

Part 2
Business Information

1. General Information

Name and address of company

Name of Company: Banpu Public Company Limited

Address: 27th Floor , Thanapoom Tower, 1550 New Petchburi Road,
Makkasan, Ratchathewi, Bangkok 10400

Telephone: 02-694-6600

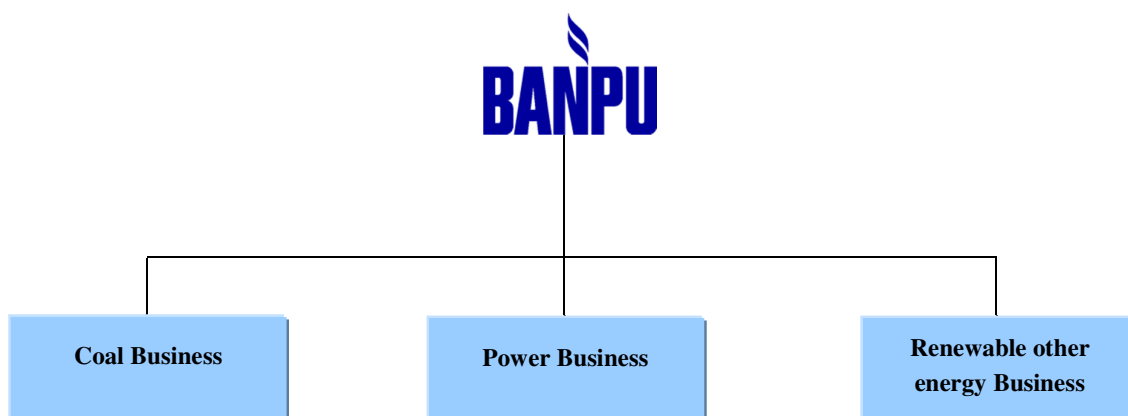
Fax: 02-207-0696-8

Web site: www.banpu.co.th

2. Type of Business and Core business of company

2.1 Overall image in conducting business of the company

Nowadays, Banpu Public Company Limited, subsidiary and associate company, conducts major important business, which are coal business, power business and renewable and other energy businesses details as of 31 December 2015 are as follows:



Coal Business consists of Subsidiaries and associates below

Company	Type of Business	Shareholding percentage
1) Banpy Public Company Limited(BP)	Energy	-
2) Banpu Minerals Company Limitid. (BMC)	Coal Mining and Trading	99.99%
3) Silamani Corporation Limited (SLM)	Coal Trading	99.99%
4) Silamani Marble Corporation Limited (SLMM)	Coal Trading	99.96%
5) Banpu International Limited (BPI)	Investment in coal mining	99.99%
6) Chiang Muan Mining Company Limited (CMMC)	Coal Mining and Trading	100.00%
7) Banpu Singapore Pte.Ltd. (BPS)	Coal Trading	100.00%
8) Banpu Minerals (Singapore) Pte.Ltd. (BMS)	Investment in coal mining	100.00%
9) PT.Indo Tambangraya Megah Tbk (ITM)	Construction in mining, electricity support business, transportation, workshop, general trading, trading, service in Indonesia	65.14%
10) PT.Indominco Mandiri (IMM)	Coal Mining in Indonesia	99.99%
11) PT.Kitadin (KTD)	Mining, contractor & trading in Indonesia	99.99%
12) PT.Trubaindo Coal Mining (TCM)	Coal Mining in Indonesia	99.99%
13) PT.Jorong Barutama Greston (JBG)	Coal Mining in Indonesia	99.99%
14) PT.Bharinto Ekatama	Coal Mining in Indonesia	99.00%
15) PT Tambang Raya Usaha Tama	Mining contractor	99.99%

Company	Type of Business	Shareholding percentage
16) PT. ITM Indonesia	Coal trading including coal agent and coal blending	99.99%
17) PT. ITM Energi Utama	Energy business	99.99%
18) PT. ITM Batubara Utama	Coal mining business	99.99%
19) BMS Coal Sales Pte. Ltd.	Coal trading including coal agent and coal blending	100.00%
20) BP Overseas Development Co., Ltd	Investment in coal mining	100.00%
21) Banpu Coal Investment Co., Ltd.	Investment in coal mining	100.00%
22) Asian American Coal Inc. (AACI)	Investment in coal mining	100.00%
23) AACI SAADEC (BVI) Holdings Limited	Investment in coal mining	100.00%
24) Shanxi Gaohe Energy Co., Ltd. (Gaohe)	Investment in coal mining	45.00%
25) Hebi Zhong Tai Mining Co.Ltd. (Hebi)	Investment in coal mining	40.00%
26) Phu Fai Mining Company Limited	Investment in coal mining	37.50%
27) Banpu Australia Co. Pty Ltd.	Investment in coal mining in Australia	100.00%
28) Banpu Australia Resources Pty. Ltd.	Investment in coal mining	100.00%
29) Centennial Coal Company Ltd	Coal Mining and Marketing	100.00%
30) Centennial Inglenook Pty Ltd.	Coal Mining	100.00%
31) Centennial Coal Sales & Marketing Pty Ltd	Coal Mining	100.00%
32) Centennial Northern Coal Services Pty Ltd.	Employer Company for Newstan Washery	100.00%
33) Centennial Airly Pty Ltd.	Coal Mining	100.00%
34) Berrima Coal Pty Ltd.	Dormant	100.00%
35) Centennial Angus Place Pty Ltd.	Coal Mining	100.00%
36) Centennial Coal Infrastructure Pty Ltd.	Coal exporting logistics and infrastructure	100.00%
37) Centennial Fassifern Pty Ltd.	Coal Mining	100.00%
38) Centennial Northern Mining Services Pty Ltd.	Employer Company for Newstan	100.00%
39) Centennial Mandalong Pty Ltd.	Coal Mining	100.00%
40) Centennial Mannering Pty Ltd.	Coal Mining	100.00%
41) Centennial Munmorah Pty Ltd.	Coal Mining	100.00%
42) Centennial Myuna Pty Ltd.	Coal Mining	100.00%
43) Centennial Newstan Pty Ltd.	Coal Mining	100.00%
44) Centennial Springvale Pty Ltd.	Coal Mining	100.00%
45) Charbon Coal Pty Ltd.	Coal Mining	100.00%
46) Ivanhoe Coal Pty Ltd.	Coal Mining	100.00%
47) Coalex Pty Ltd.	Coal Mining - Clarence JV	100.00%
48) Centennial Clarence Pty Ltd.	Coal Mining - Clarence JV	100.00%
49) Hartley Valley Coal Company Pty Ltd.	Dormant	100.00%
50) Powercoal Employee Entitlements Company Pty Ltd.	Employee Trust Company Ex Powercoal	100.00%
51) Centennial Drilling Services Pty Ltd.	Dormant	100.00%
52) Elcom Collieries Pty Ltd.	Dormant	100.00%
53) Huntley Colliery Pty Ltd.	Dormant	100.00%
54) Mandalong Pastoral Management Pty Ltd.	Dormant	100.00%
55) Powercoal Pty Ltd.	Dormant Holding company	100.00%
56) Collieries Superannuation Pty Ltd.	Superannuation Company	100.00%

Company	Type of Business	Shareholding percentage
	(Dormant)	
57) Powercoal Superannuation Pty Ltd.	Superannuation Company (Dormant)	100.00%
58) Centennial Springvale Pty Ltd.	Coal Mining	100.00%
59) Springvale Coal Pty Ltd.	Coal Mining	100.00%
60) Boulder Mining Pty Ltd	Coal Mining	100.00%
61) Springvale Coal Sales Pty Ltd.	Coal Marketing	50.00%
62) Clarence Coal Investments Pty Ltd.	Coal Mining - Clarence JV	100.00%
63) Clarence Colliery Pty Ltd.	Coal Mining - Clarence JV	100.00%
64) Clarence Coal Pty Ltd.	Coal Mining - Clarence JV	100.00%
65) AFE Investments Pty Limited	Mining Investment	100.00%
66) Port Kembla Coal Terminal Ltd.	Ship loading Coal Port	16.66%
67) Hunnu Coal Pty Ltd	Coal mining and trading	100.00%
68) Hunnu Investment Pty Ltd.	Foreign Trade	100.00%
69) Hunnu Resources LLC	Foreign Trade	100.00%
70) Munkh Sumber Uul LLC	Foreign Trade	100.00%
71) Golden Gobi Mining LLC	Foreign Trade Mineral exploration	100.00%
72) Great East Minerals LLC	Foreign Trade Mineral exploration	70.00%
73) Bilegt Khairkhan Uul LLC	Foreign Trade Mineral exploration	100.00%
74) Hunnu Power LLC	Foreign Trade	100.00%
75) Borganchan LLC	Foreign Trade	100.00%
76) Hunnu Altai Minerals LLC	Foreign Trade Mineral exploration	100.00%
77) Hunnu Altai LLC	Foreign Trade, Minerals Mining	100.00%
78) Munkhnoyon Suvraga LLC	Foreign Trade, Minerals mining, Tourism and Construction	90.00%
79) Hunnu Gobi Altai LLC	Foreign Trade Mineral exploration	80.00%

Power Business consists of Subsidiaries and associates below

Company	Type of Business	Shareholding percentage
80) Banpu Power Public Company Limited (BPP)	Investment in Power	99.99%
81) Banpu Coal Power Limited (BPCP)	Investment in Power	99.99%
82) Banpu Power International Ltd. (BPPI)	Investment in Power	100.00%
83) Banpu Power Investment Co., Ltd. (BIC)	Investment in Power	100.00%
84) Shijiazhuang Chengfeng Cogen Co., Ltd (Zhending)	Power and heat production and Sales	100.00%
85) Banpu Investment (China) Co., Ltd.	Investment in Power	100.00%
86) Zouping Peak Pte. Ltd.	Power and heat production and Sales	100.00%
87) Pan-Western Energy corporation (LLC)	Investment in Power	100.00%
88) Zouping Peak CHP Co.,Ltd. (Zouping)	Power and heat production and	100.00%

