



Management's Discussion and Analysis

For the year ended
31 December 2017

Banpu Power Public Company Limited



No. BPP 2018/004

Bangkok Office

21 February 2018

Re: Management's Discussion and Analysis of the consolidated financial statements for the year ended 31 December 2017

Attention: President
The Stock Exchange of Thailand

Banpu Power Public Company Limited ("the company") hereby submits a consolidated financial statements for the year ended 31 December 2017 which were audited by auditors to the Stock Exchange of Thailand via electronic channel and accordingly to the general public.

The company's management would like to explain its performance for the year ended 31 December 2017 in comparison with the year ended 31 December 2016 and its statement of financial position as of 31 December 2017 compared with the statement of financial position as of 31 December 2016. The analysis topics are as follows;

1. Company performance analysis
2. Consolidated statement of financial position
3. Consolidated statement of cash flows
4. Management Discussion & Analysis

1. Company Performance Analysis

The analysis and explanation of company performance for the year ended 31 December 2017 and 2016 is as follows:

Consolidated statements of income for the year ended 31 December 2017 and 2016

Consolidated financial performance (Unit: Million Baht)	2017	2016
Sales	6,419	5,542
Cost of sales	(4,879)	(3,605)
Gross margin	1,540	1,937
Administrative expenses	(1,169)	(1,101)
Share of profit from joint ventures	3,682	3,513
Other income	657	739
Financial costs	(106)	(420)
Profit before tax	4,604	4,667
Income taxes	(362)	(395)
Net profit for the year	4,242	4,273
Owners of the parent	4,155	4,138
Non-controlling interest	87	135
Basic Earnings per share (Unit: Baht)	1.364	1.743

1.1 Sales, Costs and Gross Margin

Sales represented electricity, steam and others sales of 3 CHP (Combined Heat and Power) plants and solar power plants in China. Detail is per below table;

100% Basis	Power Sold (GWh)		Steam & Others Sold (Million Tons)		Average Coal cost (RMB/Ton)	
	2017	2016	2017	2016	2017	2016
Zhending CHP	419.74	424.12	0.88	0.89	490.95	341.45
Luannan CHP	509.60	503.55	1.22	1.21	595.61	375.93
Zouping CHP	566.99	550.17	3.25	2.93	712.69	486.88
Solar Power Plants	173.73	27.58	n/a	n/a	n/a	n/a

Sales reported at THB 6,419 million, an increase of THB 878 million or 16% compared to last year, was addition sales from CHP plants of THB 5,760 million and from Solar power plant in China of THB 659 million, offset with an impact of foreign exchange from a depreciation of RMB currency against THB currency.

Power and Steam sale volumes increased by 18.49 GWh and 0.32 million tons, respectively together with an increase of average power tariff and steam price. Average power tariff was RMB 0.38 per kWh (2016: RMB 0.36), increased by RMB 0.02 per kWh or 6% and steam price was RMB 93.77 per ton (2016: RMB 83.69), increased by RMB 10.08 per ton or 12%. The higher price is the effects from the higher of coal price which is the main fuel source of power plants.

Power sales volume from solar power plant increased by 146.15 GWh, due to an increase of number of commercial operation solar power plants which there were 5 plants in 2017 (2016: 3 solar power plants).

However, there was an impact from a depreciation of RMB currency against THB currency, average RMB: THB of 2017 was at THB 5.03 (2016: THB 5.31). This affects to less revenue amount when convert from RMB currency to THB currency.

Average coal cost was RMB 619 per ton (2016: RMB 401 per ton), or 54% increase compared to last year. Coal cost has been continuously increased since 4Q16.

Gross margin was 24% (2016: 35%), 11% decreased from last year was mainly due to the higher coal cost which was a main fuel of our CHP plants as above mentioned.

