BANPU

Banpu Public Company Limited

and Subsidiaries

Management's Discussion and Analysis

The Group performance

for 1st Quarter 2019

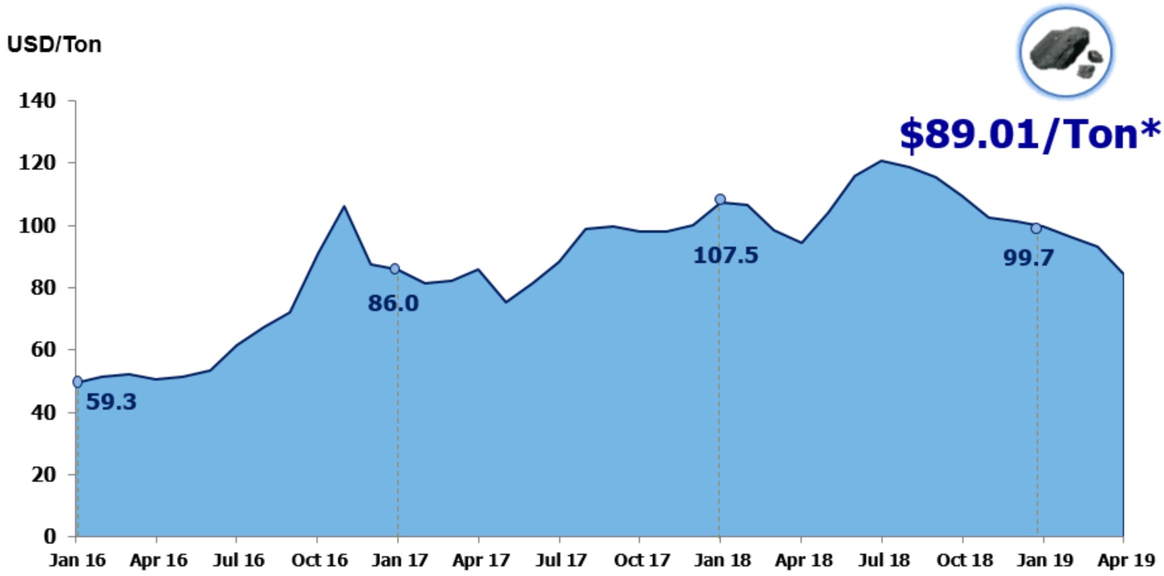
SAM | Sustainability Award Gold Class 2019

