Banpu Public Company Limited

and Subsidiaries

Management's Discussion and Analysis

The Group Performance

For the 2nd Quarter Ended 30 June 2020

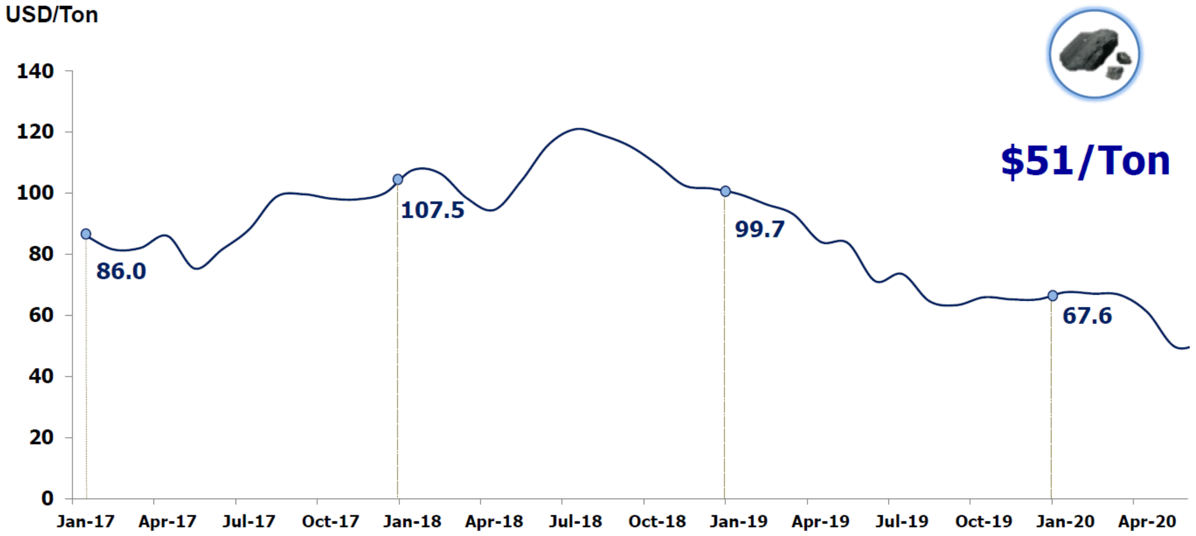
Banpu has been recognized as a member of Dow Jones Sustainability Indices (DJSI) since 2014.

In 2019, Banpu Public Company Limited received a rating of A (on a scale of AAA-CCC) in the MSCI ESG Ratings assessment.