	Sales	
89) Tangshan Banpu Heat and Power Co., Ltd. (Luannan)	Power and heat production and Sales	100.00%
90) BLCP Power Ltd. (BLCP)	Investment in consultancy services to the operator of power generation	50.00%
91) Hongsa Power Company Limited	Power generation and Sales	40.00%
92) Shanxi Lu Guang Power Co., Ltd.	Power and heat production and Sales	30.00%

Renewable and Other Energy Business consists of Subsidiaries and associates below

Company	Type of Business	Shareholding percentage
93) Banpu Engineering Services Co.,Ltd.	Investment in alternative energy	99.99%
94) Biofuel Development Holdings Company Limited	Investment in alternative energy	99.99%
95) Prachuab wind Energy Company Limited	Investment in alternative energy	99.99%
96) Banpu Renewable Energy Co.,Ltd.	Investment in alternative energy	99.99%
97) Banpu Energy Services (Thailand) Co.,Ltd.	Investment in alternative energy	99.99%
98) BOG Co., Ltd.	Investment in energy business	99.99%
99) Banpu Renewable Energy International Limited	Investment in alternative energy	100.00%
100) Banpu Energy Services Japan Co., Ltd.	Investment in alternative energy	100.00%
101) Banpu Renewable Singapore Ptd. Ltd.	Investment in alternative energy	100.00%
102) Banpu North America Corporation	Investment in oil and gas business	100.00%
103) Akira Energy Limited	Investment in alternative energy	100.00%
104) Akira Energy (South) Limited	Investment in alternative energy	100.00%
105) Akira Hokkaido Limited	Investment in alternative energy	100.00%
106) Hokkaido Solar Estate	Land owner of Solar project	100.00%
107) Aura Land Development Pte. Ltd.	Investment in alternative energy	75.00%
108) Aizu Energy Pte. Ltd.	Investment in alternative energy	75.00%
109) BPPR Co.Ltd.	Investment in consultancy services to the operator of power generation	75.00%
110) BPPR Japan Co., Ltd.	Consultancy services to the operator of power generation in Japan	75.00%
111) Ratchasima Green Energy Company Limited	Investment in alternative energy	30.00%

- The policy in dividing business operation of affiliated company

The company and subsidiary company of Coal business that produces coals will sell coals in domestic markets and foreign markets. The price selling to general customers are set by following the market price. Moreover, the company restructures the marketing by using products distribution center in Singapore to facilitate and increase effectiveness in responding to the customers' needs.

The subsidiary company of Power business manage to produce and sell electricity from huge Coal fired power plant that located in Thailand, People's Republic of China, Lao People's Democratic Republic. Furthermore, the company also expands the investment in solar thermal electricity business in Japan.

2.2 Nature of the products or services

(1) Coal Business

Coal is a solid fuel; the color is normally ranged from dark brown to black. The production process of coal starts from exploring coal sources that has commercial potential, producing (excavating and transporting), selecting coals, pulverizing coals to get the size and quality that meet customers' required and put them in the mine to deliver to the customers.

A. Coalmines in Republic of Indonesia the overall amount of production in 2015 is 28.5 million tons per year, consist of:

1) **Indomico mine** processed by PT. Indominco Mandiri, which the company holds 65.13 percent shares. It is located in Bontang, East Kalimantan province. There are 75.3 million tons of coal reserves, and the production is around 13.3 million tons per year. They use an open-pit mining method. Indomico mine has the port that can support the coal's uploading from Indonesia around 20 million tons per year.

2) **Trubaindo mine** processed by PT.Trubaindo Coal Mining, which the company holds 65.13 percent shares. It is located in West Kutai, East Kalimantan province. There are 45.6 million tons of coal reserves, and the production is around 7.3 million tons per year. They use an open-pit mining method.

3) **Jorong mine** processed by PT. Jorong Barutama Greston (Jorong), which the company holds 65.13 percent shares. It is located in Tanah, South Kalimantan province. There are 1.2 million tons of coal reserves, and the production is around 1.3 million tons per year. They use an open-pit mining method.

4) **Kitadin mine** processed by PT. Kitadin which the company hold 65.13 percent shares. It is located in Bontang and Kutailartanegara, East Kalimantan province. There are 4.4 million tons of coal reserves, and the production is around 3.6 million tons per year. They use an open-pit mining method.

5) **Bharinto mine** processed by PT. Bharinto Ekatama, which the company holds 64.49 percent shares. It is located in North Barito, Central Kalimantan province and West Kutai, East Kalimantan province that close to Tubaindo mine. There are 96.9 million tons of coal reserves, and the production is around 2.8 million tons per year. They use an open-pit mining method.

B. Coalmine in Australia

Centennial is one of the biggest underground coalmine processor in New South Wales state. Around 40 percent of electricity from coal in New South Wales state uses the coals that produced and distributed by Centennial. The main assets used in Centennial business consist of the patent in conducting coalmine business in Northern part and Western part of New South Wales state. The overall amount of production in 2015 is 13 million tons per year, compound of the following mines:

1) **Airly mine** which the company hold 100 percent shares. It located near Lithgow in the collier county of Western side, New South Wales State. There are 31.8 million tons of coal reserves, and the production is around 0.7 million tons per year. The Airly mine uses the technology of continuous miner in mining.

2) **Angus Place mine** is the joint venture between Centennial (50 percent) and SK Kores Australia Pty Ltd. (50 percent) by which Centennial is the processor of the Angus Place mine. It is located in collier county in Western of New South Wales state. There are 66.3 million tons of coal reserves. In 2015, they can produce 0.3 million tons of coals. The Angus Place mine uses the technology of Longwall Mining (starting from the end of February 2015, suspense production (Care & Maintenance) for moving machines and staffs to expand the production at Springvale mine and will be back for the production at the Angus Place mine later).

3) **Springvale mine** is the joint venture between Centennial (50 percent) and SK Kores Australia Pty Ltd. (50 percent), which Centennial is the processor of the Springvale mine. It is located in collier country in Western of New South Wales state. There are 35.9 million tons of coal reserves. In 2015, they could produce 3.5

million tons of coals. The Springvale mine uses the Longwall Mining technology. The Angus Place mine and Springvale mine produce coals that used as thermal for domestic and international markets. They also have coal belt to transport coals to customers (power plants) especially in domestic country by having Lidsdale Sliding that transportation has been expanded to support an increasing amount of coal exported further.

4) **Charbon mine** is the joint venture between Centennial (50 percent) and SK Energy Australia Pty Ltd. (5 percent). It is located in Kandos, in the collier country, the Western of New South Wales state. There are 0.1 million tons of coal reserves. In 2015, they could produce 0.6 million tons per year. The Charbon mine adopts the underground Continuous Mining and Open-Cut mining method. The coals from this mine is mainly for export by uploading from train to Kembla port. From 2015 business plan, it is the last year of production. From now on, Charbon mine will go into the ground rehabilitation process.

5) **Clarence mine** is the joint venture between Centennial (85 percent) and SK Energy Australia Pty Ltd. (15 percent), which operated by Centennial mine. Clarence mine is located near Lithgow, in the collier county of Western of New South Wales state. There are 44.1 million tons of coals reserves. In 2015, they could produce 2.7 million tons of coals. The Clarence mine is a high-efficient underground Continuous Mining. Moreover, the Clarence mine focuses on exporting coals outside the country especially through Kembla port.

6) **Mandalong mine**, the company hold 100 percent shares. It is located near Morisset, New South Wales state. There are 89 million tons of coal reserves. In 2015, they could produce 5.7 million tons of coals. The Mandalong is an underground Longwall Mining with high production capacity and the coal seam can be excavated with the thickness more than 5 meters. The coals that can produce will be used in domestic markets and for exporting at Newcastle port.

7) **Mannering mine**, the company hold 100 percent shares. It is located around Fassifern coal seam in the collier county in Newcastle, New South Wales state. Now, it is under Care & Maintenance plan. In 2013, the Mannering mine started the project to increase the value by letting nearby mines help with production process and deliver coals to customers in domestic markets. These help company increase the value of coals reserves amount and save expenses.

8) **Myuna mine**, the company hold 100 percent shares. It is located in collier county of Newcastle, New South Wales state. There are 31.9 million tons of coal reserves. In 2015, they could produce 1.7 million tons of coals. They use underground Continuous mining method with coals belt to transport coals directly to the neighborhood customers.

9) **Northern Coal Service (NCS)** is a coal washing plant that located in collier county of Newcastle, New South Wales state. Since it is located near Newcastle port, NCS washes the coals that used as heating fuel and semi-soft type of coal coke that excavated from mines, preparing for delivery to domestic and international markets. The connection with double-track railways makes an effective and fast uploading to Newcastle port. The production capacity of Northern Coal Services is 4 million tons per year and there are specific distribution routes for exporting and transporting to domestic customers.

Future Project

1. Newstan Extension

The Newstan Extension plan is the project that explores and studies possibility of utilization of existing mining infrastructure in order to expand the coals reserves and production capability. At present, it is during Feasibility study of coal reserves that have semi-soft type of coal coke properties.

2. Mandalong Southen Extension

The Mandalong South plan is an extension from Mandalong mine. Nowadays, it is in the process of excavation to study the possibility if the project in 2 years period. The mine plan is designed to have more efficiency by connecting it with Mandalong mine.

3. Neubeck

The Neubeck mine plan is in the western part of New South Wales state. It is located near domestic customer's power plant. The quality of coals can be used in domestic markets as well as export to international market. The coals exported will be transported to Kembla port. At the moment, it is during the development into Open-cut mining.

C. Coalmine in People's Republic of China

1) **Gaohe Mine** by BP Overseas Development Co., Ltd. (is company's subsidiary) hold 100 percent shares in Asia American Coal Inc. (AACI). AACI was established to develop and co-invest in coal business in People's Republic of China. ACCI do the joint venture with Shanxi Lu'an Mining Industry (Group) Co. Ltd., which

is the major coal producer in People's Republic of China. They do the joint venture with Shanxi Gaohe Energy Co., Ltd. (SGEC) of which hold 45 and 55 percent shares consecutively. Gaohe mine is an underground Longwall mining that located in Shaxi province. There are 162.4 million tons of coal reserves. In 2015, they produced 8 million tons of coals.