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM

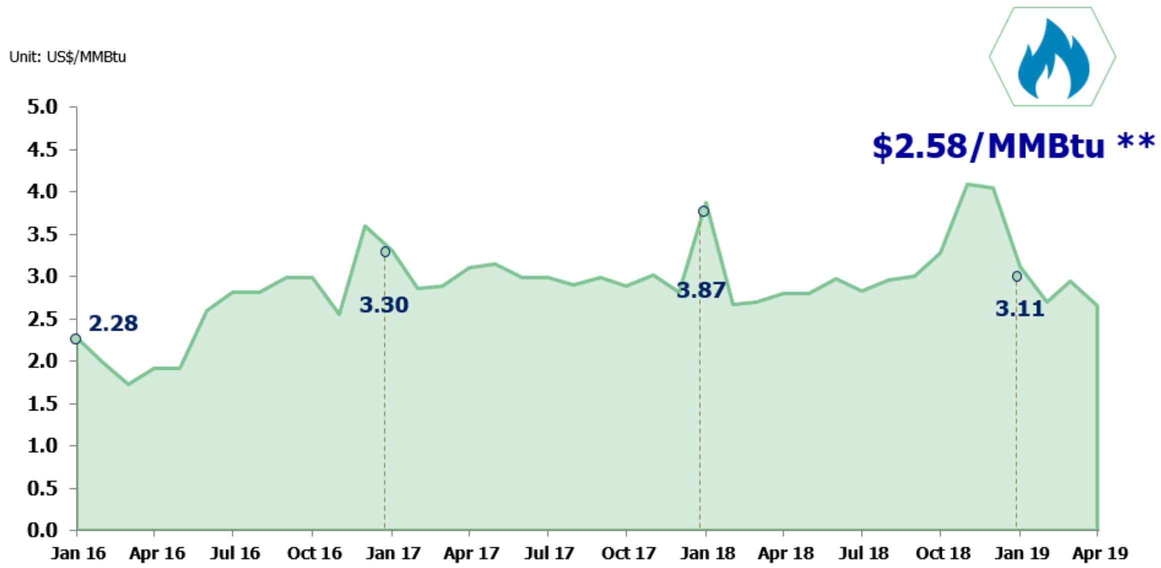
1. Energy Commodities Price Index

The market thermal coal price has gradually rebounded starting from July 2016. The following presentations illustrate the coal price index;

Coal Price Index: The Newcastel Export Index (NEX) for January 2016 –April 2019



Average Henry Hub Natural Gas Price for January2016-April 2019



* Price as of 29 April 2019
** Price as of 26 April 2019

2. Management Discussion and Analysis

The consolidated financial statement for 1Q/2019 reported an EBITDA of USD 231 million which increased 1% YoY due to lower contribution from coal business with EBITDA of USD 153 million (-5% YoY). EBITDA from power was USD 50 million (2% YoY) and EBITDA from gas was USD 28 million (90% YoY).

Net profit for the period was reported at USD 29 million including a translation loss on foreign exchange of USD 17 million due to strengthening of Thai Baht against US Dollar. The net profit marks a reverse from a net loss of USD 40 million in the previous year.

Coal operation in Indonesia reported strong production despite the rainy season. Sale volume reached 5.9 million tonnes or an increase of 33% YoY. The higher sale volume compensated for the softening coal price as Average Selling Price (ASP) retracted 14% YoY to USD 72.4 per tonne. The average cost of sale was relatively maintained at USD 48.3 per tonne despite a marginal increase in strip ratio to optimize the mine plan. The gross profit margin was 35% compared with 42% in previous year.

Australia coal in this quarter underwent a planned longwall changeover at the biggest mine Mandalong, resulting in a lower sale volume of 2 million tonnes. The ASP remained strong at AUD 99 per tonne due to favorable export market. The reduced sale volume affected the unit cost of sale which increased by 22% YoY to AUD 92.3 per tonne. The gross profit margin was calculated at 8% compared to 21% in previous year.

China coal reported a strong equity income of USD 26 million supported by sustained high coal prices in domestic market.

In power business, the Combined Heat and Power (CHP) plants in China reported improvement in operation from strong winter demand for electricity and steam on the back of lower coal cost. Its net profit was USD 9 million. BLCP continued to achieve solid electricity dispatch of 100%. Its equity income was USD 12 million, declining 26% YoY due to the structured lower tariff. Hongsa contributed an equity income of USD 23 million, increasing 21% YoY partly due to a smaller loss on foreign exchange.

3. Group Performance Analysis

The analysis and explanation of Banpu Group performance for the 1st quarter ended 31 March 2019 and 2018 as follows:

Consolidated Statement of Income for the 1st quarter ended 31 March 2019 and 2018

Consolidated financial performance (Unit: Million USD)	1Q19	1Q18	Change	
			Amount	%
Sales	699	700	(1)	0%
Cost of sales	(506)	(468)	38	8%
Gross profit	193	232	(39)	-17%
Selling expenses	(44)	(31)	(13)	-43%
Administrative expenses	(42)	(51)	9	18%
Indemnity payment	-	(86)	86	100%
Royalty fee	(61)	(58)	(3)	-5%
Profit sharing from joint ventures and associates	62	62	0	1%
Other income (expense)	36	(5)	41	815%
Financial costs	(47)	(41)	(6)	-14%
Profit before tax	97	22	75	341%
Income tax	(47)	(39)	(8)	-21%
Net profit for the period	50	(17)	67	393%
Owners of the parent	**29**	**(40)**	**69**	**172%**
Non-controlling interest	21	23	(2)	-9%
Earnings per share (Unit: USD)	0.006	(0.008)	0.014	170%

