



Management's Discussion and Analysis

For the year ended
31 December 2017

Banpu Public Company Limited



MEMBER OF
**Dow Jones
Sustainability Indices**
In Collaboration with RobecoSAM

Banpu recognized for fourth year as member of
the Dow Jones Sustainability Indices (DJSI) in 2017



No. BP 0118/010

Bangkok Office

22 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

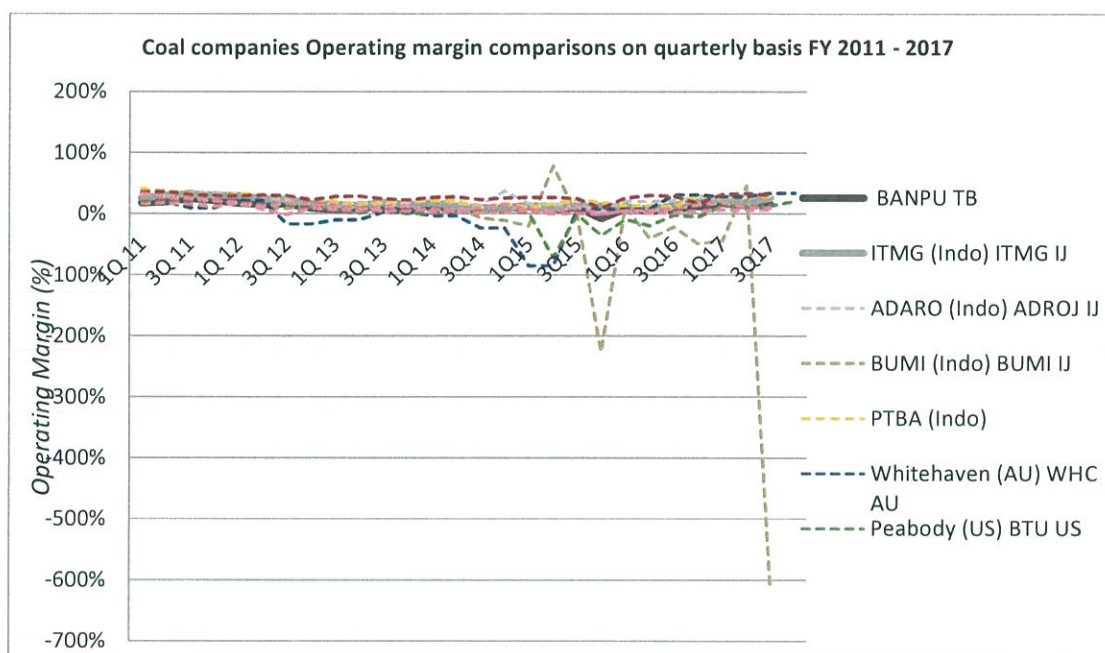
Banpu Public Company Limited ("the company") hereby submits a consolidated financial statements for the year ended 31 December 2017 which were audited by auditors to the Stock Exchange of Thailand via electronic channel and accordingly to the general public.

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. Industry Analysis of Coal producers' operating performance in Coal industry
2. Company performance analysis
3. Consolidated statement of financial position
4. Consolidated statement of cash flows
5. Management Discussion & Analysis

1. Industry Analysis - Coal producers' operating performance in Coal industry

The market thermal coal price has gradually rebounded starting from July 2016 after coal price continuously declined since 2013. The following presentations illustrate the operating margin of major coal companies in each country and the coal price index;



Global Coal Newc Index US\$ per ton (from 1 Jan 14 to 31 Dec 17)



2. Company Performance Analysis

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

Consolidated statements of Income for the third quarter ended 31 December 2017 and 2016

Consolidated financial performance	2017	2016
(Unit: Million USD)		
Sales	2,877	2,259
Cost of sales	(1,766)	(1,511)
Gross margin	1,111	748
Selling expenses	(160)	(180)
Administrative expenses	(218)	(160)
Royalty fee	(268)	(219)
Profit sharing from joint ventures	205	118
Other income (expense)	(53)	(11)
Financial costs	(140)	(130)
Profit before tax	477	166
Income tax	(134)	(69)
Net profit for the year	343	97
Owners of the parent	233	47
Non-controlling interest	110	50
Earnings per share (Unit: USD)	0.046	0.013

2.1 Sales reported at \$2,877 million (equivalent Baht 97,324 million), an increase of \$618 million or 27% compared to last year, was mainly from a net impact of a decrease of sale volume and a continued rising of the global coal price. Details of the company's revenue are as follows:

- Revenue from coal sales of \$2,624 million accounted for 91% of total sales revenue.