1.2 Administrative expenses reported at THB 1,169 million, an increase of THB 68 million or 6% compared to last year was mainly from bellows list:

- 1.2.1 A provision for doubtful account totaling THB 80 million. The provision was measured based on ability of repayment from the receivable, both loan principle and interest within timeframe.
- 1.2.2 An increase of amortization on right to operate the power plant totaling THB 7 million from 5 solar power plants that started their commercial operation during the year.
- 1.2.3 An increase of cost of management and service fee charged from the parent company THB 9 million started in October 2017 under service agreement.

1.2.4 Staff related costs increased by THB 90 million relating to 3 CHP plants in China and Bangkok office increased by THB 30 million and THB 26 million, respectively compared to last year according to the company's expansion. Also an increase of staff related costs of solar power plants in China and Japan by THB 34 million due to solar business expansion of the Group

1.2.5 A decrease of THB 145 million was mainly from decrease of professional fee, consulting fee and other related fees.

1.2.6 Others of THB 26 million.

1.3 Share of profit from joint ventures and associate reported at THB 3,682 million consisted of profit sharing from BLCP of THB 1,487 million, Hongsa power plant & PhuFai mining of THB 2,234 million, whereas loss sharing from a power plant in China which was under construction of THB 36 million and solar business in Japan at holding company level of THB 3 million,

An increase of share of profit from joint ventures THB 169 million or 5% compared to last year was mainly from an increase from Hongsa power plant & PhuFai mining totaling of THB 761 million according to better performance and higher generation compare to prior year, including an increase from solar business in Japan totaling of THB 3 million, while a decrease of profit sharing from BLCP of THB 577 million that caused from a planned outage for major overhaul of Unit 1 during 4Q17 and power plant in China that is under construction THB 18 million.

1.4 Other income of THB 654 million was comprised of

1.4.1 Interest income of THB 49 million.

1.4.2 Management fee income of THB 184 million, mainly was fee charged to related companies and joint ventures.

1.4.3 Pipeline connecting fee of THB 359 million from CHP power plant in China that charged to new steam customers.

1.4.4 Other income of THB 150 million, mainly was government subsidy, ash & slag sales from CHP plants in China of THB 79 million and THB 23 million, respectively and dividend income from investment in Solar Japan under form TK (TOKUMEI KUMIAI) agreements of THB 21 Million and other income of THB 27 million.

1.4.5 Net loss on foreign exchange of THB 85 million, was mainly unrealized loss from foreign exchange translation on RMB loan to subsidiaries in China, resulting from a depreciation of RMB currency against THB currency during the year.

1.5 Interest expenses of THB 106 million, a decrease of THB 314 million was mainly from fully repayment of loan from the parent company during 4Q16.

1.6 Corporate income tax of THB 362 million, decreased by THB 33 million compared to last year which consists of;

1.6.1 A decrease of THB 170 million from lower operating profit of CHP plants in China.

1.6.2 An increase of THB 130 million from a decrease of deferred income tax assets recognition from tax loss carry forward, which was nil in this year.

1.6.3 An increase of THB 7 million was from group restructuring in China that affects to have income tax expense and from distributed profit from Solar power business in Japan.

1.7 Net profit for the year ended 31 December 2017 reported at THB 4,155 million, increased from the last year by THB 16 million.

Basic earnings per share reported at THB 1.364 per share (2016: THB 1.743 per share)

2 Statements of Consolidated Financial Position as of 31 December 2017 in comparison with Statements of Consolidated Financial Position as of 31 December 2016

2.1 Total assets of THB 47,698 million, an increase of THB 4,735 million compared to total assets as of 31 December 2016 with details were mainly described as follows:

- Cash and cash equivalents of THB 1,129 million, a decrease by THB 24 million or 2% (See explanation in # 4 Consolidated Statement of Cash Flow)
- Short-term investments represent deposits at financial institutions of subsidiaries in China decreased by THB 149 million.
- Current and non-current portions of dividend receivables from related parties of THB 714 million and THB 7,133 million, respectively totaling of THB 7,847 million were dividend receivables from power business joint ventures, decreased by THB 200 million which was net result of received dividend and additional declared dividend during the year by THB 1,700 million and THB 1,500 million, respectively.
- Short-term loans to related party were loans to a joint venture that invested in solar development projects in Japan. A decrease of THB 238 million was net result of additional loan during the period by THB 169 million, repayment of loan by THB 28 million, a

reclassification of loan to related party and advance to related party to be investment in joint venture of THB 289 million and THB 94 million, respectively, including realized gain on foreign exchange translation of THB 4 million.

