of 15 tons per hour. It is located in Berkprai Sub-district, Ban Pong District, Ratchaburi Province. The Project has 25-year Firm Cogeneration PPA with Electricity Generating Authority of Thailand. It is expected to commence commercial operation in 2019.

1.1.6 The Entering into the Agreement for Operation and Maintenance Services for Hongsa Mine Mouth Power Project

On November 22, 2017, RATCH-Lao Services Company Limited, a direct subsidiary, has entered into an Agreement for Operation and Maintenance Services for Hongsa Mine Mouth Power Project with the Electricity Generating Authority of Thailand to support human resources for the operation and maintenance services of Hongsa Mine Mouth Project in Lao PDR. The agreement is effective from December 1, 2017 to October 31, 2020, with the total value of Baht 135 million.

1.2 Disposal of investments in joint ventures

1.2.1 The Sale of Ordinary Shares of Oversea Green Energy Company Limited

On August 25, 2017, Ratchaburi Energy Company Limited, a direct subsidiary, sold its entire ordinary shares totaling 1,260,000 shares or equivalent to 60 percent of the total shares in Oversea Green Energy Company Limited which invests in the project management service of Iwaki-Fukushima and Ueda Solar Power Projects in Japan to the existing shareholder in the amount of Baht 9.6 million.

1.2.2 The Sale of Ordinary Shares of RIC International Investment Pte. Limited

On August 16, 2017, RH International (Singapore) Corporation Pte. Limited, an indirect subsidiary, sold its entire ordinary shares totaling 9,510,060 shares or equivalent to 60 percent of the total shares in RIC International Investment Pte. Limited, which is the developer of Iwaki-Fukushima and Ueda Solar Power Projects in Japan to the existing shareholder in the amount of USD 9.81 million.

2. Operation performance according to consolidated financial statement

Unit : Million Baht

| | 2017 | 2016 | Increase (Decrease) | % |
|--|------------------|------------------|------------------------|--------------|
| Revenue from sale and rendering of services (excluded Fuel Cost) | 6,656.26 | 6,287.22 | 369.04 | 5.9 |
| Revenue from financial leases | 3,995.45 | 4,491.34 | (495.89) | (11.0) |
| Share of profit of associate entities and joint ventures | 3,577.16 | 2,907.20 | 669.96 | 23.0 |
| Other incomes | 865.20 | 794.30 | 70.90 | 8.9 |
| Total revenues | 15,094.07 | 14,480.06 | 614.01 | 4.2 |
| Cost of sale and rendering of services (excluded Fuel Cost) | 5,503.11 | 4,823.45 | 679.66 | 14.1 |
| Administrative expenses | 1,686.26 | 1,476.04 | 210.22 | 14.2 |
| Finance costs | 1,502.50 | 1,402.44 | 100.06 | 7.1 |
| Income tax expense | 870.89 | 863.24 | 7.65 | 0.9 |
| Total expenses | 9,562.76 | 8,565.17 | 997.59 | 11.6 |
| | 5,531.31 | 5,914.89 | (383.58) | (6.5) |
| Non-controlling Interests | 122.92 | 93.17 | 29.75 | 31.9 |
| Profit Attributable to Owner of the Company before exchange rate | 5,654.23 | 6,008.06 | (353.83) | (5.9) |
| Gain (loss) on exchange rate | 452.47 | 157.66 | 294.81 | 187.0 |
| Profit Attributable to Owner of the Company | 6,106.70 | 6,165.72 | (59.02) | (1.0) |
| Earnings per share (Baht) | 4.21 | 4.25 | | |
| Fuel Cost | 31,344.26 | 36,799.82 | | |

The operating result according to the consolidated financial statements of the Company and its subsidiaries for the year 2017 showed the profit of Baht 6,106.70 million or Baht 4.21 per share, decreasing by Baht 59.02 million or 1.0 percent, compared to the profit of Baht 6,165.72 million or Baht 4.25 per share of the year 2016. The significant transactions were as follows:-