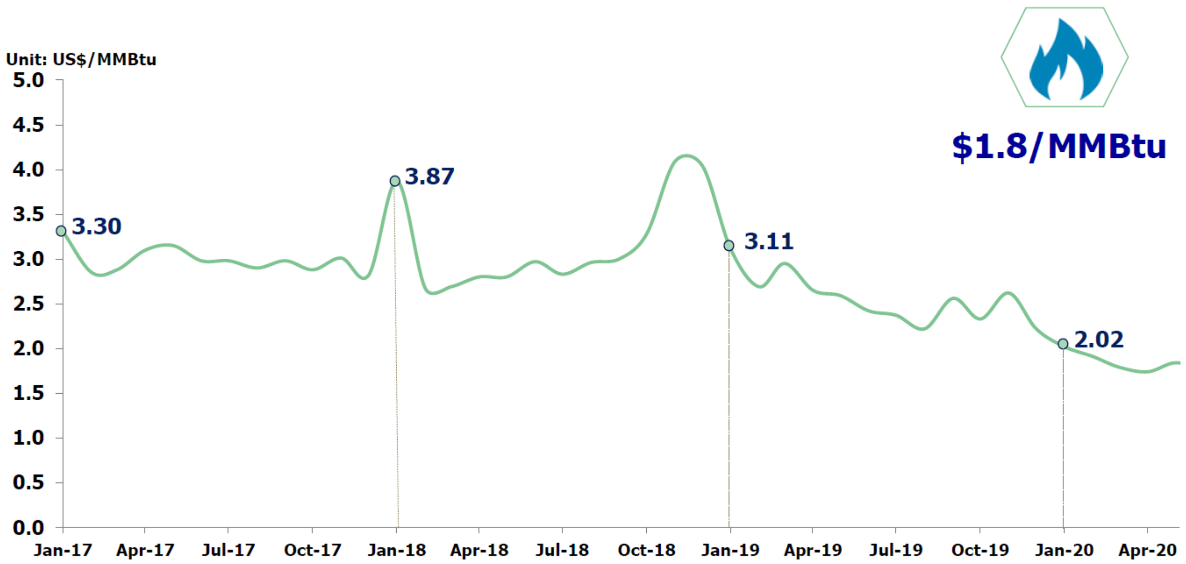
1. Energy Commodities Price Index

The market thermal coal and natural gas price since January 2017 as per below graphs that illustrate the coal and gas price indexes in the past periods.

Coal Price Index: The Newcastle Export Index (NEX) for January 2017 – June 2020



Average Henry Hub Natural Gas Price for January 2017 – June 2020



2. Management Discussion and Analysis

Global Economic in 2Q2020 was heavily impacted from the COVID-19 pandemic resulted in ongoing oversupply situation from the previous quarter in key commodities products including coal, oil and gas and impacted to Banpu energy resources operational performance. In addition, the weak diesel price supports on cost reduction program at Banpu coal mines and our power business continue to generate strong earning to support Banpu group performance.

Group EBITDA for 2Q20 was USD 71.9 million (- 56% QoQ), including EBITDA from coal of USD 37.4 million (-65% QoQ), EBITDA from gas of USD 1.6 million (+10% QoQ) and EBITDA from power of USD 32.9 million (-40% QoQ).

In this quarter, the rapid appreciation of Thai Baht against US Dollar at 30.89 THB/USD compare to the previous quarter resulted in an unrealize translation loss of USD 21million. Therefore, the company reported consolidated net loss of USD 79 million reduced by USD 83 million compare to the same period last year.

Indonesia coal achieved coal sale of 5.33 million tonnes, decreasing 8% QoQ due to the rainy season. The softening market prices impacted to The Average Selling Price (ASP) reported at 52.67 USD per tonne while cost of sale was well maintained at USD 41.23 per tonne resulted in Gross Profit Margin (GPM) of 22%. The company continued emphasis on cost reduction program to ensure the ability to generate positive margin.

Australia reported stable operation performance with coal sale volume of 3.09 million tonnes. The ASP remained firm at AUD 81.56 per tonne; however, Clarence mine and Springvale mine encountered unfavorable mining condition, therefore the average coal cost was at A$84.63 and gross profit margin was reported at negative 3%

China coal reported equity income of USD 7 million due to resilient coal sale and cost normalization. The outbreak of COVID-19 pandemic did not significantly impacted coal mining operation as coal is still being considered a critical energy provider for residential and industrial use.

Shale gas business in the US reported the lower sale volume of 15.9 Billion Cubic Feet (Bcf). The continued oversupply in the market resulted in the 44% drop in ASP to USD 0.52 per Million cubic feet (Mcf). In this quarter, the company also perform investment restructuring by corporatization of BKV Corporation on 1st May 2020, and realized one-time expenses of USD 30.84 million however this item was non- cash transaction so it has no impact to the company cash flow.

In power business, the Combined Heat and Power (CHP) plants in China contributed net profit of USD 2 million. BLCP maintain 100% high electricity dispatch rate reported in an equity contribution of USD 15 million. HPC reported equity income of USD 13 million as unit 3 underwent yearly major maintenance.

Renewable and Energy technology business continue to progress well with the ongoing development in providing solid electricity generation from solar farm both in China and Japan. While projects under construction are progressing well. The company still maintain its strict measures to prevent any impact from COVID-19 in all operations while remain cautious in utilizing the capital expenditure to ensure the liquidity and cash flow generation.