The revenue from coal sales comprise of :

- Sales from Indonesia coal mines of \$1,722 million.

- Sales from Australia coal mines of \$883 million.

- Sales of power and steam and others of \$216 million represented 7% of total revenue.

Revenue (Unit: Million \$)	2017	2016
Coal business	2,605	2,063
Power & Steam business	189	155
Gas business	37	15
Others	46	26
Total	2,877	2,259

- Sales of gas business of \$37 million represented 1% of total revenue.
- Sales of other business of \$46 million represented port service charges and coal trading business.

Coal Business

	2017 Sales Vol. Mil Tonnes	2016 Sales Vol. Mil Tonnes	2017 Avg. Price Per Tonne	2016 Avg. Price Per Tonne	2017 Avg. Cost Per Tonne	2016 Avg. Cost Per Tonne
Indonesia Mines	23.28	26.83	US\$ 74.55	US\$ 52.45	US\$ 43.86	US\$ 32.16
Australia Mines	13.35	13.20	A\$ 86.13	A\$ 67.31	A\$ 56.84	A\$ 51.70
Total	36.63	40.03				

- Coal sale volume of 2017 was 36.63 million tonnes, decreased by 3.40 million tonnes or 8%, from net of a decrease of sales volume from Indonesia mines by 3.55 million tonnes as a result of heavy rain in Indonesia , and an increase from Australia mines by 0.15 million tonnes.
- Average selling price of 2017 was \$71.10 per tonne, compared to 2016 average selling price that was \$51.53 per tonne, increased by \$19.57 million or 38% as a result of increasing in the global thermal coal market price compared to previous year. Indonesia mines' average selling price was \$74.55 per tonne which increased by \$22.10 per tonne or 42% from last year.

Australia mines' average selling price of 2017 was A\$86.13 per tonne, compared to average selling price 2016 that was A\$67.31 per tonne, an increase of A\$18.82 per tonne, or 28% was mainly from an improve of domestic contract prices and a higher export selling price from the rising of global coal market price compared to last year.

Australia mines	Sales volume (Mil Tonnes)		Average Selling price (A\$/Tonne)	
	2017	2016	2017	2016
Domestic sales	8.15	8.37	75.01	60.89
Export sales	5.20	4.83	103.57	78.43
Total	13.35	13.20	86.13	67.31

Average domestic sale price per tonne was A\$ 75.01 increased by A\$14.12 as a result of legacy contracts were gradually expired and replaced by new contracts with higher sales price. For export sales, average selling price per tonne was A\$103.57, increased by A\$25.14 from a rising of market coal price during the year offset by the impact of a strengthen of AUD against USD compared to last year. Average AUD/USD in 2017 was 0.77 (2016: 0.74).

Power Business

	Power Sales (Mil \$)		Steam & Others (Mil \$)	
	2017	2016	2017	2016
CHP (Combined Heat & Power) Plants	84.63	80.69	84.91	71.38
Solar Power Plants	19.46	2.93	-	-
Total	104.09	83.62	84.91	71.38

Power sales, steam sales and others of 3 CHP plants in China were \$170 million that increased by \$18 million from last year due to an increase of power and steam sales volumes. 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 price was increase as the higher trend of market coal price which is a main fuel source of CHP plants.

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

2.2 Cost of sales \$1,766 million, increased by \$255 million or 17% which was an increase of power & steam business cost of sales of \$43 million which was from a higher of coal costs that were a main fuel of CHP power plants in China. Average coal cost was RMB 619 per tonne (2016: RMB 401 per tonne), an increase of 54% compared to previous year. Coal cost has continued rising since 4Q16.

Cost of sales (Unit: Million \$)	2017	2016
Coal business	1,580	1,389
Power & Steam business	144	101
Gas	24	8
Others	38	13
Total	1,766	1,511

Whereas coal business' cost of sales increased by \$171 million that was net impact from a decrease of sale volume and an increase of average cost per tonne compared to previous year.

Indonesia mines' average cost per tonne increased by \$2.65 was mainly from a higher of stripping ratio that increased from 8.66 to 11.24 and a rising of global market diesel price during the year. Average diesel price per litre was \$0.53 (2016: \$0.42) and lower of coal production than plan as a result of heavy rain in Indonesia, offset with a decrease of other production costs resulting from continuously implemented cost saving program since previous year.

Australia mines' average cost of sales per tonne increased by A\$5.14 compared to last year. Production volume at Mandalong and Springvale mines were below plan due to facing a difficult area (difficult geological condition) and underground gas issue.