2.1 Share of profits of associated entities and joint ventures

Share of profits in associate entities and joint ventures for the year 2017 was Baht 3,577.16 million, increasing by Baht 669.96 million or 23.0 percent from Baht 2,907.20 million in the year 2016. The main reasons were as follows:-

2.1.1 The profit of Hongsa Power Company Limited ("HPC"), a joint venture, in a portion of 40 percent increased in the amount of Baht 821.62 million; as well as, the profit of Phu Fai Mining Company Limited, a joint venture for coal mining and trading to HPC, in a portion of 37.5 percent increased in the amount of Baht 47.60 million, as Hongsa Power Plants generated electricity more than the previous year. In addition, Hongsa Power Plants have commenced commercial operation for 3 units on September 2, 2015, November 2, 2015, and March 2, 2016, respectively.

2.1.2 The profit of Navanakorn Electricity Generating Company Limited, a joint venture, in a portion of 40 percent, increased in the amount of Baht 103.26 million as the power plant has commenced commercial operation on June 3, 2016.

2.1.3 The loss of Xe-Pian Xe-Namnoy Power Company Limited, an under construction joint venture, in a portion of 25 percent, was Baht 152.75 million in the year 2017 due to loss on exchange rate in the amount of Baht 136.75 million. In the year 2016, the figures showed the profit in the amount of Baht 60.16 million due to the gain on exchange rate in the amount of Baht 75.51 million.

2.1.4 The profit of Ratchaburi Power Company Limited, a joint venture, in a portion of 25 percent, decreased in the amount of Baht 126.49 million. The main reason was the decrease in revenue from finance lease contracts in the amount of Baht 99.84 million. Additionally, the power plant generated electricity less than the previous year.

2.2 Revenue from Sales and Rendering of Services (excluding fuel costs)

Revenue from sale and rendering of services for the year 2017 was Baht 6,656.26 million (excluding fuel costs of Baht 31,344.26 million), increasing by Baht 369.04 million or 5.9 percent from revenue from sale and rendering of services in the year 2016 of Baht 6,287.22 million (excluding fuel costs of Baht 36,799.82 million). The main reason was the increase in revenue from sale of Ratchaburi Electricity Generating Company Limited, a subsidiary, in the amount of Baht 556.72 million due to the increase in Base Availability Credit in 2017 compared to that of 2016, as specified in the Power Purchase Agreement. Meanwhile, revenue from operation and maintenance services of RATCH-Lao Services Company Limited, a subsidiary, decreased

by Baht 188.38 million as it has transferred its rights of such service agreement to Nam Ngum 2 Power Company Limited in April 2016, in exchange for the Baht 134.71 million remedy.

2.3 Cost of sale and rendering of services (excluding fuel costs)

Cost of sale and rendering of services for the year 2017 was Baht 5,503.11 million (excluding fuel costs of Baht 31,344.26 million), increasing by Baht 679.66 million, or 14.1 percent from the cost of sale and rendering of services in the year 2016 in the amount of Baht 4,823.45 million (excluding fuel costs of Baht 36,799.82 million). The main reason was from the increase in cost of sale of Ratchaburi Electricity Generating Company Limited by Baht 705.86 million, as the shutdowns for planned maintenance during the year 2017 were more than those of the previous year.

2.4 Revenue from Finance Leases Contracts

Revenue from finance leases contracts for the year 2017 was Baht 3,995.45 million, decreasing by Baht 495.89 million or 11.0 percent from Baht 4,491.34 million in the year 2016. The change was due to the decreased lease receivable, calculated according to the Effective Interest Method.

2.5 The effect of exchange rate of the Company and its subsidiaries

In the year 2017, the Company recorded gain on exchange rate of Baht 452.47 million, increasing by Baht 294.81 million or 187.0 percent from Baht 157.66 million in the previous year. The main reason was the appreciation of AUD currency in relative to USD currency, resulting in the increase of net asset value in AUD currency.