3. Group Performance Analysis

The analysis and explanation of Banpu Group performance for the 2nd quarter ended 30 June 2020 and 2019 as follows:

Consolidated Statement of Income for the 2nd quarter ended 30 June 2020 and 2019

Consolidated financial performance (Unit: Million USD)	2Q20	2Q19	Change Inc/(Dec)	%
		Restated		
Sales and service income	518	731	(213)	-29%
Cost of sales and services	(456)	(569)	(113)	-20%
Gross profit	62	162	(100)	-62%
Selling expenses	(39)	(41)	(2)	-5%
Administrative expenses	(46)	(54)	(8)	-15%
Investment restructuring expense	(31)	-	31	100%
Royalty fee	(44)	(63)	(19)	-30%
Share of profit from joint ventures and associates	31	77	(46)	-60%
Other income	7	(13)	20	154%
Finance cost	(46)	(47)	1	-2%
Profit (Loss) before income taxes	(106)	21	(127)	n.a.
Income taxes	34	-	34	100%
Profit (Loss) for the period	(72)	22	(94)	n.a.
Owners of the parent	**(78)**	**4**	(82)	**n.a.**
Non-controlling interests	**6**	**18**	(12)	**-67%**
Earnings (Loss) per share (Unit : USD)	(0.016)	0.001	(0.017)	n.a.

In order to manage risks caused by COVID-19 pandemic that has a significant impact on worldwide economic, the group has focused on cost management and production efficiency to cope with the uncertainty of the global economic and volatility of energy commodities price in the future.

The group performance in 2Q2020 reported net loss at $79 million, decreased by $83 million compared to 2Q2019 mainly from investment restructuring expense in natural gas business of $31 million that was non- cash transaction but affected to the net profit of this quarter, moreover, a decrease of coal and natural gas sales volume and sales price aligned with global economic and also from an appreciate of THB currency against USD currency which resulted in to loss on exchange rate of $21 million. Whereas, cost management program has provided a favor outcome in this quarter. Details were described as follows;

3.1 Sales and cost of sales

(Unit: Million USD)	Revenue 2Q20	Revenue 2Q19	Revenue Inc.(Dec.)	Cost of Sales 2Q20	Cost of Sales 2Q19	Cost of Sales Inc.(Dec.)
Coal Business	453	645	-30%	396	497	-20%
Natural Gas Business	11	25	-56%	16	17	-6%
Power & Steam Business	41	41	0%	31	34	-9%
Others	13	20	-35%	13	21	-38%
Total	**518**	**731**	**-29%**	**456**	**569**	**-20%**

Sales

Sales reported at $518 million (equivalent THB 16,637 million), decreased by $213 million compared to 2Q2019. This was a decrease of $192 million from coal businesses, a decrease of $14 million from natural gas business, and a decrease of others of $7 million. Details of revenue were described as follows:

1. Sales from coal business of $453 million or 87% of total revenue separated by source of coal as below:
    - Indonesia coal mines of $220 million
    - Australia coal mines of $172 million
    - Others of $61 million
2. Sales from natural gas business in USA of $11 million or 2% of total revenue.
3. Sales from Power and steam of $41 million or 8% of total revenue derived from Combined Heat and Power (CHP) plants and solar power plants in China.
4. Others of $13 million represented 3% of total revenue. A decrease of $7 million was mainly from fuel trading business of a subsidiary in Indonesia.

1.Coal Business

Coal Business		2Q20	2Q19	Inc.(Dec.)
Sales Volume	Million Tonnes	8.45	9.36	-10%
Average selling price	$/Tonne	53.92	68.59	-21%
Average Cost of sales	$/Tonne	46.83	51.84	-10%

Coal sales of $453 million, decreased by $192 million or 30%. This was a decrease of sales volume by 0.91 million tonne and average selling price by $14.67 per tonne compared to 2Q2019 as following :

Indonesia Mines		2Q20	2Q19	Inc.(Dec.)
Sales Volume	Million Tonnes	5.33	6.49	-18%
Average selling price	$/Tonne	52.67	67.00	-21%
Average Cost of sales	$/Tonne	41.23	47.96	-14%

Coal Business in Indonesia

- **Sales volume**

  Coal sales volume was 5.33 million tonnes, decreased by 1.19 million tonnes compared to 2Q2019.