Banpu Group performance reported net profit for 1Q19 at $29 million, increased by $69 million compared to 1Q18, was mainly from one- time indemnity payment of $86 million in 1Q18 that was nil in 1Q19, while, a decrease of gross profit by $39 million. Details were described as follows:

3.1 Sales and Cost of Sales

(Unit: Million USD)	Revenue			Cost of Sales		
	1Q19	1Q18	Inc.(Dec.) %	1Q19	1Q18	Inc.(Dec.) %
Coal Business	575	588	-2%	417	387	8%
Natural Gas Business	36	26	38%	17	18	-6%
Power & Steam Business	56	65	-14%	43	48	-10%
Others	32	21	54%	29	15	93%
Total	**699**	**700**	**0%**	**506**	**468**	**8%**

Sales

Sales reported at $699 million (equivalent THB 22,100 million) with minor changes compared to 1Q18, there was from a decrease of $13 million from coal businesses, a decrease of $9 million from power and steam business, while an increase of $10 million from natural gas business. Details of revenue were described as follows:

1. Sales from coal business of $575 million or 82% of total revenue, segmented by geographic as below:
   - Sales from Indonesia coal mines of $425 million
   - Sales from Australia coal mines of $143 million.
   - Sales from others of $7 million
2. Sales from natural gas business of $ 36 million or 5% of total revenue, an increase of $10 million was from an increase of production and sales volume compared to 1Q18
3. Sales from Power and steam of $56 million or 8% of total revenue were from Combined Heat and Power (CHP) plants and solar power plants in China.
4. Others of $32 million represented 5% of total revenue, an increase of $11 million mainly was from fuel trading business of a subsidiary in Indonesia.

1. Coal Business

Coal sales of $575 million decreased by $13 million or 2% was from a decrease of coal sales price from Indonesia mines and a decrease of coal sales volume from Australia mines.Detail was as follows:

Indonesia Mines		1Q19	1Q18	Inc.(Dec.) %
Sales Volume	Million Tonnes	5.88	4.42	33%
Average Price	$/Tonne	72.42	84.17	-14%
Average Cost of sales	$/Tonne	48.27	47.13	2%

Coal Business in Indonesia

- **Sales volume**

  Coal sale volume was 5.88 million tonnes, increased by 1.46 million tonnes or 33%, from weather condition that support coal production better than 1Q18, especially at Indominco Mine.

- **Average selling price**

  Average selling price per tonne was $72.42, decreased by $11.75 or 14% from a decrease of the global thermal coal market price compared to 1Q18.

- **Average cost of sales**

  Average cost of sales per tonne was $48.27, increased by $1.14 as a result of an increase of stripping ratio from 12.04 per tonne to 13.21 per tonne.

Australia Mines		1Q19	1Q18	Inc.(Dec.) %
Sales Volume	Million Tonnes	2.01	2.85	-29%
Average Price	A$/Tonne	99.08	95.17	4%
Average Cost of sales	A$/Tonne	92.27	75.39	22%

Coal business in Australia

- **Sales volume**

  Coal sale volume was 2.01 million tonnes, decreased by 0.84 million tonnes or 29%, mainly from a decrease of production volume of 0.55 million tonnes due to a longer period of Longwall changeover in Mandalong mine compared to 1Q18.

- **Average selling price**

  Average selling price per tonne was A$99.08, increased by A$3.91 or 4% compared to 1Q18 from an increase of export sales as a net result of lower of global coal market price, and an impact from a depreciation of AUD currency against USD currency.That affected to higher revenue in AUD currency when converted from export sales in USD currency. Average exchange rate of AUD/USD this quarter was $0.7118 (1Q18: $0.7864).

- **Average selling price of domestic and export sales**

Australia Mines	Sales Volume (Unit: Million Tonnes)			Avg. Price/Tonne (A$/Tonne)		
	1Q19	1Q18	Inc.(Dec.) %	1Q19	1Q18	Inc.(Dec.) %
Domestic	1.18	1.68	-30%	79.10	79.85	-1%
Export	0.83	1.17	-29%	129.24	116.28	11%
Total	**2.01**	**2.85**	**-29%**	**99.08**	**95.17**	**4%**

Average domestic selling price per tonne was A$ 79.10, decreased by A$0.75. For export sales, average selling price per tonne was A$129.24, increased by A$12.96 from impact of market coal price and depreciation of AUD currency against USD currency per above mentioned.