- 2.3 Gross profit reported \$1,111 million, an increase of \$363 million or 48%. Gross profit margin was at 39%, derived from 40% of coal business and 24% of power business (2016: Gross profit was 33%, derived from 33% of coal business and 35% of power business). A rising of market coal price was unfavorable to cost of coal fired power business and affected to a decrease of power business's gross profit compared to last year.
- 2.4 Selling expenses reported \$160 million, a decrease of \$20 million or 11% was from a decrease of \$25 million from less export coal sale volumes of Indonesia mines. Whereas, an increase of \$5 million from Australia mines due to more coal transportation from western mines to supply power plants than last year.
- 2.5 Administrative expenses reported at \$218 million, an increase of \$58 million or 36% was from;
- 2.5.1 An increase of \$8 million from cost of employee to support business growth, especially for solar power business in China and head office.
 - 2.5.2 Provision for doubtful account of loan receivable of a subsidiary of \$ 2 million. Such provision was based on ability of repayment from the receivable, both loan principle and interest within timeframe.
 - 2.5.3 An increase of land and building tax of a subsidiary in Indonesia of \$9 million.
 - 2.5.4 An increase of \$9 million from professional fees from more investments of the Group.
 - 2.5.5 An increase from an effect of foreign exchange rate as a result of an appreciation of THB against USD, which affected to the higher expenses when converting THB expense to USD. Average exchange rate of USD/THB was Baht 33.94 (2016: Baht 35.30).
- 2.6 Royalty fees reported at \$268 million, an increase of \$49 million or 23% was due to net impact from higher of coal selling price and lower of sale volumes compared to last year.
- 2.7 Equity income from joint ventures reported at \$205 million consisted of profit sharing of BLCP, Hongsa power plant in Lao, coal business in China and solar power plants in Japan of \$43 million, \$66 million, \$94 million and \$2 million, respectively.
- Equity income increased by \$87 million or 73% compared last year, was net impact of an increase of profit sharing from coal business in China of \$75 million from higher market coal

price, Hongsa power plant & Phu Fai of \$25 million from better operation, including from solar projects in Japan of \$2 million and decrease of profit sharing of BLCP of \$15 million.

2.8 Other expenses of \$53 million was comprised of;

2.8.1 Interest income of \$6 million.

2.8.2 Net loss from financial derivatives of \$21 million which comprised of :

- Net realized loss of \$23.50 million which was net impact of loss from coal swap contracts, interest rate swap contracts, foreign exchange rate forward contracts of \$12.73 million, \$6.70 million, and \$10.93 million, respectively, offset with a realized gain from oil hedging contracts, gas hedging contracts, and cross currency swap contracts of \$4.95 million, \$0.17 million and \$1.74 million, respectively.
- Net unrealized gain of \$2.53 million which was mainly from gain on change in fair value of interest rate swap contracts and gas hedging contracts of \$0.93 million and \$2.98 million, respectively. While there was a loss on change in fair value of foreign exchange rate forward contracts of \$0.95 million, coal swap contracts of \$0.36 million and oil hedging contracts of \$0.07 million.

2.8.3 Net loss on foreign exchange rate of \$76 million was mainly from net unrealized loss on foreign exchange rate translation of THB currency borrowings as a result of the appreciation of THB against USD compare to prior year. Average exchange rate of USD/THB as of 31 December 2017 was Baht 32.68 (As of 31 December 2016: Baht 35.83).

2.8.4 Management fees and other income of \$38 million.

2.9 Corporate income tax of \$134 million, increased by \$65 million which comprised of;

2.9.1 Corporate income tax of \$117 million, an increase of \$38 million was mainly from a better operating profit of coal business.

2.9.2 An increase of income tax expense by \$24 million was mainly from deferred income tax assets from tax loss carry forward in 2016 that was nil in 2017.

2.9.3 An increase of income tax expense by \$3 million was from withholding tax on interest payment of a subsidiary of \$1 million and an increase of withholding tax on dividend received by \$11 million. Whereas in prior year, there were adjustment of income tax from R&D expense of a subsidiary in Australia of \$9 million but there was nil in this year.