- **Average selling price**

  Average selling price per tonne was $52.67, decreased by $14.33 or 21% compared to 2Q2019, in accordance with a decrease of global coal market price.

- **Average cost of sales**

  Average cost of sales per tonne was $41.23, decreased by $6.73 or 14% compared to 2Q2019. This was due to the better cost management to cope with a decrease in global coal market price, while still maintain coal quality, including quality development to meet customer demand and retain in the long run. A decrease in average cost of sales was mostly from a decrease in stripping ratios from 11.58 to 10.80 and a decrease of oil price as global coal market price during the quarter which the average cost per liter of oil price per was $0.31 (2Q2019 : $0.65 per liter), also from a favor outcome from cost reduction program implemented across the group.

Australia Mines		2Q20	2Q19	Inc.(Dec.)
Sales Volume	Million Tonnes	3.09	2.82	10%
Average selling price	A$/Tonne	81.56	99.39	-18%
Average Cost of sales	A$/Tonne	84.26	88.57	-5%

Coal business in Australia

- **Sales volume**

  Coal sales volume was 3.09 million tonnes, increased by 0.27 million tonnes or 10% compared to 2Q2019. This was from an increase of investment in Springvale mine from 50% shareholdings to be 100% shareholdings since prior year, resulted to higher sales volume in this quarter.

- **Average selling price**

  Average selling price per tonne was A$81.56, decreased by A$17.83 or 18% compared to 2Q2019 as the following:

Australia Mines	Sales Volume (Unit: Million Tonnes)			Avg. Price/Tonne (A$/Tonne)		
	2Q20	2Q19	Inc.(Dec.)	2Q20	2Q19	Inc.(Dec.)
Domestic	2.19	1.50	46%	77.16	78.87	-2%
Export	0.90	1.32	-32%	92.19	122.72	-25%
Total	**3.09**	**2.82**	**10%**	**81.56**	**99.39**	**-18%**

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

  Average domestic selling price per tonne was A$ 77.16, decreased by A$1.71 due to a less portion of sales from high valued contracts. Average export selling price per ton was A$92.19 decreasing from 2Q2019 driven by global coal market price. Whereas, a depreciation of AUD currency against USD currency promoted higher revenue in AUD currency when converted from USD export sales, then higher average selling price. Average exchange rate of AUD/USD was $ 0.6570 (2Q2019: $ 0.6992).

- **Average cost of sales**

  Average cost of sales per tonne was A$84.26, decreased by A$4.31 from higher production volume compared to 2Q2019. Coal production volume was 3 milion tonnes (2Q2019: 2.1 million tonnes). However, Myuna mine and Springvale mine encountered the difficulty in geology mining conditions that affected to a higher of average cost of sales, whereas average selling price was more decreased as driven by global market price.

2. Natural Gas Business

Natural Gas Business		2Q20	2Q19	Inc.(Dec.)
Sales Volume	Bcf	15.90	17.10	-7%
Average selling price	$/Mcf	0.52	1.30	-60%
Average Cost of Sales	$/Mcf	1.03	1.00	3%

Natural gas business in US

Sales from natural gas business of 2Q2020 reported at $11 million, decreased by $14 million or 56% as following details:

- **Sales Volume**

  Natural gas sale volume was 15.90 billion cubic feet, decreased by 7% compared to 2Q2019 in line with a decrease of production that driven by a decline of consumption demand which impacted from COVID19 pandemic in US.

- **Average Selling Price**

  Average selling price was $0.52 per thousand cubic feet, decreased by 60 % from 2Q2019. This was a consequence of high level of stock reserves since last winter in 2019 which was not as cold as usual and affected to a decrease in demand since then.

- **Average Cost of Sale**

  Average cost of sales was $1.03 per Mcf, increased by 3% compared to 2Q2019 from a higher depletion rate. For US gas business, depletion rate is calculated from gas reserve which is calculated based on average price from a previous year. Therefore, a decrease in average price, would result in a decrease in gas reserves and then a higher depletion rate per Mcf. However, depletion is non- cash expense and has no impact to cash flows. Thus, our gas business still generates cash margin.