- **Average cost of sales**

Average cost of sales per tonne was A$92.27, increased by A$16.88 from lower of production volume during Longwall changeover at Mandalong mine during 1Q19, then affected to an increase of average fixed cost.

2. Natural Gas Business

Natural Gas Business		1Q19	1Q18	Inc.(Dec.) %
Sales Volume	Bcf	**16.20**	**16.70**	**-3%**
Average Price	$/MMBtu	**2.10**	**1.50**	**40%**
Average Cost of Sales	$/MMBtu	**1.07**	**1.05**	**2%**

Natural gas business in USA

Sales from natural gas business of 1Q19 reported at $36 million, increased by $10 million or 38% as following details:

- **Sales Volume**

  Natural gas sale volume was 16.20 Bcf, decreased by 3% compared to 1Q18 due to temporary delay of production in order to minimize production risk for security purpose caused by drilling a new natural gas resource that located nearby.

- **Average Selling Price**

  Average selling price was $2.10 per MMBtu, increased by 40% from expansion to a higher price market compared to 1Q18 due to quality improvement of pipeline.

- **Average Cost of Sale**

  Average cost of sales, increased by $0.02 per MMBtu, from lower production and sales volumes, then impacted to higher average fixed cost that was high portion as business nature.

3. Power Business

Sales from Power and Steam of $56 million or 8% of total revenue was from sales from CHP plant and solar power plant in China. Detail is as follows:

Power Business		Combined Heat & Power Plants			Solar Power Plants		
		1Q19	1Q18	Inc. (Dec.) %	1Q19	1Q18	Inc. (Dec.) %
Sales Volume	GWh	435.83	458.25	-5%	42.96	41.77	3%
Average PowerTariff	RMB/GWh	0.35	0.38	-8%	0.80	0.80	0%
Average Steam Price	RMB/Tonne	98.99	96.85	2%	N/A	N/A	N/A
Average Cost of Sales	RMB/GWh	0.62	0.64	-3%	0.15	0.16	-6%

Combined Heat and Power (CHP) plants in China

Sales from power, steam, and others from 3 Combined Heat and Power (CHP) plants in China $51 million, decreased by $9 million compared to the same quarter of previous year.

- **Sales Volume**

  A decrease of sales volume 22.42 GWh was from less customer demand from Zouping Power Plant than last year.

- **Average Power Tariff**

  A decrease of average power tariff by RMB 0.03 caused by price adjustment according to local government policy (HEBEI) since 1 September 2018.

- **Average Cost of Sale**

  A decrease of average cost of sales by RMB 0.02 per GWh was from a decrease of sales volume of power and steam, also from a decrease of coal cost that was main fuel. Average coal cost was RMB 619 per tonne (1Q18: RMB 653 per tonne), decreased by RMB 34 per tonne or 5% from 1Q18.

Solar power plants in China

Sales from solar power plants in China of $5 million reported same as 1Q18.

- **Sales Volume**

  An increase of solar power plant sale volume due to weather condition that supported operation better than 1Q18.

- **Average Power Tariff**

  Average power tariff was RMB 0.80 same as 1Q18.

- **Average Cost of Sales**

  A decrease of average cost of sales of RMB 0.01 per GWh.

Selling expense

Selling expenses reported at $44 million, increased by $13 million or 43% was from:

1. An increase of $6 million was from Indonesia mines, that related to Domestic Market Obligation that was not effective in 1Q18.And also $7 million from an increase of selling expense which was in line with more export coal sales compared to 1Q18.
2. Australia mine that the amount was similar to 1Q18.

Administrative expense

Administrative expenses reported at $42 million, a decrease of $9 million or 18% was mainly from a reversal of amortization transaction related to disposal of Mannering mine in Australia total of $11 million net with an increase of others of $2 million

Royalty fees

Royalty fees reported at $61 million, an increase of $3 million or 5% was a result of higher sales from Indonesia Mines.