- Short-term and long-term loans to other companies totaling of THB 258 million was RMB loans to solar power projects in China which is in process of ownership transfer. A decrease of THB 1,236 million was net impact from an increase of THB 258 million was additional loan during the year and a decrease by THB 1,495 from reclassification to be loans to subsidiary according to the completion of ownership transfer to the group.
- Investment in an associates and joint ventures of THB 18,400 million, increased by THB 1,132 million or 7% from additional investment in solar project in Japan of THB 290 million and profit sharing from joint venture net of on dividend income by THB 1,223 million, share of other comprehensive income of cash flow hedge THB 187 million, while there was unrealized loss from foreign exchange translation at the year-end of THB 568 million.
- Other investments of THB 2,765 million, increased by THB 1,687 million or 157% represent investments in solar power plants in Japan in form of TK (TOKUMEI KUMIAI) agreements that increase of THB 1,829 million netting with unrealized loss from foreign exchange translation at the year-end of THB 142 million.
- Net property plant and equipment of THB 11,993 million, an increase of THB 3,550 million or 42% was mainly from the acquisition of 2 solar power plants in China of THB 1,884 million and additions of machinery and equipment of CHP plants in China of THB 2,600 million; netting with write-off and reclassification of THB 210 million, depreciation expenses for the period of THB 463 million and unrealized loss from foreign exchange translation at the year-end of THB 261 million.
- Other non-current assets of THB 1,843 million, an increase of THB 282 million or 18% was mainly from net result of an increase of advance to others for investment in solar power plants in Japan of THB 293 million, reclassification of refundable VAT of solar power plants in China to be non-current assets of THB 427 million, an increase of land use right of THB 110 million from expansion phase of a CHP plant in China, accrued subsidy income of THB 463 million, respectively. While there were a reclassification of advance payment for project development of solar project in Japan of THB 924 million

to other investments and also reclassification of advance to contractor of THB 79 million to loan to other company according to a termination of share purchase agreement of Thai Solar Consultant Co., Ltd and disposed back to seller and other reduction of THB 8 million.

2.2 Total liabilities of THB 7,913 million, increased by THB 2,831 million compared to total liabilities as of 31 December 2016 with details were mainly described as follows:

- Short-term loans from financial institutions of THB 2,324 million, decrease of THB 112 million was from loan repayment during the year.
- Current portion of long-term loans and long-term loans from financial institutions of THB 348 million and THB 2,898 million, respectively, totaling of THB 3,246 million. An increase of THB 2,737 million was from net impact of an addition of THB 2,832 million (net of financial charge) and repayment of THB 81 million and unrealized gain on foreign exchange translation at the year-end of THB 14 million.
- Other current liabilities of THB 1,855 million, a decrease of THB 24 million was mainly net impact from advance received from steam residential customers of power plants in China decrease of THB 115 million and accrued expense of THB 26 million whereas an increase from accrued investment cost of THB 28 million, accrued consulting expenses and construction costs of solar power plants in China of THB 89 million.

2.3 Shareholders' equity of THB 39,785 million, a net increase of THB 1,904 million compared to shareholders' equity as of 31 December 2016 with details were mainly described as follows:

- An increase of THB 4,155 million from net profit of 2017.
- An increase of THB 62 million from paid-up share capital as a result from the exercise of BPP-W and BPP-ESOP during the year.
- An increase of THB 33 million from reserve for share based payment.
- An increase of THB 187 million from changes in fair value of hedged financial instruments
- An increase of THB 69 million from non-controlling interests.
- A decrease of THB 915 million from loss on foreign exchange translation of subsidiaries' financial statements.
- A decrease of THB 10 million from share based payment distribution to parent company.
- A decrease of THB 1,676 million from dividend payment.