3. Power Business

Sales from Power and Steam of $41 million or 8% of total revenue was from sales from CHP plant and solar power plant in China. Details were described as follows:

Power Business		Combined Heat & Power Plants (CHP)			Solar Power Plants		
		2Q20	2Q19	Inc.(Dec.)	2Q20	2Q19	Inc.(Dec.)
Sales Volume	GWh	362.29	347.91	4%	66.55	59.64	12%
Steam Volume	Million Tonnes	1.14	0.99	15%	N/A	N/A	N/A
Average PowerTariff	RMB/kWh	0.36	0.37	-3%	0.83	0.83	0%
Average Steam Price	RMB/Tonne	92.62	100.35	-8%	N/A	N/A	N/A

Combined Heat and Power (CHP) plants in China

Sales from power, steam, and others from 3 CHP plants in China $33 million, slightly increased compared to 2Q2019. This was mainly from increasing in sales volume of electricity and steam as detail below:

- **Sales Volume**

  Sales volume of 362 GWh, increased by 14.38 GWh from prior year, whereas steam sales of 1.14 tonne million, increased by 0.15 tonne million compared to 2Q2019 from a higher demand for electricity and steam consumption from Zouping power plant.

- **Average Selling Price**

  A decrease of average power tariff by RMB 0.01 per kWh ,driven by a decrease in cost of coal which is main fuel, mostly from Zouping power plant compared to 2Q2019.

- **Cost of Sale**

  Average cost of sales $29 million, decreased by $2.80 million was from a decrease of coal cost that was main fuel by RMB 65 per tonne compared to 2Q2019. Average coal cost was RMB 540 per tonne (2Q2019: RMB 605 per tonne).

Solar power plants in China

Sales from solar power plants in China reported at $7.62 million. An increase of $0.53 million compared to 2Q2019.

- **Sales Volume**

  An increase of solar power sales volume was derived from Jixin solar power plant that was acquired since July 2019. However, most of solar power plant faced a decrease in operating performance from weather conditions and higher curtailment from the government compared to 2Q2019.

- **Average Power Tariff**

  Average power tariff was RMB 0.83, that was similar to 2Q2019.

- **Cost of Sales**

  An increase of cost of sales was align with a higher sales volume from a new solar power plant since 3Q2019.

Administrative expense

Administrative expenses reported at $46 million, decreased by 8 million or 15%. This was because the group has focused on cost management to cope with slowdown of global economic. Main decrease was from professional fees and others, including domestic and overseas traveling expense.

Investment restructuring expense in natural gas business

Administration expense of $30.80 million was a recognition of a non-cash transaction related to converting of interests in BKV Oil & Gas Capital Partners, L.P. as a limited partner to be a capital contribution through BKV corporation that was corporatized since May 1, 2020.

Royalty fees

Royalty fees reported at $44 million, decreased by $19 million or 31% was from a decrease of royalty fees from Indonesia mines $18.60 million and from Australia mines by $0.73 million caused by a decrease in coal sales price and volume compared to 2Q2019.

Profit sharing (Unit : Million USD)	**2Q20**	**2Q19**	**Inc.(Dec.)**
BLCP	15	11	36%
Hongsa & Phufai Mining	13	33	-61%
Holding Company of Solar Power in Japan	(4)	(0)	981%
Coal business in China	7	34	-79%
Total	**31**	**77**	**-59%**

Share of profit from joint ventures and associates

Profit sharing from joint ventures and an associate reported $31 million, decreased by $46 million or 59 % compared to 2Q2019 with major details described as below:

1) Recognition of profit sharing from BLCP of $15 million, increased by $4 million. In 2Q2020, there was gain on exchange rate translation $3 million, and operating performance $12 million.

2) Recognition of profit sharing from Hongsa power and PhuFai mining in Laos of $13 million, decreased by $20 million from operating performance of $16 million caused by temporary cease operation of unit no.3 from overhaul, and the effects from foreign exchange rate translation of $3 million.