Share of profit (Unit : Million USD)	1Q19	1Q18	Inc.(Dec.) %
BLCP	12	17	-26%
Hongsa & Phufai Mining	23	19	20%
Shanxi Luguang (Under construction)	(0)	(0)	-86%
Holding Company of Solar Power in Japan	1	(1)	-377%
Coal business in China	26	26	-3%
Total	62	62	1%

Share of profit from joint ventures and associates

Profit sharing from joint ventures and an associate reported similar amount to 1Q18 with details described as below:

1) An increase of profit sharing from Hongsa power and PhuFai mining of $4 million.
2) A decrease of profit sharing from BLCP of $5 million according to a decrease of revenue structure based on a power purchase agreement, an increase of corporate income tax rate according to BOI promotion certificate and impact from an appreciation of THB currency against USD currency.

Other income

Other income comprised of :

1) Interest income of $3 million.
2) Net gain from financial derivatives of $1 million comprised of:
   - Unrealized gain from financial derivatives at the end of period of $2 million was gain from coal swap contracts and oil hedging contracts total of $1 million. Also there was gain from cross currency swap contracts, natural gas hedging contracts and foreign exchange rate forward contracts total of $1 million.

- Realized loss from financial derivatives of $1 million was from foreign exchange rate forward contracts and natural gas hedging contracts.

3) Loss on foreign exchange rate of $17 million was mainly from unrealized loss on foreign exchange rate translation on THB currency borrowings as a result of an appreciation of THB currency against USD currency compared to the same period of prior year. Average exchange rate of USD/THB as of 31 March 2019 was 31.81 (31 Dec 2018: THB 32.45).

4) Management fee income and others of $49 million was mainly from gain on disposal of Mannering mine in Australia of $42 million and government subsidy of $4 million from residential steam.

Corporate income tax

Corporate income tax of $47 million, increased by $8 million or 21% mainly was from:

1) An increase of corporate income tax of $4 million from higher operating profits compared to the same quarter of prior year.

2) A decrease of withholding tax of $4 million was from a decrease of payment of interest expense of subsidiaries of $6 million compared to 1Q18.

3) An increase of deferred income tax expense of $8 million was from a one-time adjustment as a result from restructuring among the group.

4. Statements of Consolidated Financial Position

Statements of Consolidated Financial Position as of 31 March 2019 in comparison with the Statements of Consolidated Financial Position as of 31 December 2018.

Financial Position (Unit: Million USD)	31-Mar-19	31-Dec-18	Inc.(Dec.)	
			Amount	%
Assets	8,576	8,454	122	1%
Liabilities	5,377	5,279	98	2%
Equity	3,199	3,175	24	1%

4.1 Total assets of $8,576 million, an increase of $122 million compared to total assets as of 31 December 2018 with main details described below:

Financial Position (Unit: Million USD)	Assets		Inc.(Dec.)	
	31-Mar-19	31-Dec-18	Amount	%
Cash and Cash equivalent	648	607	41	7%
Short-term investments	10	8	2	22%
Trade accounts receivable and note receivables	263	395	(131)	-33%
Current portion of dividend receivables from related parties	10	10	0	2%
Other current assets	506	374	132	35%
Total Current Assets	**1,437**	**1,394**	**43**	**3%**
Dividend receivables from related parties	214	210	4	2%
Investments in an associate and joint ventures	1,418	1,374	44	3%
Other investments, net	150	148	2	1%
Property, plant and equipment, net	1,882	1,859	23	1%
Deferred exploration/stripping costs, net	864	869	(6)	-1%
Mining property rights, net	1,701	1,711	(10)	-1%
Goodwill	524	524	0	0%
Other non current assets	386	364	22	6%
Total Non-Current Assets	**7,139**	**7,059**	**80**	**1%**
Total Assets	**8,576**	**8,454**	**122**	**1%**

- Cash and cash equivalents of $648 million, an increase of $41 million or 7% (Refer to the explanation in no.5 Consolidated Statement of Cash Flows).