2) Hebi Mine by Banpu Mineral Company Limited (the company's subsidiary) do the joint venture with Hebi Coal and Electricity Co., Ltd. by holding 40 and 60 percent shares consecutively. The Hebi Zhong Tai Mining Co., Ltd. (HZTM) was established to process on the production and distribution of coals from Hebi that located in Henan province. It is an underground Longwall Mining that has 20.9 million tons of coal reserves and can produce 1.2 million tons of coals.

D. Coalmines in Mongolia

Mongolia has the big source of coal reserves with an opportunity to develop as a major coal exporter in the future. Their border adjacent to Russia and China, which are countries with heavy coals consumption industries in top rank of the world. In 2011, the company possesses coal sources in Mongolia by buying all shares of Hunnu Coal Pty., Ltd. The company have coals sources that cover the area of South Gobi, Middle Gobi, and in the Western part of the country which consists of major project that is in the process of development as follows:

1) Tsant Uul The Tsant Uul plan is located in the south of Mongolia near the border of China (an autonomous region, Inner Mongolia province). They received the patent permits in 2011, with 30 years concession. At present, the plan is developing and studying on possibility in increase the value of existing coals to response to the needs of Chinese market. They already have an experimental on installing the Pilot Plant in pilot project. In production process, it is the extracting tars from coals (coal to coal tar), which this preliminary experiment can produce tars with the total amount of 5,000 liters. This can be assured that the Tsant Uul coals source can extracting tars. Nowadays, they currently study the possibility to increase value of tars, charcoal, and gas received from production process then preparing for commercial production in the next step.

2) Altai Nuurs is located in the west of Mongolia. They have both Coking coal and Thermal coal. The company is studying the feasibility of the project in doing preliminary mine which will use to apply to change

mineral exploration patent permit status in 2559, including to ask for approval for study the feasibility of mining project in 2560.

3) **Unst Khudag** is located in middle of Mongolia by having Thermal coal type. In 2015, they were approved to change the status of mineral exploration patent permit with 30 years concession and can renew the patent permit when expired. In 2559, they will study and ask for approval to study the feasibility of mining project including to study the amount of reserves water that will use in the project. Moreover, they also study the feasibility of preliminary engineer, investment, and cost of production in transforming coals to chemical products and electric power as well as study the chemical products market in China.

(2) Power Business

A. Banpu Investment Co., Ltd. (BPIC)

The company hold 100 percent shares of paid-up capital in Banpu Power Investment Co., Ltd. (BPIC), which registered in Singapore through Banpu Power International Co., Ltd. (BPPI). There are 3 investment in Combined Heat and Power plant in northern region of People's Republic of China with the installed electricity capacity with total of 237 megawatts and 948 tons per hour of production capacity of installed steam, details in these following:

1) **Luannan Combined Heat and Power Plant** that use coal as fuel. It is located in Luanan district, Tnagshan city, Hebei province. It has 100 megawatts of electricity generation capacity and 128 tons per hour of steam production capacity. The combined heat and power plant Luannan is the power plant that can generate electricity and steam.

2) **Zhengding Combined Heat and Power Plant** that use coal as fuel. It is located in Zhengding district, Jiazhuang city, Hebei province. It has 73 megawatts of electricity generation capacity and 370 tons per hour of steam production capacity. The combined heat and power plant Zhengding is the power plant that can generate electricity, produce steam, hot water and cold water.

3) **Zhouping Combined Heat and Power Plant** that use coal as fuel. It is located in Binzhou district, Shandong province. It has 100 megawatts of electricity generation capacity and 45 tons per hour of steam production capacity. The combined heat and power plant Zhengding is the power plant that can generate both electricity and steam.

B. BLCP Power Company Limited (BLCP)

The company holds 50 percent shares of paid-up capital in BLCP Power Co., Ltd., which is the major independent power producer (IPP). It is thermal power plant with the size of 1,434 megawatts that consists of two 717 megawatts installed power plants. They use bituminous type of coal, which is a good quality of coal of fuel. The coals imported from Australia and Indonesia. The power plant is located on Map Ta Phut industrial estate, Rayong province. There is power purchase agreement (PPA) with Electricity Generating Authority of Thailand with 25 years concession starting from the opening day of sector two commercial operation, start the power plant construction in August 2003 and open the commercial operation for sector one in October 2006. The second production sector is opening the commercial operation in February 2007. At present, BLCP already operates for 9 years.

C. Hongsa Power Company Limited (HPC)

Banpu Power Company Limited (“BPP”) (which is company subsidiary that hold 99.99 percent shares) do the joint venture with Ratchburi Holding Company Limited (“RATCH”) and Lao Holding State Enterprise (“LHSE”) which is the government enterprise of Lao People’s Democratic Republic to join establish Hongsa Power Company Limited (“HPC”) and Phu Fai Mining Company Limited (“PFMC”). Both companies have the headquarters in Vientiane, Lao PDR. The objective of HPC and PFCM is to conduct the power plant project in Hongsa, Lao People’s Democratic Republic, the essence of joint venture are as follows:

- HPC received the concession in developing thermal power plant project by using lignite as fuel. It is located in Northern part of Lao PDR. The amount of production capacity is 1,878 megawatts. The proportion of shareholding is that BBP hold 40 percent shares, RATCH hold 40 percent shares, and LHSE hold 20 percent shares.

- PFMC received the concession in conducting lignite mine. The proportion of shareholding is that BBP hold 37.5 percent shares, RATCH hold 37.5 percent shares, and LHSE hold 25 percent shares.

Hongsa power plant is mine mouth power plant that use lignite energy. There is 1,878 megawatts of installed production capacity, which consists of three unit of electricity generation, each unit has 626 megawatts. The first manufacturing unit operated commercial on 2 June 2015. The second manufacturing unit operated commercial on 2 November 2015 and the third manufacturing unit operated commercial on March 2559

D. Shanxi Lu Guang power plant project,

Banpu Power Investment Co., Ltd. is company’s subsidiary that hold 100 percent shares and sign the agreement to do joint venture and to develop the Shanxi Lu Guang Power plant project. This project is a new coal thermal power plant with 1,320 megawatts size that located in Changzhi city, Shanxi province, People’s Republic of

China (3 kilometers away from Gaohe mine). The shareholder and shareholding proportion are Banpu Power Investment Ltd. hold 30 percent shares, Gemeng International Energy Co., Ltd. “Gemeng” hold 35 percent shares, and Shanxi Lu’an Mining Group “Lu’an” hold 35 percent shares. Lu’an is one of the shareholders of Shanxi Gaohe Energy Co., Ltd., which hold and operate Gaohe mine in Shanxi province (the shares proportion are Lu’an hold 55 percent shares, and the company indirectly hold 45 percent shares). This power plant project receives the last approval from Shanxi Provincial Development and Reform Commission on November 2015 and during the last process to prepare for construction. However, the company expects that the Shanxi Lu Guang power plant project will be commercially operate in 2560.

Elementary Information of Shanxi Lu Guang Power Plant Project:

Production Capacity: 1,320 Megawatts (2 x 660 Megawatts)

Production Technology: Ultra Clean Coal Technology - Ultra super Critical

Amount of Coal Consumption: Approximately 3.2 to 3.5 million tons per year

Source of Coal: From Gaohe mine (use coal belt to transport coals) Lu’an mine and others mine

Shareholder Structure: Gemen (35 percent), Lu’an (35 percent), and Banpu Power (30 percent)

Project’s Value: Approximately 4,700 million yuan (around 740 million US dollars)

Beginning Commercial Operate: Within 2560

(3) Renewable Power Generation

The company starts to expand an investment of company’s group to renewable power generation group. In the early 2014, Banpu Power Co., Ltd. invests in solar power plant in Japan through subsidiary company of BBP. Nowadays, the company invests in seven solar power plant projects as follows:

A. Olympia Project. The company invests in 40 percent proportion in solar power plant that has total amount of 10 megawatts electricity production capacity (alternating current). It is located in Gunma, Tochigi, and Ibaraki, Japan. The Olympia project compounds of 5 projects are Hitachi Omiya 1 project, Hitachi Omiya 2 project, Osenosato Katachina, Sakura 1 project, and Sakura 2 project. Each project has installed electricity capacity of 2 megawatts (alternating current). All five projects are commercial operated in July 2015, January 2015, January 2015, December 2015, and October 2015 consecutively. The Olympia project appointed Octep Japan Co., Ltd. which is an asset management company that specializes on managing real estate asset as the project operator.

B. Hino Project is in construction process. The company invests in 75 percent proportion of electricity that produced from solar energy that expected to have 3.5 megawatts of electricity production (alternating current). It is located in Shiga, Japan and expected that Hino project will be commercially operate in 2559.

C. Mukawa Project is during the process of signing the agreement with project's contractor. The company will invest 55 percent proportion in production of electricity from solar energy, expected to have 17 megawatts of installed production capacity (alternating current). It is located in Mukawa province, Hokkaido prefecture, Japan and expected that Mukawa project will be commercially operate in 2560.

D. Nari Aizu Project is in developing process. It is invested 75 percent proportion is production of electricity from solar energy, expected to have 20 megawatts of installed production capacity (alternating current). It is located in Aizu province, Fukushima prefecture, Japan and expected that Nari Aizu project will be commercially operate in 2560.

E. Awaji Project is in developing process. It is invested 75 percent proportion is production of electricity from solar energy, expected to have 8 megawatts of installed production capacity (alternating current). It is located in Aizu province, Hyogo prefecture, Japan and expected that Awaji project will be commercially operate in 2560.

F. Yabuki Project is in developing process. It is invested 75 percent proportion is production of electricity from solar energy, expected to have 7 megawatts of installed production capacity (alternating current). It is located in Fukushima prefecture, Japan and expected that Yabuki project will be commercially operate in 2561.

G. Onami Project is in developing process. It is invested 75 percent proportion is production of electricity from solar energy, expected to have 16 megawatts of installed production capacity (alternating current). It is located in Fukushima prefecture, Japan and expected that Onami project will be commercially operate in 2561.