3) Recognition of shares of profit from coal business in China of $7 million, decreased by $27 million from a decrease of sales volume and selling price aligned with market price compared to 2Q2019.

Other income

Other income of $7 million comprised of:

1) Net loss on foreign exchange rate of $21 million was mainly from unrealized gain on foreign exchange rate translation on THB currency borrowings, as result of an appreciation of THB currency against USD currency compared to prior year. Average exchange rate of USD/THB as of 30 June 2020 was THB 30.89 (31 March 2019: THB 32.67).

2) Net gain from financial derivatives of $19 million comprised of:
   - Realized gain from financial derivatives of $18 million derived from coal swap contracts of $11 million, fuel swap contracts of $8 million, foreign exchange rate forward contracts $2 million. Whereas, realize loss from interest rate swap contracts of $3 million and cross currency swap of $0.04 million.
   - Unrealized gain on fair value of financial derivatives at the end of period of $1 million was mainly from foreign exchange rate forward contracts.

3) Management fee income and others of $9 million was from:
   - Interest income of $3 million.
   - Dividend income of $1 million.
   - Government subsidy of $1 million from residential steam.
   - Sales of ashes, slag and scraps from mines, power plants and others of $4 million.

Corporate income tax

Corporate income tax of $34 million, increased by $34 million was mainly from:

1) A decrease of $8 million was from a decrease of operating profits compared to 2Q2019.

2) A decrease of withholding tax of $1 million caused by a decrease of dividend income during the period, and from withholding tax of interest paid of subsidiaries that was nil in this quarter.

3) A decrease of income tax of $25 million was from reversal of net deferred income tax asset that is a timing different of recognition period between tax and accounting basis on foreign exchange rate translation of financial statement.

4. Statements of Consolidated Financial Position

Statements of Consolidated Financial Position as of 30 June 2020 in comparison with the Statements of Consolidated Financial Position as of 31 December 2019.

Financial Position (Unit: Million USD)			**Inc.(Dec.)**	
	30-Jun-20	**31-Dec-19**	**Amount**	**%**
		Restated		
Assets	8,607	8,069	538	7%
Liabilities	6,163	5,434	729	13%
Equity	2,444	2,635	(191)	-7%

4.1 Total assets of $8,607 million, increased $537 million compared to total assets as of 31 December 2019 with main details described as below:

Financial Position (Unit: Million USD)	**Assets**		**Inc.(Dec.)**	
	30-Jun-20	**31-Dec-19**	**Amount**	**%**
		Restated		
Cash and Cash equivalent	921	433	488	113%
Short-term investments	-	110	(110)	-100%
Financial assets measured at fair value through profit or loss	7	-	7	100%
Trade accounts receivable and note receivables, net	206	246	(40)	-16%
Other current assets	469	573	(104)	-18%
Total Current Assets	1,603	1,362	239	18%
Dividend receivables from related parties	19	21	(2)	-8%
Investments in an associate and joint ventures	1,602	1,485	117	8%
Other investments, net	-	144	(144)	-100%
Financial assets measured at fair value through other comprehensive income	153	-	153	100%
Property, plant and equipment, net	1,869	1,950	(81)	-4%
Deferred exploration/stripping costs, net	950	920	30	3%
Mining property rights, net	1,282	1,318	(36)	-3%
Goodwill	409	398	11	3%
Right of use assets	82	-	82	100%
Other non- current assets	638	471	167	35%
Total Non-Current Assets	7,004	6,707	297	4%
Total Assets	8,607	8,069	538	7%