3. Analysis of Statements of Financial Position

3.1 Analysis of Assets

As at December 31, 2017, the total assets were Baht 94,224.83 million, decreasing by Baht 2,166.26 million or 2.2 percent from Baht 96,391.09 million as at December 31, 2016. The details were as follows:

(Million Baht)

| | Dec 31, 2017 | Dec 31, 2016 | Increase (Decrease) | % |
|---------------------|------------------|------------------|------------------------|--------------|
| Current assets | 23,525.93 | 26,303.02 | (2,777.09) | (10.6) |
| Non-current assets | 70,698.90 | 70,088.07 | 610.83 | 0.9 |
| Total Assets | 94,224.83 | 96,391.09 | (2,166.26) | (2.2) |

3.1.1 Financial lease receivables from related party decreased in the amount of Baht 3,770.05 million.

3.1.2 Cash and cash equivalents decreased in the amount of Baht 131.75 million. The details are described in no.4. Additionally, current investments decreased in the amount of Baht 2,452.40 million.

3.1.3 Trade accounts receivable from related parties of Ratchaburi Electricity Generating Company, Limited, a subsidiary, decreased in the amount of Baht 699.41 million as the electricity sales in November and December of 2017 were less than the electricity sales in November and December of 2016.

3.1.4 The Company invested in the MRT Pink Line Project and the MRT Yellow Line Project in the total amount of Baht 700 Million.

3.1.5 Assets of Mount Emerald Wind Farm Project and Collinsville Solar Power Project; projects under RATCH-Australia Corporation Limited, a subsidiary located in Australia, increased in the total amount of AUD 160.04 million.

3.1.6 RH International (Singapore) Corporation Pte. Limited, an indirect subsidiary, made an advance payment for share subscription in the amount of USD 20.83 million to PT Medco Ratch Power Riau, an indirect joint venture, as to develop the Riau Combined-Cycle Power Plant Project in the Republic of Indonesia. The payment was to fund the Project Development Cost Account as stipulated in the Power Purchase Agreement.

3.2 Analysis of Liabilities

As at December 31, 2017, total liabilities were Baht 30,943.65 million, decreasing by Baht 2,994.67 million or 8.8 percent from Baht 33,938.32 million as at December 31, 2016. The details were as follows:

(Million Baht)

| | Dec 31, 2017 | Dec 31, 2016 | Increase (Decrease) | % |
|-------------------------|------------------|------------------|------------------------|--------------|
| Current Liabilities | 9,541.63 | 10,867.76 | (1,326.13) | (12.2) |
| Non-Current Liabilities | 21,402.02 | 23,070.56 | (1,668.54) | (7.2) |
| Liabilities | 30,943.65 | 33,938.32 | (2,994.67) | (8.8) |

3.2.1 The Company made a repayment for its short-term loans from financial institutions during the year, in the amount of Baht 3,800 million.

3.2.2 USD 300 million and JPY 15,000 million debentures decreased in the total amount of Baht 1,187.62 million due to the depreciation of USD currency in relative to THB currency.

3.2.3 Trade accounts payable of Ratchaburi Electricity Generating Company Limited, a subsidiary decreased in the amount of Baht 306.22 million as Ratchaburi Power Plants generated less electricity in November and December 2017 than that of in November and December 2016, resulting in the decrease in fuel consumption.

3.2.4 RATCH-Australia Corporation Limited, a subsidiary, received long-terms loan from financial institutions during the year in the amount of AUD 88.12 million.

3.3 Analysis of Equity

As at December 31, 2017, equity was Baht 63,281.18 million, increasing by Baht 828.41 million or 1.3 percent from Baht 62,452.77 million as at December 31, 2016. The main reasons were as follows:

3.3.1 The profit of the year 2017 in the amount of Baht 6,106.70 million

3.3.2 The dividend payment during the year 2017 decreased retained earnings in the amount of Baht 3,480.00 million.

3.3.3 Other components of equity decreased in the amount of Baht 1,682.88 million. The main reason was currency translation differences, decreasing the equity in the amount of Baht 1,295.02 million. Additionally, change in fair value of the investment in EDL-Generation Public Company decreased the equity in the amount of Baht 387.61 million.