2.3 Marketing and Competition

(1) Marketing Policy

A. Marketing of coal business

Marketing policy

The company has marketing policy that transparent, straightforward, and responsible for all stakeholders. It focuses on sustainable growth and achieve successful goal as following:

1. Maintain existing customers base in each region through quality products and services that response to customers need and be able to deliver product on time
2. Increase the customers to become a leading company in Asia
3. Create the value of the products and services
4. Create marketing readiness to become the best choice
5. Be a professional
6. Compete in the market with honor, moral, and respect customers, competitors and shareholders
7. Clear, straightforward, demonstrate the reliability and integrity, maintain secure market position

1) Global coal market

There are two major import markets that are Asia and Europe. Most coals will be used in power plant. In 2015, the demand for imported coal in global market severely shrunk. It was the first decline in ten years. The major reason comes from decline of coals imported from China due to deflation and oversupply within the country. Moreover, there is no growth in coal importing from India. Furthermore, the coal imported in Europe is decline, even though the import from other countries in Asia and South America region increase but cannot compensate the decline from China and Europe imported. This causes the overall image of global coals imported decline more than 75 tons per year from previous year.

The Asian coal market is the biggest market in the world. In 2015, the amount of coal trading can be calculated as 78 percent of international trading amount of the whole world. The major coal importers are India, China, Japan, South Korea, and Taiwan.

China used to be the biggest coal importer in the world, faces with deflation. This cause no growth in demand of domestic electricity consumption as well as an increasing of electricity production from dams and nuclear power plants cause no increase in demand for coal fired power plant, while the coal production capacity in China is excess the demand. This also causes high competition, coal's price in China decline steadily. Chinese government has launched the measure to restrict coals import to support domestic manufacturers. The volume of imported coals in the past year is significantly reduced which cause huge effect in global market. Whereas, the coal consumption demand in India reduces due to deflation as well. Moreover, Indian government encourages domestic coal production coal, so these make coal importing in India has not much grown.

China and India have high uncertainty in coal importing markets since they can produce a lot of coals in their counties. Whereas, other major markets such as Japan, South Korea, Taiwan, Malaysia, Thai, and Philippine are the coal markets that have certain demand in using imported coal because the amount of coal that they can

produced in the country is not much. However, the price of high quality coal must be reduced to be able to compete with low quality coal during falling in price from oversupply.

Indonesia and Australia remain the main producer and exporter in Asia.

The reduction of China coal imported in recent years causes severe effect to Indonesia. Due to majority are poor quality coals from Indonesia, which result to decreasing in the amount of coals exported from Indonesia. While the amount coal exported in Australia last year is quite similar to previous year since the coals producer from Australia get pressure from distribution and transportation that made with railway and port company that must transport the agree upon amount of coals, otherwise they would be fine (Take or pay contract).

In 2015, Russia transport more coals to Asia since European market shrinks and the cost of coal from Russia is falling due to the depreciation of Russia Ruble. Whereas the Republic of South Africa transports more coal to Asia by starting from sending poor quality coals to the market to compete in India market and to maintain the price of high quality coals. These make Asia markets have oversupply on coals, which cause decline in coal's price.

The coal markets in Europe have the majority importers such as Germany, Turkey, Italy, and Spain. Most of them with use coals in coal fired power plants. In 2015, the overall import amount in Europe reduced due to reduction of imported from England. So that England tries to reduce the carbon dioxide gas emission by increase Carbon tax as well as the price of natural gas is reduced. These make the cost of coal fired power plant in England have higher price than natural gas power plant. The other countries in Europe postpone an increasing of environmental taxes because unfavorable economic conditions. This makes coal fired power plant being able to compete in other European countries.

The weather in Europe is not too cold, so the demand for electricity is not high. While the production of electricity from other renewable energy from dams, wind, solar increase. The European Unions gradually decommission the old power plants according to the plan to reduce emission of Carbon dioxide (Industrial Emission Directive, IED). This reduce the demand of coal in Europe, even though, many countries gradually decommission the old coal fired power plant, but Turkey still start new coal fired power plant which cause increasing in demand for coal in Turkey, however, it cannot compensate the decline of coal consumption in England.

The major producers and exporters in European markets are Colombia, Russia, Republic of South Africa, and United States of America. The demand of coal from Europe shrank which cause vicious competition in European markets. The price of coals in Europe gradually reduces which makes coal from United States America cannot compete with others. Nevertheless, the coal's export of America do not decline much due to take-or pay contract that make some exporters have to push their export, while the production cost of Colombia, Russia, and

Republic of South Africa is decline in accordance with devaluation and falling in oil price. These help them survive in the time that coal's price fall sharply.

In 2015, the company distributes 28.4 million tons of coal that produced in Indonesia, which sell the most to India in 19 percent amount of all coals. The next countries are Japan and China that is 18 and 16 percent consecutively. The company expands sale to new coming market that is Bangladesh, even customers of the company are in every regions, however, the company still focuses on Asian markets that company have advantages on transportation and quality control since it close to production source. Furthermore, the market tends to have more growth in the future.

2) Indonesia coal market

The amount of coals production of Indonesia in 2015 is around 453 million tons, which reduces 9.4 or around 47 million tons from previous year. It is due to the decline of import from China. The decreasing amount of coals production are from medium and small manufacturers while large manufacturers are not reduce much because their loyal customers believe that the companies are stable and credible. Some of them made long-term coal contract with their customers. 82 percent of coals that manufacturer in Indonesia are exported to foreign countries such as India, China, Japan, South Korea, Taiwan, and countries in Southeast Asia, and etc. There are only 18 percent coals that distribute domestically.

In 2015, Indonesian government releases the measures to increase revenue to the government and to suspend the coals production from non-licensed or illegal miners, for examples;

- Advance collection of mineral tax
- Determine that the coal manufacturers must have Clean and clear status from government before export coals to make sure that coals that will be exported is produced from licensed mines and pay all taxes to the government
- Determine that the payment of exported coals must be paid by using Letter of Credit, effective from 1 April 2015
- Collection of coal export tax is 1.5 percent of total exports, effective from 8 August 2015

Even Indonesia government releases more measures, but the amount of coals still exceeds demand from world market, which makes gradually decline in coal price. Indonesia is the country that gets the most effect from import of less heating value coal from China because the quality of coal exported from Indonesia has low quality compared with other competing countries. When the price of coal in global market falls close to the production cost,

the manufacturers in Indonesia cannot compete with rivals in other countries, that the cost per unit is lower. This implies that the Indonesian exports in recent year shrink drastically.

While Indonesian export is decline, the coal demand from domestic is growing continuously. From the operation of new power plant in 2015, the overall demand of coals in Indonesia is expected to be around 83 million tons, increasing 6 percent from last year. Mostly comes from electricity production sector that use low quality coals. So that, 80 percent of coal consumption in Indonesia used in electricity production, 11 percent used in cement industry and the rest used in other industries.

In 2015, the distribution of coals within Indonesia is around 3.7 million tons; calculate as 13 percent of all distributed coals that produced in Indonesia. That market shares is approximately around 4.4 percent of only the demand in Indonesia market. The majority customers are power plants in Indonesia cover 78 percent of coals amount selling in Indonesia, the rest are distributed to cement industries, paper industries, and others.

Most power plants in Indonesia are designed to use low quality coals because there are large amount of low quality coal reserves in Indonesia. The high quality coal in Indonesia is limited to large and old power plants and cement factories. Many cement factories improve their machines to be able to use lower quality, and can use with wide ranges quality of coals and being more flexible in coals sourcing. The number of high quality manufacturers is not so much from all coal reserves, therefore; the competition is low, then the price is higher compared with low quality coals that have more manufacturers and high competition.

Competition Strategy

In 2015, the world demand for imported coals decline with the oversupply. Thus, the competition is more intense and the coals price fall steadily. The company defines competitive marketing competition strategies in order to compete effectively by these following strategies:

- **Market Restructuring**

The company sets up BMS Coal Sales Pte Ltd. in Singapore to take care of marketing and sales of coal from Indonesian and Australian mines. It is market centralization and enhances effective communication with customers. Moreover, the company hires specialist in coal market who have experienced in Japanese market and can communicate Japanese fluently to take care of the market in Northern part of Asia. This is the market that company pays more attention to because it is the market that needs high and medium heat coals that company produces so they can sell in higher price.

- **Market segmentation and defining target market**

The company divided the market by following company's product types. They send good quality coal to sell in the markets that offer high price such as Japanese market, and sell low quality coals to large power plants that needs high delivery stability. The rest are selling to high competition market such as Indian market. These help maintain company's customers in the main market during oversupply period.

- **Management and product development**

The company improves coal quality by bringing coals from several mines of the company and mixes them together to meet customer's quality requirement. Moreover, the company purchase good quality coals from outside and use it to improve the quality of company's coals to increase products value and reduce environmental effects when using it. The company also adopts computer technology in the whole system of supply chain management, which helps improve effectiveness in production plans, quality control, collection, transportation, and coals mixing. Therefore, the company can delivers coals to the customers correctly and accurately both in quantity and quality.

- **Customer relationship management**

The company survey customers' satisfaction by sending questionnaires to their customers as well as goes out and makes face-to-face interviews with them in order to know specific demand of the customers and also to build a good relationship with customers. Moreover, they also bring back customers' suggestions to improve company's performance. Furthermore, the company also emphasizes on creating a good relationship with customer through many activities, for examples, report the results of operations and business plans to the customers, exchange the information of coals market, invite customers to see company's activities, provide technical support to the customers, and etc. These makes company is closer to the customers which can create a long-term relationship.

- **Steadily reinforce "BANPU" Brand**

The company intends to be a reliable coal producer and distributor with stability in deliver both quality and quantity to customers, including to readiness in responding to customers' needs in long-term. It can be considered as a part of commitment of the company as a leading energy company in Asia. Moreover, the company still reinforces the strength of "BANPU" Brand by being a supporter of world CLT in many places continuously. Chief executive of the company has been invited to be a guest speaker in World CLT in many places. This makes manufacturers, distributors, and consumers from over the world know the company

Significant Competitors

The significant competitors in Indonesian coal market remain the largest coal producer country, such as PT Bukit, Asam, PT Adaro Indonesia, PT Kideco Jaya Agung, PT Arutmin Indonesia, PT Kaltima Prima Coal, PT Berau Coal, and etc. Moreover, there are a lot of small competitors which most of them are not reliable in terms of quality and continuity in production. Last year, most coals manufacturers get effect from the reduction in purchasing volume from China whereas the production capacity is excess demand. These create high competition, many producers have to reduce the amount of production and some have to stop producing or close their mines due to high cost of production that they cannot compete with. Moreover, Indonesian government increases the strictness in quality and exporting control. It causes non-licensed and illegal mines have to stop production and shut down. However, most of them are small mines that not affect overall production capacity.