- Cash and cash equivalents of $921 million, increased by $488 million. (As explanation in no.5 Consolidated Statement of Cash Flows)
- Financial assets measured at fair value through profit or loss of $7 million was fixed deposits with local bank in China.
- Current portion and non-current portion of dividend receivable from related parties of $1 million and $19 million, respectively, decreased by $1 million were dividend receivable from joint ventures who operates power business in Thailand. This was a net result of:
    1. A decrease from received dividend during the period of $16 million.
    2. An increase from additional declared dividend during the period of $16 million.
    3. A decrease from the effects of foreign exchange rate translation at the end of period of $1 million.
- Investment in joint ventures and associates of $1,602 million, increased by $117 million or 8% was from:
    1. An increase from addition of investments in an associate company in Singapore of $85 million.
    2. An increase from recognition of profit sharing recognized by $78 million.
    3. A decrease from dividend received during the period of $16 million.
    4. A decrease from the effects of foreign exchange rate translation at end of period and others by $29 million.
    5. A decrease from the adoption of new Thai Financial Reporting Standard No.9 (TFRS 9) "Financial instruments" that was effective in 2020 resulted in accounting entry adjustment of $1 million.
- Financial assets measured at fair value through other comprehensive income (FVOCI) or other investment (as presented in statement of financial position of 2019) $153 million, increased by $9 million. This was due to an additional investment in solar power plant in Japan under form of TK (Tokumai Kumiai) agreement of $5 million, including an increase from the impact of fair value adjustment of $21 million under new accounting standard no.9 (TFRS 9). Moreover, there was capital refunds that was reclassified to be receivable of $20 million from Goudou Kaisha Okei Photovoltaic Generation Plant (Aizu Wakamatsu Project) and Goudou Kaisha J&A Energy (Project:Iwate) because the counter party was unable to follow conditions under the agreement. And an increase from the effects of foreign exchange rate and others of $3 million.
- Property plant and equipment of $1,869 million, decreased by $81 million derived from:
    1. An increase from additions of machine and equipment of coal business, natural gas business and power business total of $45 million.
    2. A decrease from depreciation charges for the period of $98 million.
    3. A decrease from the effects of foreign exchange rate translation at end of period and others of $22 million.

4. A decrease from reclassification to be right-of-use asset of $6 million according to new Thai Financial Reporting Standard No. 16 (TFRS 16) “Leases” that was effective in 2020.

- Right-of- use assets of $82 was recognized from applying TFRS 16 “Leases” that was effective in 2020.
- Other non-current assets of $638 million, increased by $167 million. This was an increase from deposits for Barnett project acquisition of $170 million, an increase from accrued subsidy income from solar power plants in China of $8 million, an increase in restricted deposit in Indonesia of $4 million, and others of $3 million; whereas, a decrease was from a reclassification of land used right to be right of use assets of $10 million, a decrease from warrants exercised that was reclassified to be an investment of $9 million.

4.2 Total liabilities of $6,163 million, increased by $729 million compared to total liabilities as of 31 December 2019 with movement details as described below:

Financial Position (Unit: Million USD)	**Liabilities**		**Inc.(Dec.)**	
	30-Jun-20	**31-Dec-19**	**Amount**	**%**
		Restated		
Short-term loans from financial institutions	1,022	455	567	125%
Trade accounts payable	69	60	9	15%
Current portion of long-term borrowings, net	269	363	(94)	-26%
Current portion of debenture, net	301	176	125	71%
Accrued overburden and coal transportation costs	69	74	(5)	-6%
Financial derivative liabilities due in one year	22	2	20	984%
Other current liabilities	420	430	(10)	-2%
Total current liabilities	2,172	1,560	612	39%
Long-term loans from other company	2,016	1,796	220	12%
Debentures, net	1,480	1,644	(164)	-10%
Financial derivative liabilities, net	43	21	22	105%
Other liabilities	452	413	39	9%
Total non-current liabilities	3,992	3,874	117	3%
Total liabilities	6,164	5,434	729	13%

- Short-term loans from financial institutions of $1,022 million, increased by $567 million was additional loans of $789 million, repayment of $223 million, and the effects of foreign exchange rate translation at the end of period of $1 million.
- Current portions of long- term loans of $269 million, decreased by $94 million was due to a decrease from repayment of $179 million and the effects of foreign exchange rate translation at the end of period of $5 million, while an increase from reclassification from non-current portion of $90 million.