3.3.4 Non-controlling interests decreased by Baht 115.41 million.

4. Analysis of Cash Flows

Cash and cash equivalents of the Company and its subsidiaries as at December 31, 2017 were Baht 9,287.46 million, decreasing by Baht 131.75 million from Baht 9,419.21 million on December 31, 2016. The details were summarized below:

| | (Million Baht) |
|--|------------------------|
| Net cash from operating activities | 8,207.42 |
| Net cash used in investing activities | (1,605.87) |
| Net cash used in financing activities | (6,430.40) |
| Effect of exchange rate changes on balances held in foreign currencies | (302.90) |
| Net cash decrease during the year | <u><u>(131.75)</u></u> |

4.1 Net cash from operating activities increased cash flow in the amount of Baht 8,207.42 million. The reason was the operating result of the year 2017 improved cash position by Baht 5,340.50 million, together with the change in operating assets and liabilities in the amount of Baht 2,866.92 million.

4.2 Net cash used in investing activities decreased cash flow in the amount of Baht 1,605.87 million. The main reasons were as follow:-

4.2.1 RATCH-Australia Corporation Limited, a subsidiary, invested in Mount Emerald Wind Farm Project and Collinsville Solar Power Project in Australia in the total amount of AUD 160.04 million.

4.2.2 The Company additionally invested in Xe-Pian Xe-Namnoy Power Company Limited and Berkprai Cogeneration Company Limited in the total amount of Baht 1,001.03 million. In addition, the Company invested in the MRT Pink Line Project and the MRT Yellow Line Project in the total amount of Baht 700 million.

4.2.3 RH International (Singapore) Corporation Pte. Limited, an indirect subsidiary, made an advance payment for shares subscription in the amount of USD 20.83 million (equivalent to Baht 708.03 million) to PT Medco Ratch Power Riau, an indirect joint venture, to develop the Riau Combined-Cycle Power Plant Project in the Republic of Indonesia.

4.2.4 The Company received dividends from associates and joint ventures in the total amount of Baht 2,532.10 million.

4.2.5 The Company received cash from current investments in the amount of Baht 2,462.25 million.

4.3 Net cash used in financing activities decreased cash flow in the amount of Baht 6,430.40 million. The main reasons were as follows:-

4.3.1 The Company made a short-term loan repayment during the year in the amount of Baht 3,800 million.

4.3.2 The dividend payment to shareholders during the year in the amount of Baht 3,478.90 million.

4.3.3 The Company paid for interest expenses in the amount of Baht 1,397.89 million.

4.3.4 RATCH-Australia Corporation Limited, a subsidiary, received long-term loan from financial institution in the amount of AUD 88.12 million (equivalent to baht 2,247.61 million).

5. Significant Financial Ratios (Excluded the effect of foreign exchange rate)

| Ratios | | 2017 | 2016 | |
|--|----------------|----------------|----------|----------|
| 1) Current Ratio | (Times) | 2.47 | 2.42 | |
| 2) Profit to Total Revenue (excluded fuel costs) | (%) | 36.65 | 40.85 | |
| 3) Return on Equity | (%) | 9.00 | 9.81 | |
| 4) Return on Assets | (%) | 5.80 | 6.26 | |
| 5) EBITDA * | (Million Baht) | 9,218 | 9,324 | |
| 6) EBITDA to Total Assets | (%) | 9.67 | 9.87 | |
| 7) Debt to Equity Ratio | (Times) | 0.49 | 0.54 | |
| 8) Debt Service Coverage Ratio | (Times) | 1.58 | 3.27 | |
| 9) Book Value per Share | (Baht) | 43.63 | 42.98 | |
| * Not included the change in lease receivable | | (Million Baht) | 3,920.38 | 3,195.55 |