- Current and non-current portions of dividend receivable from related parties of $10 million and $214 million, respectively were dividend receivable from a joint venture who operates power business in Thailand. An increase of $4 million was a net result from additional declared dividend and received dividend during the period of $59 million and $59 million, respectively and unrealized gain on foreign exchange rate translation at the end of the period of $4 million.

- Investment in joint venture and associates of $1,418 million, increased by $44 million or 3% from addition of investments in electronic vehicle (EV) development business in Japan of $20 million and solar power plant business in Singapore of $20 million, dividend received net with profit sharing recognized by $3 million and unrealized gain on foreign exchange rate translation at end of period by $32 million, also adjustment effects of $7 million from new Thai Financial Reporting Standard No.15 “Revenue from contracts with customers” that was effective in 2019.

- Other investments of $150 million, an increase of $2 million was from investments in solar power plants in Japan under form of TK (TOKUMEI KUMIAI) agreements of $0.5 million and from changes in fair value at the end of period of $1 million.

- Property plant and equipment of $1,882 million, an increase of $23 million was from additions of machine and equipment of coal business, natural gas business in USA and power plants total of $63 million, depreciation charges for the period of $52 million and unrealized gain on foreign exchange rate translation at end of period & others of $12 million.

- Other non-current assets of $386 million, an increase of $22 million was from an increase of deferred income tax assets of $8 million, prepaid tax of subsidiaries in Indonesia of $7 million. Also, an increase of restricted cash of $3 million of a subsidiary in Indonesia and an increase in accrued subsidy income of solar power plants in China of $4 million and others of $4 million.

4.2 Total liabilities of $5,377 million, increased by $98 million compared to total liabilities as of 31 December 2018 with movement details as described below:

Financial Position (Unit: Million USD)	Liabilities		Inc.(Dec.)	
	31-Mar-19	31-Dec-18	Amount	%
Short-term loans from financial institutions	501	512	(11)	-2%
Trade accounts payable	72	116	(43)	-38%
Current portion of long-term borrowings, net	325	370	(45)	-12%
Financial derivative liabilities due in one year	90	88	2	2%
Accrued overburden and coal transportation costs	138	143	(5)	-4%
Financial derivative liabilities due in one year	3	5	(1)	-32%
Other current liabilities	535	476	58	12%
Total current liabilities	1,664	1,709	(45)	-3%
Long-term loans from other company	1,757	1,655	102	6%
Debentures, net	1,421	1,397	24	2%
Financial derivative liabilities, net	23	18	5	25%
Other liabilities	512	500	12	2%
Total non-current liabilities	3,713	3,570	143	4%
Total liabilities	5,377	**5,279**	**98**	**2%**

- Short-term loans from financial institutions of $501 million, a decrease of $11 million was from additional loan of $359 million, repayment of $374 million, realized loss on foreign exchange rate of $1 million and unrealized loss on foreign exchange rate translation at the end of period of $3 million.

- Current portions of long- term loans of $325 million, a decrease of $45 million or 12% was the net result of reclassification from non-current portion of $47 million and repayment of $93 million and unrealized loss on foreign exchange rate translation at the end of period of $1 million.

- Current portions of debenture of $90 million, an increase of $2 million was from unrealized loss on foreign exchange rate at the end of period.

- Accrued overburden and coal transportation expenses of $138 million, a decrease of $5 million or 4% was mainly from mining operations of subsidiaries in Indonesia.

- Long- term loans of $1,757 million, an increase of $102 million or 6% was net result of additional loan of $157 million, reclassification to current portion of $47 million, early repayment of $14 million and unrealized loss on foreign exchange translation at the end of period of $6 million. Mainly was from AUD currency loan as a result of depreciation of AUD currency against USD currency. Average exchange rate of AUD/USD as of 31 Mar 2018 was 0.7084 (31 Dec 2018: 0.7039).

- Debenture of $1,421 million, an increase of $24 million or 2% was unrealized loss on foreign exchange translation at the end of period.