The significant competitors in global market, other than coals producer in Indonesia, there are also a lot of major coal producers in Australia, Republic of South Africa, and Russia. Most of them are the old competitors that do not change much.

Pricing Policy

The selling price of coals depends on type of coals and markets. It relies on the coal price in world market. In the period that the offering price for good quality coal is similar to the reference price from Newcastle port, Australia while the quality of coal is lower, there will be coal price adjustment in accordance with real quality of coal. However, it must not lower than the price that set by Indonesian government. From the distribution of coals, there are both fix price and flexible price that vary according to the world market price or so called Index Line that depends on each customers. In recent years, the coal price has high fluctuation, which it causes more demand for Index Link type of price to stimulate the real market situation. The company trades in coal swap market to reduce risks from market fluctuation

Customers Characteristic

Company distributes most coals to large power plants in Japan, South Korea, Taiwan, China, India, Malaysia, Philippine, and some countries in Europe. Most of them are the countries that trade large amount of coals from the company. Most of the companies in this group used to be state enterprise or stay in the high security real estate market that have demand to buy coals from high security and credible in delivery. Many customers take the principles of good management into practice. They consider on right and equality in doing business. This urges the seller to take good care of their business and the amount of this kind of customers tends to increase.

Moreover, the company also distributes coal to other industries such as cement, petro chemical, paper, plastic and chemical product, and etc. The amount of coals that these customers purchase is smaller than the amount from large power plants. Normally, it will be short-term coal trading agreement with manufacturer or coal traders, some will purchase from spot market.

Distribution and distribution channel

The company assigns BMS Coal Sales Pte. Ltd, the subsidiary that sets up in Singapore as marketing and coal trading operator. The distribution emphasized on reaching the end users or domestic coal traders. The direct strategic objective is effectiveness in responding to customers' needs. They using customers service agent in the country that customers stay in order to facilitate them. They also process on documents and information of competitors. However, the companies that do coal trading agreement are coal-trading companies in Indonesia and Australia.

3) Australian's coal market

Most coals that Centennial Coal Company Ltd. produces are using in New South Wales power plants, at the same time, the export to power plants in Asia remains increase gradually. Nowadays, Centennial is the supplier about 80 percent of fuels used in large coal fired power plant in Western Region. The coals trading with large power plants will happen under long-term contract that specify the amount of coals and price are set in advance. The agreement of domestic coal delivery that made with power plants in New South Wales, details are as follows:

- The location of Centennial mine are directly connected with power plants (with mine-mount characteristic), this makes Centennial get advantages on transportation by having road and belt that use only in coal transporting to power plant, this helps reduce the cost of transportation of Centennial including to the community effect
- These agreements are under Australia dollar currency, thus, it helps mitigate risk from changing in currency exchange.
- The domestic coal transportation is a continuing business, therefor; it can create cash flow from majority buyers that have long-term credibility to Centennial.

Change in coal market including to:

- Changing in coal price from several reasons such as the pressure in capital cost, lack of new demand, instability of new demand, and the cost of electricity production from coals, which is cheaper compared with purchasing fuels from other countries such as natural gas, etc.
- Increasing infrastructure competency that used to be limitation of coal exporting
- International power plants perceive that security coal sources are important. The international power plants invest in Australian mine projects in order to make long-term agreement in purchasing coal at market price
- The approval processes in starting mines in several years are more difficult, they make the project expansion or increase coals' demand is harder. Therefore, domestic power plants have to buy coals in higher price to make sure that they will have coals to use in electricity production including to purchasing coals from the sources that located near power plant.
- The dollar Australian exchange rate is weaken (compared with US dollar) this can compensate the reduction of coals price in world market that makes no change in coal exporting price in Australian dollar. This is one of the reasons that helps increase Australian coals manufacturers' competency.

Therefore, increasing in demand of energy consumption and challenging in finding new sources. These will add more value to existing coal sources and from these factors, Centennial have considered and done coals selling plans to relates and to responds to the demand of coal that used as heating fuels that rise gradually.

When the agreement is almost expired, Centennial still keeps the important of coals delivery to domestic power plants, which is one of the main strategies.

4) Thailand coal market

At the moment, almost all of the coal markets in Thailand are import market. Due to the coal production sources in the country are gradually shut due to the limited amount of coal reserves. The price of import coal reduces gradually, which make the price of imported coals can compete with the price of coal that produce in the country. Cement industry is the industry that uses the most coal in the country. During first 11 months of 2015, the amount of coal consumption is around 6.95 million tons, decreases from the same period of last year 0.18 million tons. It is the reduction from domestic coal consumption 0.62 million tons since the amount of production is decline and the imported amount is increased 0.46 million tons. However, the calorific values of domestic coals are less than imported coals, it makes the amount of coals using in the country reduced and replaced by the small amount of imported coals. Despite the demand of coal energy consumption still increases, the Independent Power Producers (IPPs) is in the second rank in coal consumption inferior to cement industry. In the first 11 months of 2015, the total

amount of consumption is 5.35 million tons, which reduces from the same period of last year 0.37 million tons. The machinery maintenance of BLCP causes the reduction on amount of coal consumption. All of coals used by these group are imported coals, while the amount of coal consumption by Small Power Producers (SPPs) during the first 11 months of 2015 is around 2.07 million tons, reduces from the same period of last year around 0.06 million tons. The rest are the consumption from other industries such as paper industry, petro chemical, textiles and foods, etc. comprise the amount of coals in coal traders' warehouses that have the total amount of 5.94 million tons in the first 11 months of 2015, rising from the same period of last year approximately 0.59 million tons.

The characteristics of Thailand coals' market, it can be divided into 3 big types according to its usability and purchasing amount as following:

1. Most of the large coal consumption is the large factories that have constant demand of coal consumption such as, cement industry, petro chemical industry, lager paper industry, including to Small Power Producers (SPPs). The coals' consumers in this group have potential to direct import coals and are able to purchase in large amount. It makes international large coals entrepreneurs can compete in this market.

2. The Independent Power Producers (IPPs) are large factories with large and constant amount of consumption. The IPPs normally do long-term coal purchasing agreement with coal producers, therefore; there are only small amount selling to irregular customers. Hence, the competition is low in this market.

3. Small Power Producers, this type of coal market has a lot of consumers; most of them are small factories. Each of the coals users will use only small amount and has small warehouse. These force them can buy only in small amount from coals manufacturers that are able to gradually deliver. Thus, they cannot directly order from foreign country.

Competition Strategies

There are high competitions in Thai's coals market due to most of coals are imported from foreign countries so there are many manufacturers while there are limited amount of large manufacturer. The company determines the main competition strategies, and the details are in these following:

- Stability and Credibility in Delivery

The company still gets reliability in terms of coal delivery stability. Since the company has their own sources in Indonesia that have large amount of coal reserves and the amount is enough to respond to customers demand in long-term, especially for large group of customers that need large amount of coals. These create the competitiveness over their competitors and can also maintain market shares of major customers.

- Salesperson and good relationship with customers

The company has close relationship with their customers for so long and shows that through the time the company response to all agreements that have with their customers in term of coals production that meet customers need both in quality and on time delivery. The company uses salesperson in offering coals selling to the customers, follow up the sales and coordinate with the customers on coals delivery in order to assure that the company is delivered products and services that meet customers' needs.

- Coal Distribution Center

The company uses both warehouses in collecting coals and gradually delivers to their customers. This can reduce the burden in collection and maintain all stock of their customers. Moreover, it also increases effectiveness of supply chain of customers. The company develops warehouse under ethic and good management by considered on the social and environmental responsibility. They concerned about the controlling in practice areas to be strictly in line of the environmental protection regulations and take care of nearby community effect. This can be the example of standard warehouse that can gain advantages on sustainable competition.

Significant Competitors

There are 20 significant competitors and most of them are coal entrepreneurs. They do not have their own coal sources, thus; they have to buy from others producers, which create high capital cost. At the same time, there are the unstable in quality, quantity, and delivery time when purchasing from small producers. Nevertheless, coal manufactures will sell coals in the market that they have more potential competition, for examples, the market with major customers. Apart from coal trader in Thailand, there also have major coal traders from foreign countries that come to compete such as, Rio Tinto, Glencore, Noble Energy, Eastern Energy, Trafigura, and others major coal producers in Indonesia. While small coal producers or entrepreneurs that have their own warehouses to collect coals, they can gradually deliver coal to small customers that want to buy small amount of coals in each time. However, the large coal traders do not care about this market.

Pricing Policy

The coals' selling price in Thailand bases on the price of world market, it is similar to other markets that will adjust the price in accordance with the quality of coals that really sell and will base on the amount purchase, quality regulation and others conditions that agree with the customers.

Customers Characteristics

- The major customers of the company remain Cement industries and electric power and steam industries that always have demand in using coals. The cement industries group is the large company with high stability and purchase coals in high quantity. They usually buy coals from producers or distributors that have high credibility. They do purchasing agreement with producers or distributors both in short-term and long-term. The electric power and steam industries is considered as medium coals buyer such as paper, petro chemical, textile industries as well as Small Power Producers (SPPs). These customers are large companies that also have high stability and regularly need coals. Many customers have small warehouse to collect coals, therefore, it becomes the opportunity for traders that have warehouse and can gradually deliver coals. The large factories customers usually do the short-term contract with trader to assure that they will always have coals to use. Many customers focus on social and environmental responsibility; these urge coal entrepreneurs give an important to the aforementioned.

B. Marketing of Electricity Power Sector

1) The company holds 50 percent shares of BLCP with total shares proportion is 717 megawatts which distribute electricity to Electricity Generating Authority of Thailand with long-term Independent Power Producers (IPPs) type of contract.