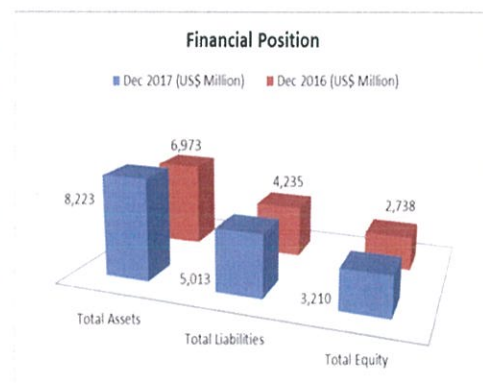
2.10 Net profit of 2017 reported \$233 million, an increase of \$186 million or 395% compared to the previous year.

Earnings per share (EPS) reported at \$0.046 per share or equivalent Baht 1.550 per share. (2016: \$0.013 per share or equivalent Baht 0.462 per share)

3. Statements of Consolidated Financial Position as of 31 December 2017 in comparison with the Statements of Consolidated Financial Position as of 31 December 2016

3.1 Total assets of \$8,223 million, an increase of \$1,250 million compared to total assets as of 31 December 2016 with main details described below:

- Cash and cash equivalents of \$683 million, an increase of \$228 million or 50% (See explanation in # 4 Consolidated Statement of Cash Flow)
- Current and non-current portions of dividend receivable from related parties of \$22 million and \$218 million totaling of \$240 million were dividend receivable from a joint venture who operates power business in Thailand. An increase of \$16 million was a net result from additional declared dividend and received dividend during the period of \$100 million and \$91 million, respectively. Also, there was an unrealized gain on



exchange rate translation at the end of the year totaling of \$7 million.

- Investment in joint ventures and associates of \$1,170 million, increased by \$279 million or 31% from the addition of investments in solar business in Japan and

renewable energy business in Singapore totaling of \$65 million, profit sharing recognized net with dividend received by \$109 million, whereas, decrease from sales of investment in Ratchasima Green Energy Co., Ltd of THB 2 million, and unrealized gain on exchange rate translation at end of the year by \$107 million.

- Other investments of \$112 million, an increase of \$64 million was from an addition of investment in solar power business in Japan under a form of TK (TOKUMEI KUMIAI) agreement of \$62 million and unrealized gain on exchange rate translation at the end of the year of \$2 million.
- Property plant and equipment of \$1,779 million, an increase of \$495 million was from purchased equipment of subsidiaries in Indonesia and Australia of \$241 million, additional investment in gas business in USA and solar power plants in China totaling of \$360 million, depreciation expenses of \$165 million, also unrealized gain on exchange rate translation and others of \$59 million.

3.2 Total liabilities of \$5,013 million, increased by \$778 million compared to total liabilities as of 31 December 2016 with main details described below:

- Short-term loans from financial institutions of \$419 million, an increase of \$136 million was from addition of \$1,186 million, repayment of \$1,062 million and unrealized loss on exchange rate translation at the end of year of \$12 million.
- Current portions of long- term loans of \$153 million, a decrease of \$ 176 million or 54% was the net result of repayment of \$330 million, reclassification from long-term loan of \$153 million and unrealized loss on exchange rate translation of \$1 million.
- Accrued overburden and coal transportation expenses of \$103 million, an increase of \$18 million was mainly from overburden, coal hauling and transportation expenses of subsidiaries in Indonesia.
- Long- term loans of \$1,691 million, an increase of \$307 million or 22% was net result of addition loan during the period of \$814 million, early repayment of \$380 million, reclassification to current portion of long-term loans of \$153 million, an unrealized loss on exchange rate translation of \$26 million.

- Current portions of debenture of \$168 million was from a reclassification from debentures of \$154 million and unrealized loss on exchange rate of \$14 million.
- Debentures of \$1,426 million, an increase of \$238 million was from a new bond issuance of \$286 million, reclassification to be current portion of \$154 million and unrealized loss on exchange rate translation of \$106 million.
- Derivative liabilities of \$21 million represented unrealized loss from change in fair value of financial derivatives at the end of period which consisted of cross currency swap and interest rate swap contracts of \$15 million and \$6 million, respectively.

3.3 Shareholders' equity of \$3, 211 million, an increase of \$473 million was mainly due to;

- An increase of \$233 million from net profit of 2017.
- An increase of \$32 million from additional of paid-up share capital from exercised of BANPU warrants (BANPU-W3) during the year.
- An increase of \$38 million from change in fair value of available for sales investments, hedged financial instruments and others.
- An increase of \$138 million from non-controlling interests.
- An increase of \$192 million from gain on exchange translation of subsidiaries' financial statements.
- A decrease of \$160 million from dividend payment.

3.4 Net debt-to-equity as of 31 December 2017 reported at 0.99 times for the consolidated financial statements (31 December 2016: 0.91 times).