3 Statements of Consolidated Cash Flows for the year ended 31 December 2017

Statement of consolidated cash flow for the year ended 31 December 2017 recorded a decrease of net cash flow by THB 24 million (included the effect from exchange rate translation loss of THB 23 million) from 31 December 2016. The consolidated cash flows are divided into:

3.1 Net cash inflow from operation activities of THB 602 million with major operating items as follows;

- Collection from sales of power and steam of THB 6,600 million
- Payment to suppliers and contractors of THB 5,478 million
- Payment of interest expense of THB 105 million
- Payment of corporate income tax of THB 289 million
- Others of THB 126 million

3.2 Net cash outflow from investing activities of THB 1,664 million with major items as follows;

- Payment for machine, equipment and project in progress of THB 2,548 million
- Payment for investments in Solar project in Japan and China of THB 346 million
- Payment for loan to related companies and others of THB 767 million
- Payment for Solar project development in Japan of THB 908 million
- Dividend received from joint venture and others of THB 2,681 million
- Receiving from loan to related companies of THB 29 million
- Receiving from interest income and others of THB 195 million

3.3 Net cash inflow from financing activities of THB 1,061 million comprised of;

- Proceeds from short-term and long-term loans from banks of THB 8,583 million
- Repayment of short-term loans and long-term loans from banks of THB 5,949 million
- Payment for other financial costs of THB 22 million
- Cash receipts from the exercise of BPP-W and BPP-ESOP of THB 124 million
- Dividend payment of THB 1,676 million

4 Management Discussion and Analysis

The financial result of 2017 reflects the company's ability to create sustainable value through efficiency improvement of operating power plants, improvement in project management and development to achieve the Commercial operation Date (COD) of all projects as planned and the competitiveness in seeking investment opportunity for growth. In 2017, the company achieved total operating capacity of 2,068 MW on equity basis and the committed project development in pipeline of 721 MW. The strong financial position with low debt to equity ratio reflects the ability to seek for source of funding to achieve the growth target of 4,300 MW.

The company reported net profit for the year at THB 4,155 million which already included the unrealized FX translation loss of THB 85 Million due to Thai Bath appreciated against US Dollar during the year. This is mainly from the significant improvement of Hongsa efficiency by achieving Equivalent Availability Factor or EAF of 81%, increase by 19% compare to 62% in the previous year which result in consistency of electricity generation. The net profit for 4Q17 is reported at THB 461 million, decreased by 47% compare to the previous year of THB 877 million. This is an impact from the extended major overhaul (EMJ) of BLCP for 10 weeks. However, there is still supporting contribution from Combined Heat and Power (CHP) operation in China in which the sale of power and steam are higher due to higher demand during winter season.

The reported revenue of THB 6,419 million consists of additional revenue from Solar China of THB 659 million and CHP plants of THB 5,760 million, increase of 16% compared to previous year. This is due to the achievement in commercial operation date of solar power plants in China during the year and the increase in demand for both power and steam as well as the adjustment in the tariff during July 2017. Though many power plants in China was affected from the higher coal price which increase by 54% compared to previous year, our CHP plants still being able to maintain gross profit of 24%, decreased by 11% from previous year which reported gross profit of 35%.

The share of profit from joint ventures was reported at THB 3,682 million compared to THB 3,513 million last year or the increase of 5% which consists of share of profit from Hongsa of THB 2,235 million (included the unrealized translation loss of THB 908 million) which increase from THB 1,474 million last year or increase of 28% while BLCP reported the share of profit of THB 1,487 million (included the unrealized translation loss of THB 430 million) which decrease from THB 2,064 million last year or lower by 38%. Excluding the unrealized exchange rate translation, both BLCP and HPC can generate the operating profit of THB 5,060 million which increased significantly from the improvement of Hongsa efficiency.

The reported EBITDA was THB 5,410 million compared to THB 5,575 million or a decrease of 3%

Please be informed accordingly,

Sincerely yours



Sutee Sukruan

Chief Executive Officer



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