Competition Strategies

- Coal fired power plant in Thailand

The company gives an important on environmental protection and gets accept from the community. Over the period of time, Thailand is aware of environment, there are rising and updating legislations and standards as well as go against coal fired power plants in nationwide.

However, the above-mentioned strategy, company invests in power plants effectiveness adjustment and maintenance of equipment to gradually reduce environmental pollution. Providing support in activities and understand the communities within the areas. This results in ability to completely follow the legislation and standards and good relationship with communities.

Significant Competitors

- The major electricity producer in the country such as, Electricity Generating Public Company Limited, Ratchaburi Holding Company Limited, and Glow Energy Public Company Limited.
- Electricity generators and investors from foreign countries.

2) Electricity Sector in People's Republic of China

In 2015, the company manages their business in accordance with market opportunities that is during the winter that demand for steam and heat are high. The company will fully generate and distribute electricity, steam, and heat. The company emphasizes on effective of production to lessen down the production cost. However, the falling of coal price in Chinese market from midyear of 2012 that related to the situation of coal price in the world market. These cause gradually decrease in coal price in 2015 together with the economic slowdown in China during 2015, which increase 6.9 percent. It results to 6 percent decline in electricity selling amount compared with previous year. Nonetheless, the company does not get any effects on company's turnover and total profits since the reduction on fuel price ratio is higher than the reduction on electricity price ratio. The company also has a plan to effectively control the overall cost of production. The company starts to expand the production in power plant that are ready so as to respond demand of steam that increase with the growth of local economy.

Despite Chinese's government increase the strictness on environmental policy and pollution control, there is no effect on company operation. In 2015, due to the company control the production to follow currently environmental standard, but it is need to be adjusted and controlled the environment to meet new environmental standard that will be regulated next year, which the company is able to follow the plan.

Competition Strategies

The combined heat and power plant business in People's Republic of China is the business that promoted by government since it is highly effective than normal power plants and the pollution control is better. Therefore, the benefits consists of receiving price guarantee on selling electricity to local power plants, getting the privilege on monopoly selling of steam and heat in permission areas and receiving subsidy from local government. These are important factors that can adopt with competition strategies as follows:

- Quality of services and customers relationship management

The company gives important to quality and service that is there are the management on readiness and stability of production and distribution of both steam and heat so as to simultaneously respond to the demand from customers especially for heat distribution in the winter to the customers. Maintaining good relationship with the customer on the basis of honest and mutual benefits can create credibility and reliability from customers.

At the same time, the contract that signed with steam industries, the price of steam is adjustable if the price of fuel increases higher than the price specify on the agreement. These help reduce the burden on higher price of fuel.

- Cost management

The company effectively manages on capital cost especially with coal and fuel cost by using procurement strategy and coal reserves at the time that coal price fall and reserve to use during higher price as well as increasing manufacturers efficiency to reduce production costs.

- Adaptation readiness

There are always changing in Chinese market situations; thus, the company have to follow market situation closely and always adjust the business operation to correspond with market situation or the situation in that time. These can open business opportunity or reduce the effect on business. In 2015, Zhengding Combined Heat and Power Plant processed on construction of Cooling Tower. As a result, the distribution of steam increases and can also sell cold water in the summer too.

- Relationship management with local government sectors and community

The company establishes the relationship with local government on the basis of the alliance that earns common benefits in providing basic infrastructures (electricity and steam) to local communities, create the credibility and equality as well as continuously support community activities. From these, the company can ask for the support from local government sector in case that the company gets effect from outside factors, for examples, supporting fund or approval to increase steam price when coal price is higher as well as gets accepted from government sector and community that it is an community company model.

- Clarity in national energy policy

The management on national energy including to clearly determining energy policy and low investment risk since there are specification of Feed-in tariff (FIT) structure with the form of constant electricity bid rate through life time program.

Significant Competitors

- Electricity generators and investors from foreign countries.

3) Electricity Sector in Lao People's Democratic Republic (Hongsa Project)

The company holds the shares in Hongsa Power Copany Limited ("HPC") and Phu Fai Mining Company Limited ("PFMC") in the proportion of 40 and 37.5 percert respectively. There is electricity generation capacity of total shareholding proportion of 752 megawatts. The amount of electricity that distributes to Electricity Generating Authority of Thailand by Independent Power Producer (IPP) long-term contact type and will distribute some to Lao People's Democratic Republic. At the moment the first sector commercially operates on 2 June 2588, the second sector is commercially operate on 2 November 2015, and the third sector will be commercially operated on March 2559

Competition Strategies

- Coal fired power plants in Lao People's Democratic Republic

The company realizes that the effect that might occur with the community from the structural development and the Hongsa power plant construction, therefore, the company encourages the participation of community in the areas together with living standard development of people who live in community. This reflect in the initiative in starting community development plans such as infrastructure development water supply, electricity, road, an immigration of some communities and the building of new appropriate shelters, and promote professional development and etc.

Significant Competitors

- Electricity generators and investors from foreign countries.

4) Electricity Sector in Japan

The company invests in the electricity generation from solar energy both in Northern and Central part of Japan. Nowadays, the installed production capacity by total investment proportion of 4 megawatts that commercially operates and more than 50 megawatts of the project is under development.

Competition Strategies

The company can start investing in solar power plant in Japan as well as study and prepare for the readiness on investment opportunity evaluation and project development for both alliance, working team, and personnel so as to search for opportunity to grow up in renewable energy business in Japan. Moreover, the government support and encouragement on investment of financial institutions are also important factors that can quickly drive the business.

- Short period in development project

The company can start electricity production and distribution. They can also quickly generate revenue and return on capital in short term compared with coal fired power plant project.

- Clarity in national energy policy

The management on national energy including to clearly determining energy policy and low investment risk since there are specification of Feed-in tariff (FIT) structure with the form of constant electricity bid rate through life time program.

- Significant Competitors

Electricity generators and investors from foreign countries.

(2) Marketing and Competitive Situation

A. Coal business competitive situation

There are a lot coal market competitions in 2015 due to severely shrinking in demand while there are huge oversupply. These cause the price in world market reduce steadily. The coal price at Newcastle port (FOB Newcastle), Australia reduces 20 percent in 2015 while coal price in Europe (CIFARA) reduces 27 percent.

The coal market in 2015, the amount of import thermal coal is approximately 925 million tons. It reduces from previous year by 7.5 percent or around 75 million tons. The majority is the reduction from coal import market in Asia especially the reduction of import amount from China that makes the total import amount of Asia in recent year decrease to 65 million tons compared with previous year. The overall coal import in European market is estimated to decline around 11 million tons compared with previous year.

China anticipates that the import amount of thermal coal in 2015 will reduce 32 percent from previous year or will reduce around 73 million tons because the economic slowdown. Therefore, the demand for electricity consumption is lower as well as the electricity generation from many dams and nuclear power plants are increased. As a result, there is no growth in electricity from coal fired power plants while the production capacity within country is excess the demand. The coal manufacturers in China have to reduce their coal price to maintain their own market shares. As a result, coal price in Chinese market gradually reduce, which force coal's price reduction in the world market especially the coal producer in Australia reduce coal price to push their coal to Chinese market. Chinese government released many measures to protect domestic coal producers and to reduce environmental effect in some areas especially in coastal metropolitan areas, for examples, strictly define the quality of coal used in some areas, asking the large state enterprise coal fired power plants to reduce the imported amount from foreign countries, reduction of taxes and duties to help domestic coal producers and etc. Moreover, the reduction of Chinese Yuan affects Chines import.

India anticipates that there will be 162 million tons of thermal coal importing in 2015, which is similar to the amount in previous year. Due to the economic slowdown, the growing of electricity demand is lower. The increasing amount of coal production within country contributes to decreasing in amount of imported coals while the reduction in amount of coal imported of China affects the rest amount of coals in the world market. The producers in foreign countries turn to give an important to Indian market, which creates higher competition, as well as coal buyers in India want to buy coal in lowest price. Therefore, they do not need to buy coals while the price decreases,

they will wait until it touch the lowest price. These become the pressure that push down coal price while the depreciation of Rupee makes buyer put off coal purchasing.

Japan the amount of coal imported in 2015 is similar to the amount in previous year. Due to the coal fired power plant in Japan still produce with full capacity because most of the nuclear power plants stop their production. The amount of coal reserves in other countries in Asia such as, South Korea, Vietnam, Malaysia, Thailand, and Philippine is growing but in smaller amount compared with the decline in China.

In Europe, the import amount of thermal in 2015 reduces from the previous year around 6 percent, at the amount of 163 million tons due to increasing in environmental strictness. The decommissioning of inefficient old power plants in accordance with the plan to reduce greenhouse gas emissions of European Union (Industrial Emission Directive), there are gradually increased in electricity generation from renewable energy as well as the weather of Europe in previous year was not so cold and reduction in price of natural gas that resulted in decline in coal consumption. The unrest in Middle East, and the conflict between Russia and Turkey do not affect coal price because the coal supply in Europe is exceed the demand, which resulted to high competition.

England in 2015, the amount of coal imported fell the most in Europe. From estimation, British will import coal around 44 percent from previous year or reduce around 14 million tons due to exponentially increase in Carbon tax in England from 9.55 sterling pounds per carbon dioxide ton, equal to (£9.55/mt CO₂e) to 18.08 sterling pounds per carbon dioxide ton on 1 April 2015. The price of natural gas has dropped, which makes the cost of electricity production from coal is higher than natural gas. The other countries in Europe, the environmental taxes do not increase significantly as in England. The coal fired power plant can still compete. However, Europe gives an important to electricity generation from renewable energy such as, solar energy, wind energy, and etc. Therefore, the increasing in electricity production from renewable energy will reduce the electricity generation from dams. Last year, the amount of imported coal Spain and Portugal increase from reduction on electricity generation form dams while Turkey is running new coal fired power plants, it causes more demand on coal consumption.

The export of coal used as heating fuel in 2015, the total export amount is 937 million tons, which reduces around 6.3 percent from last year. There are 6 main countries that export this type of thermal coal that are Indonesia, Australia, Russia, Colombia, Republic of South Africa, and United states of America, which covered 92 percent of total exported amount of the entire world. In recent year, the coal producers try to gradually reduce the cost of production because of the reduction price in world market. The currency depreciation of exporting countries compared with US dollar and the reduction of oil price is also helping reduce cost of investment in exporting

countries. Therefore, most coal producers can survive during the period that coal price reduces sharply.