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

Banpu's statement of consolidated cash flow for year ended 31 December 2017 recorded an increase of net cash flow by \$228 million (including the effect from gain on exchange rate translation of \$11 million). The consolidated cash flows are divided into:

4.1 Net cash inflow from operation of \$344 million; with major operating items as follows;

- Collection from coal sales of \$2,772 million
- Payment to contractors and suppliers of \$1,648 million
- Interest payment of \$133 million
- Payment of corporate income tax of \$77 million
- Royalty payment of \$275 million
- Others of \$295 million

4.2 Net cash outflow from investing activities of \$514 million; with major items as follows;

- Payment for machine, equipment and project in progress of \$241 million
- Payment for addition of investment in solar business in Japan of \$12 million
- Payment for renewable energy business in Singapore of \$56 million, coal business in Indonesia of \$7.5 million and Gas business in USA of \$ 280 million and others of \$0.8 million
- Payments for loan to related parties and others of \$24 million
- Payment for Solar project development in Japan of \$27 million.
- Dividend received from subsidiaries, joint ventures of \$92 million.
- Receiving from interest income and others of \$42 million.

4.3 Net cash inflow from financing of \$387 million; comprised of

- Proceeds from short-term loans and long-term loan from banks & others of \$2,000 million.
- Receive from debentures issuance of \$286 million.
- Receive from an increase of share capital from exercised warrants during the year of \$36 million.
- Repayment of short-term loans and long-term loans of \$1,775 million.
- Dividend payment of \$160 million.

5. Management Discussion and Analysis

The 2017 consolidated financial statement reports a net profit of USD 234 million. The earnings more than quadrupled from a net profit of USD 47 million in the previous year led by strong improvement in coal earnings and high utilization of power plants. In addition, gas business started to provide significant earnings from series of acquisition made during last year. Excluding the impact from foreign exchange translation loss, group net profit was USD 310 million compared to USD 59 million in the previous year.

Group EBITDA for 2017 was USD 968 million, increasing 79% from previous year. EBITDA from coal was USD 789 million (+109% YoY) EBITDA from power was relatively flat at USD 153 million and EBITDA from gas was USD 25 million.

In 4Q17 the company realized a net profit of USD 66 million, a 9% increase from previous quarter. However, excluding foreign exchange loss of USD 21 million due to Thai Baht strengthening the net profit was USD 88 million or increasing 12% from previous quarter.

Group EBITDA in 4Q17 totaled USD 274 million (+4% QoQ, +27% YoY) comprising of EBITDA from coal of USD 243 million (+10% QoQ, +45% YoY), from power of USD 24 million (-33% QoQ, -48% YoY), and from gas of USD 7 million (+20% QoQ, +184% YoY).

The resilient demand for coal coupled with limited supply in the region continued to support coal prices at high level throughout year 2017. This healthy coal market benefited coal operations in 4Q17 for all 3 countries. Indonesia coal achieved a good coal sale of 6.38 million tonnes, higher 20% QoQ, with an average selling price (ASP) the highest of the year at USD 81.8 per tonne. The cost of sale slightly increased 6% QoQ to USD 44.7 per tonne, partly due to rising diesel price by 13% QoQ to USD 0.57 per litre. Gross profit margin remained firm at 43%.

Australia coal sale volume in 4Q17 was 3.61 million tonnes, improving 6% QoQ. The split between domestic and export sale were 62% vs 38%. The ASP followed market trend by rising further 4% QoQ to AUD 93.5 per tonne while cost of sale increased 11% QoQ to AUD 60.08 per tonne due to difficult mining condition. Gross profit margin was 36% compared to 40% in previous quarter.

China coal reported a strong equity income of USD 19 million in 4Q17 supported by favorable coal prices as the country approaching winter season.

In power business, the Combined Heat and Power (CHP) plants in China contributed a net profit of USD 23 million in 4Q17 due to high seasonal demand for both power and steam products while power plants still facing high coal cost. BLCP successfully completed the first Extended Major Overhaul for Unit 1 as planned. It reported an equity loss of USD 5.8 million in 4Q17. Hongsa continued to achieve a strong level of plant utilization as indicated by Equivalent Availability Factor (EAF) of 83%. It reported an equity income of USD 11 million including foreign exchange loss of USD 5.3 million due to Thai Baht strengthening.

Please be informed accordingly,

Sincerely yours,

Somruedee Chaimongkol

Chief Executive Officer

Ms. Arisara Sakoongaravek

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