- Current portion and non-current portion of derivative liabilities of $3 million and $23 million, respectively, total of $26 million represented unrealized loss from changes in fair value of financial derivatives at the end of period. These consisted of cross currency swap contracts of $ 10 million, interest rate swap contracts of $14 million and foreign exchange rate forward contracts of $2 million.

4.3 Shareholders'equity of $3,199 million, an increase of $24 million was mainly due to;

Financial Position (Unit: Million USD)	Equity		Inc.(Dec.)	
	31-Mar-19	31-Dec-18	Amount	%
Equity attributable to owners of the parent	2,610	2,560	50	2%
Non-controlling interests	589	615	(26)	-4%
Total equity	3,199	3,175	24	-2%

- An increase of $29 million from net profit of 1Q19.
- An increase of $28 million from non-controlling interests.
- An increase of $26 million from gain on foreign exchange rate translation of subsidiaries' financial statements and others.
- A decrease of $7 million from impact of new Thai Financial Reporting Standard No. 15 "Revenue from contracts with customers" that was effective in 2019.
- A decrease of $52 million from dividend payment.

4.4 Net debt-to-equity ratio as of 31 March 2019 reported at 1.07 times (31 December 2018: 1.07 times).

5. Statement of Consolidated Cash Flow

Statement of consolidated cash flows for the first quarter ended 31 March 2019 recorded an increase of net cash flow by $40 million (included the effect from unrealized gain on exchange rate translation of $3 million). The consolidated cash flows were divided into:

Statement of Cash Flows (Unit: Million USD)	Amount
Cash flows from operating activities	67
Cash flows from investing activities	(65)
Cash flows from finaning activities	35
Net increase (decrease) in cash and cash equivalents	**37**
Exchange gains (losses) on cash and cash equivalents	3
Cash and cash equivalents at the beginning of period	607
Cash and cash equivalents at end of period	**647**

5.1 Net cash inflow from operating activities of $67 million; with major operating items as follows;

- Collections from coal sales of $608 million
- Payments to contractors and suppliers of $412million
- Interest payments of $40 million
- Payments of corporate income tax of $30 million
- Royalty fee payments of $59 million

5.2 Net cash outflow from investing activities of $65 million; with major items as follows;

- Payments for machines, equipment and project in progress of $62 million
- Payments for investment in electronic vehicle (EV) development business and solar power business in Japan $22 million
- Payments for deferred charge of mine exploration, mine development and overburden of $34 million
- Payments for short-term investment of $2 million
- Payments for short term loan to related company of $4 million
- Dividend receipts from joint ventures of $59 million

5.3 Net cash inflow from financing activities of $35 million; comprised of

- Receipts from short term and long term loans from financial institutions and others of $425 million.
- Repayments of short term and long term loans from financial institutions and others of $ 390 million.

6.Coal Reserves

The quantity of sales and remaining of coal reserves for the first quarter ended 31 March 2019:

Source (Unit: Million Tons)	Quantity of Coal Sales and Reserves		
	Reserves as of 31-Dec-18	Sales 1st Quarter 2019	Reserves as of 31-Mar-19
1. Indonesia			
1.1 Jorong	4.97	0.32	4.65
1.2 Indominco	57.61	3.28	54.33
1.3 Kitadin	2.08	0.21	1.87
1.4 Trubaindo	33.6	0.88	32.72
1.5 Bharinto	133.74	0.52	133.22
2. Australia	321.27	2.12	319.15
3. China			
3.1 Gaohe	134.73	2.15	132.58
3.2 Hebi Zhongtai	17.12	0.31	16.81
Total	**705.12**	**9.79**	**695.33**

7. Natural Gas Reserves

The quantity of sales and remaining of natural gas reserves for the first quarter ended 31 March 2019:

Item (Unit: Million Cubic Feet)	Quantity of Natural Gas Sales and Reserves		
	Reserves as of 31-Dec-18	Sales 1st Quarter 2019	Reserves as of 31-Mar-19
Natural Gas	1,254,173	16,220	1,237,953
Total	**1,254,173**	**16,220**	**1,237,953**