Indonesia remains the biggest thermal coal exporter of the world even though the amount of export last year reduced a lot. From the evaluation, Indonesia will export around 370 million tons in 2015, which decline more than 50 million tons in previous year or reduce more than 12 percent. Indonesia is the country that gets severely affect from reduction on coal import from China because majority coals export from Indonesia have low calorific value. If the coal price in the world market decreases, the price per unit of Indonesian coal is higher than the price per unit of Australian coal that has high calorific value. These make low quality coal from Indonesia cannot compete with others, especially in China.

Australia is the second rank for the world most export thermal coal type. The exporting amount in last year was approximately 200 million tons which very similar to previous year. Most coals that export from Australia are good quality coals; therefore, they do not get any impact from coals that imported from China like Indonesia. The main coal markets in Australia are Japan, South Korea, Taiwan, and China. Even Australia gets effect of import reduction of China is not so much, but the coal producers in Australia still have to push more products to other countries, such as, India and Philippine to compensate the amount that decrease from China since most of the company signed the contract with railway companies and harbors in Australia in take-by-pay contract type. These cause in increasing amount of coal export.

Russia the export of coal in Russia expected to increase around 4.6 percent from last year due to the depreciation of Russia Ruble compared with US dollar. This makes the coals' cost of production in Russia in term of US dollar per ton also decline. Russia gets effect on the reduction of British import since Russia is the main coal exporter of England. Russia has to export more coals to Asian. The depreciation of Russia Ruble and good coal quality make Russia can gain more market shares in Asia.

Colombia anticipates to export 7 percent more compared with last year; even they have the problem on prohibition of coal transportation during nighttime rail. The railway companies in Colombia get complaints from people who live along the railway about noise pollution, thus Colombia's court order to stop coal transportation during 22.30 to 04.30 starting from mid February 2015. However, prohibition on nighttime coal transports does not affect much. At the same time, the railway companies of Colombia installed noise reduction system so they can start transporting during nighttime again since December 2015. Colombia can consider as the main coal exporter to European market with low capital cost, which make Colombia can better compete in European market.

Republic of South Africa anticipates that the exporting amount would be similar to previous year due to the limitation on railway transportation to the port. Last year the coal producers in Republic of South Africa face with oversupply in the market while the exporting amount to America will reduce around 18 percent compared with previous year because the cost of production of coal producers in America cannot compete in the world market especially during the condition that US dollar is appreciation.

The coal price in the world market last year gradually reduces because the demand of coal importing reduces sharply while there is a lot of oversupply in the market. The coal price in accordance with long-term contract between coal consumers in Japan and coal producers in Australia (Australian-Japan Reference Price) for the delivery in 2015 (April 2015 to March 2559) reduce to 67.70 US dollar per ton, which is decline 17.1 percent compared with last year. However, coal price (FOB) in Spot market at Newcastle port, in Australia is much lower than this level.

At the end of 2015, the coal price of Spot market at Newcastle port reduces to 50 US dollars per ton. The reduction of production cost, the depreciation in the currency of exporters country compared with US dollar, and the oil price reduction in oversupply situation are all force the price to decline because coal producers try to compete with each other by decrease their coal price and maintain their market shares.

The competition trends in 2559, it expected to be more severe because the demand of import from China may reduce due to economic slowdown and oversupply within country while Chinese government tries to protect domestic coal producers. Moreover, Chinese government is trying to solve air pollution problem in metropolitan areas by having a goal to reduce coal consumption in the city. These might cause the reduction in coal demand of China in short-term and intermediate. At the same time, the demand for imported coal in India will also reduce because of economic slowdown and domestic coal productions in India have a tendency to increase to substitute the amount that imported. The competition in European markets expected to be more severe as well because of the demand for coal consumption might not increase. As the producers in Colombia try increase the amount of export because they already increase the production capacity and they do not have problem on coals transportation. These will result in oversupply in European market while the price of natural gas in Europe is estimated to stay in low level, which will affect the power plant that use natural in as fuel can compete with coal fired power plant. Moreover, the electricity generation from renewable energy will constantly rise, which can reduce the demand of coal consumption.

In production sector, the production is expected to reduce slowly. The coal producers in some countries such as, Australia must try to export more coal so as to reduce the cost because they have take-or-pay contract the

railway company and harbor. However, the producers in Australia are able to compete in Chinese market due to the agreement on free trade between Australian and China. This results in the reduction of thermal coal import tax from 6 percent to 2 percent on, starting from 1 January 2559. This will affect coal imported from Indonesia but it is expected that this will not cause China to import more coals, while the overall demand will also shrink which results in the amount of oversupply in the market. However, the majority coal producers think that they can reduce cost of production from currency exchange rate and oil price that tends to decrease, which results in reduction of coal price.

1) The condition of Coal Business Competition in Australia

Coal market in Australia

- The majority demand of thermal coal for domestic consumption

Australia is the country that uses coal in power generation business. The coal price will base on the world price, which will reflect the quality of coal energy and the coal properties. The world demand and supply resulted from the growth and shrink of world economy. Due to Australia is the major coal exporter, thus they will base the price on Newcastle FOB, which is the spot market price from Newcastle port, Australia. This is not including transportation cost that may use the price referenced with export parity. However, if any companies have the long-term contract on coal trading, the price that each company gets might differ from the price in world market.

- Coal supply Coal resources can be found around Australia, by which Queensland and New South Wales have black coal that consists of subbituminous coal, bituminous coal, and anthracite that found the most in Australia. According to the Australian Resource Assessment Report, nowadays there are more than 100 coalmines in Australia and more than 35 mines are in the development process. The amount of coal exported from Australia is in the second rank from Indonesia. However, Australian coal can be considered as the good quality coal with high thermal level and low sulfur.

- Access to infrastructure system

Good infrastructure is an important factor in being a coal-exporting leader in Australia. Basic infrastructure for coal business comprises post, road, conveyor belt, and railway. However, old coalmines that located near coast will have domestic transportation that ready for service but the new coalmines will located far away from port and need basic infrastructure to transport coal to port. Australia faces with export limitation problem, which the government solves this problem by building more ports and let companies hold shares.

One of the strength of Centennial mine is the capability and readiness in efficiency transportation system that ready to deliver coal to domestic power plants by using land route conveyor belt, which have low transportation cost.

- Substitute products

Since the power plant is a large consumer of coal industry that uses it coal as heating fuel (thermal coal). At present, America discovered more natural gas especially Shale gas, which causes natural gas price in America went down and America also have natural gas pipeline system that already covered. These make many electricity generators increase their production capacity in the power plant that uses natural gas and reduce the use of coal. However, this situation will happen only when plenty amount of natural gas are found, have proper natural gas pipeline system, then the natural gas price will stay in lower level. Therefore, this effect is only in America. Moreover, the installation solar rooftop is increasing in Australia, which will cause in reduction of demand from Nation Electricity Market (NEM). However, it is only small amount and not significant compared with total demand for electricity.

Australian coal exporting market

- For foreign customers, Centennial transport through Kembla port and Newcastle Port, in these couple years, the overcrowding at Newcastle port is an ongoing problem that Australian faces. Thus, in September 2009 the New South Wales state government and two ports consist of Waratah Port and Newcastle Coal Infrastructure Group port (NCIG) agree with the Capacity Framework Agreements that use to take care of port expansion, which is more important to quickly respond to the rising in demand.

- Waratah Coal Services Port (“PWCS”) increases their transportation capacity from 133 million tons per year to 145 million tons per year.

- At present NCIG is expanding port transportation capacity around 66 million tons per year, which finished on June 2013

- Kembla port is built to support the coal transportation from mine in Southern and Western part of New South Wales state. Nowadays, they can support coal reserves for export around 18 million tons per year.

2) The condition of Coal Business Competition in Thailand

The demand of coal in private sector in the first 11 months of 2015 is at 20.7 million tons, which increase 0.29 million tons from the same period of last year. This is an increasing amount of coal import in the first 11 months of 2015. The coal import is 20.26 million tons, which increase 1.13 million tons or increase 5.9 percent from the same period of the last year. While the amount of coal consumption that produces in the country in first 11 months of 2015 is at 0.45 million tons, which reduces 0.84 million tons or reduce around 65.1 percent from the same

period of last year. Due to the amount of coal reserves and cement factories have coal source in Northern part that keep coal to use in their own cement factories, these cause coal consumers who live in Central areas have to import coal so as to compensate the decreasing amount in the country.

The competition situation in Thailand is more severe because the oversupply condition in the world market. The coal producers and traders in the world market try to push more coal into Thai market as well as the coal price in the world market reduces gradually. As a result, the imported coals are able to compete with coal that produced in the country.

Coal demand of public sector in Thailand

(Exclude Mae Moh power plant of Electricity Generating Authority of Thailand)

Unit: million tons

	2011	2012	2013	2014	11 Month		Growth			
					2014	2015	2012	2013	2014	2015 (11 MONTH)
Domestic coal	2.86	1.61	1.78	1.36	1.29	0.45	-43.6%	10.2%	-23.6%	-65.1%
Imported coal	16.23	18.58	17.99	20.89	19.13	20.26	14.5%	-3.2%	16.1%	5.9%
Total	19.09	20.19	19.77	22.25	20.42	20.71	5.8%	-2.1%	12.6%	1.4%

Source: Energy Policy and Planning Office, Ministry of Energy

The tendency demand of coals in 2559 anticipates having small increase from previous year because the Independent Power Producers (IPP) stops for machinery maintenance in 2015 and will start with full capacity again in 2559. While coals demand from other industries estimate to have small rise in accordance with economic expansion. The competition situation remains intense as in last year since there are oversupply condition in the world market that coal is easy to find as well as coal producers in the world market try to reduce their production cost and push sales, thus coals price tends to decline.