- Current portions of debenture of $301 million, increased by $125 million from the reclassification from non-current portion of $130 million and a decrease from the effects of foreign exchange rate translation at the end of period of $5 million.
- Accrued overburden and coal transportation expenses of $69 million, decreased by $5 million or 6% was mainly from mining operations of subsidiaries in Indonesia.
- Long- term loans of $2,016 million, increased by $220 million or 12% was a net result of:
  1. An increase from additional loan of $319 million.
  2. A decrease from reclassification to current portion of $90 million.
  3. A decrease from the effects of foreign exchange translation at the end of period of $8 million. Mainly was from AUD currency loan due to a depreciation of AUD currency against USD currency. Average exchange rate of AUD/USD as of 30 June 2020 was $0.6869 (31 Dec 2019: $0.6981).
- Debenture of $1,480 million, decreased by $164 million or 10% from reclassification to be current portion of $130 million and from the effects of foreign exchange rate translation at the end of period of $34 million.
- Current portion and non-current portion of derivative liabilities reported at $22 million and $43 million, respectively, total of $65 million. This was changes in fair value of financial derivatives at the end of period, that consisted of cross currency swap contracts of $9 million, interest rate swap contracts of $38 million, fuel swap contracts $18 million.

4.3 Shareholders' equity of $2,447 million, a decrease of $191 million was mainly due to;

Financial Position (Unit: Million USD)	Equity		Inc.(Dec.)	
	30-Jun-20	31-Dec-19	Amount	%
		Restated		
Equity attributable to owners of the parent	1,825	2,028	(203)	-10%
Non-controlling interests	619	607	12	2%
Total equity	2,444	2,635	(191)	-7%

- A decrease of $24 million from net profit for the six-month period ended Q2020.
- An increase of $11 million from non-controlling interests.
- A decrease of $77 million from the effects of foreign exchange rate translation of subsidiaries' financial statements and others.
- A decrease of $83 million from fair value reserves for financial assets (other investment) and cash flows hedge reserves.
- An increase of $42 million from impact of new Thai Financial Reporting Standard No. 9 "Financial instrument" that was effective in 2020.
- A decrease from dividend payment of $59 million.

4.4 Net debt-to-equity ratio as of 30 June 2020 reported at 1.34 times (31 December 2019: 1.23 times).

5. Statement of Consolidated Cash Flow

Statement of consolidated cash flows for the six-month period ended 30 June 2020 presented an increase of net cash flow by $487 million (included the effect from unrealized loss on exchange rate translation of $10 million). The consolidated cash flows were divided into:

Statement of Cash Flows (Unit: Million USD)	**Amount**
Cash flows from operating activities	126
Cash flows from investing activities	(262)
Cash flows from finaning activities	633
Net increase in cash and cash equivalents	**497**
Exchange loss on cash and cash equivalents	(10)
Cash and cash equivalents at the beginning of period	433
Cash and cash equivalents at end of period	**920**

5.1 Net cash inflow from operating activities of $132 million; with major operating items as follows;

- Collections from coal sales of $1,215 million.
- Payments to contractors and suppliers of $754 million.
- Interest payments of $91 million.
- Payments of corporate income tax of $51 million.
- Royalty fee payments of $182 million.
- Others received of $5 million.

5.2 Net cash outflow from investing activities of $268 million; with major items as follows;

- Payments for machines, equipment and project in progress of $50 million.
- Payments for investment in renewable energy business and solar power business in Japan $90 million.
- Payments for deferred charge of mine exploration, mine development and overburden of $97 million.
- Payments for deposit for investment of $100 million.
- Payment for restructuring of investment of $ 8 million.
- Payment for short-term loan to a related party of $37 million.
- Payment for financial assets measured at fair value through profit or loss of $21 million.
- Receipts from financial assets measured at amortized cost of $102 million.
- Dividend receipts from joint ventures of $16 million.
- Interest income and others of $17 million.

5.3 Net cash inflow from financing activities of $633 million; comprised of

- Receipts from short term and long - term loans from financial institutions and others of $1,107 million.
- Repayments of short term and long - term loans from financial institutions and others of $ 415 million.
- Dividend payment of $59 million.