B. Competition condition in electricity business

1) The condition of Coal Business Competition in People's Republic of China

The progress electricity business in People's Republic of China, the growth rate of consumption amount in the country is in this following:

	Unit	2015	2014	2013
Overall electricity consumption growth rate	Percent	0.5	4.1	7.6
Electricity consumption of industrial sector growth rate	Percent	-1.4	4.2	7.0
Production growth rate	Percent	10.4	8.9	9.6
Total production capacity	Megawatt	1,506,730	1,360,190	1,250,000

2) Competition condition in electricity business of Thailand

The Office of the National Economic and Social Development Board (NESBD) anticipates that economic trend of Thailand in 2015 will expand 2.8 percent; it comes from economic slowdown during early in the year to mid-year. However, there are positive factors from the economic recovery in the third and fourth quarter of the year. The value of household expense and export industries increases.

The installed electricity production capacity in 2015 has 38,815 megawatts of production capacity. It increases 12 percent from 2014. The demand for electricity is highest to 27,346 megawatts, which higher than electricity demand in 2014 at 26,942 megawatts, which is different around 404 megawatts of calculate as 1.5 percent. The production amount and purchasing of Electricity Generating Authority of Thailand (EGAT) in 2015 is 192,189 kilowatt-hours, increases from last year around 3.3 percent due to the stimulation of economic activities of government and private sectors. The proportion of electricity production from coal types as follows, 67 percent comes from of natural gas, 18 percent comes from coals, 2 percent comes from water energy, 8 percent comes from imported, 5 percent comes from renewable energy, and 0.5 percent comes from oil. (Source: Energy Policy and Planning Office - EPPO)

2.4 Products procurement

(1) Detail of Assets

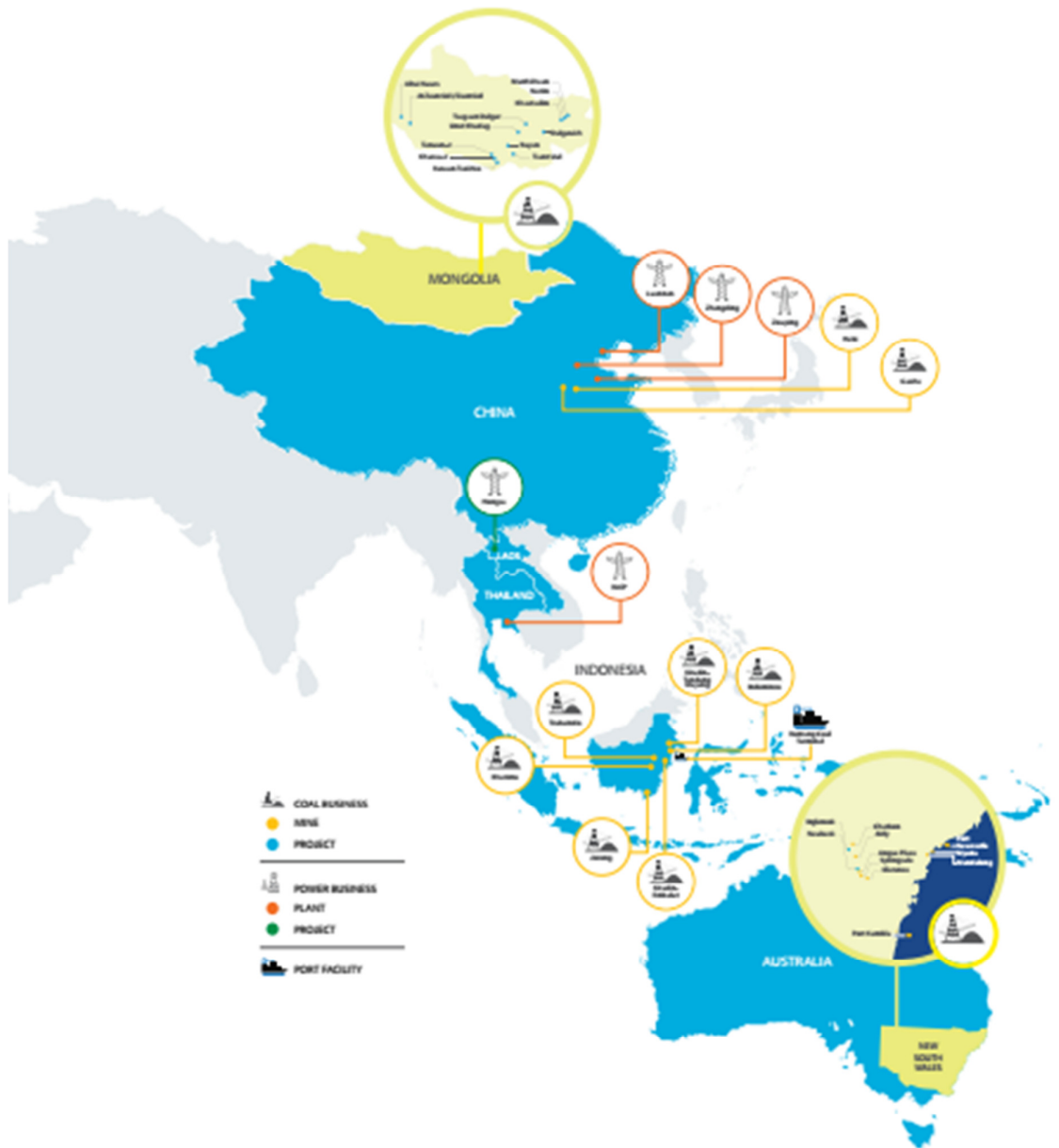
A. Location of Coal mine and Power plant

Coal Mine/Project	
<u>Indonesia</u> 1. Jorong Mine, South Kalimantan Province 2. Indominco Mine, East Kalimantan Province 3. Trubaindo Mine, East Kalimantan Province 4. Kitadin Mine, East Kalimantan Province 5. Bharinto Mine, East Kalimantan Province	<u>Australia</u> 1. Airly Mine, New South Wales 2. Angus Place Mine, New South Wales 3. Charbon Mine, New South Wales 4. Clarence Mine, New South Wales 5. Ivanhoe North Mine, New South Wales 6. Mandalong Mine, New South Wales 7. Mannering Mine, New South Wales 8. Myuna Mine, New South Wales
<u>China</u> 1. Hebi Mine, Henan Province	

2. Gaohe Mine, Shanxi Province <u>Mongolia</u> 1. Unst Khudag concession 2. Tsant Uul concession 3. Altai Nuurs Coal concession JV	10. Newstan Mine, New South Wales
Power Plant	
<u>Thailand</u> 1. BLCP Map Ta Phut Industrial Estate <u>Laos</u> 1. Hongsa Power Plant <u>Solar Projects in Japan</u> 1. Olimpia Project 2. Mukawa Project 3. Nari Aizu Project 4. Awaji Project 5. Hina Project 6. Yabuki Project 7. Onami Project	<u>China</u> 1. Luannan power plant, Hebei Province 2. Zhengding power plant, Hebei Province 3. Zouping power plant, Shandong Province 4. Shanxi Lu Guang power project, shanxi Province

Coal mine and Power plant of the company

MAP OF OPERATIONS



B. Capacity and Productivity

The company had coal production capacity and coal production in 2013-2015 below

	Unit	1 Jan –31 Dec 2015	1 Jan –31 Dec 2014	1 Jan –31 Dec 2013
<i>Indominco Mine*</i>				
Production Capacity	Thousand Tons	15,000	15,000	15,000
Actual Production	Thousand Tons	13,858	14,843	15,097
Capacity utilization	Percent	92.39	98.95	100.65
Change in actual production	Percent	-6.64	-1.68	4.35
<i>Trubaindo Mine*</i>				
Production Capacity	Thousand Tons	8,000	8,000	8,000
Actual Production	Thousand Tons	7,169	7,517	7,847
Capacity utilization	Percent	89.61	93.96	98.09
Change in actual production	Percent	-4.63	-4.21	-5.57
<i>Jorong Mine*</i>				
Production Capacity	Thousand Tons	2,000	2,000	2,000
Actual Production	Thousand Tons	1,305	1,327	1,267
Capacity utilization	Percent	65.25	66.35	63.35
Change in actual production	Percent	-1.66	4.74	13.13
<i>Kitadin Embalut Mine*</i>				
Production Capacity	Thousand Tons	2,000	2,000	2,000
Actual Production	Thousand Tons	1,216	1,243	1,094
Capacity utilization	Percent	60.80	62.15	54.70
Change in actual production	Percent	-2.17	13.62	-10.33
<i>Kitadin Tandung Mayang Mine*</i>				
Production Capacity	Thousand Tons	2,500	2,500	2,500
Actual Production	Thousand Tons	1,902	1,920	2,542
Capacity utilization	Percent	76.00	76.80	101.68
Change in actual production	Percent	-0.93	-24.47	5.39
<i>Bharinto Mine*</i>				
Production Capacity	Thousand	3,000	3,000	2,000

	Tons			
Actual Production	Thousand Tons	2,527	3,000	1,583
Capacity utilization	Percent	84.23	100	79.15
Change in actual production	Percent	-15.77	89.51	163.83
Australia Mine**				
Production Capacity	Thousand Tons	15,000	15,000	15,000
Actual Production	Thousand Tons	13,040	15,216	13,836
Capacity utilization	Percent	86.93	101.44	92.24
Change in actual production	Percent	-14.30	9.97	-5.67

Note : * 100% basis

** Equity basis

The Company had Power capacity and electricity generation in 2013-2015 below

	Unit	1 Jan –31Dec 2015	1 Jan –31 Dec 2014	1 Jan –31 Dec 2013
Luannan Power Plant				
Installed Capacity*	Mwh	680,265	688,965	784,817
Net generation**	Mwh	512,990	521,213	519,839
Utilization	Percent	75.41	75.65	66.24
Change in net generation	Percent	-1.58	0.26	0.63
Zhengding Power Plant				
Installed Capacity*	Mwh	595,795	404,311	404,933
Net generation**	Mwh	411,801	327,165	326,011
Utilization	Percent	69.12	80.92	80.51
Change in net generation	Percent	25.87	0.35	2.15
Zouping Power Plant				
Installed Capacity*	Mwh	815,328	828,871	839,575
Net generation**	Mwh	531,164	522,546	649,989
Utilization	Percent	65.15	63.04	77.42
Change in net generation	Percent	1.65	-19.7	8.18
BLCP Power Plant				
Installed Capacity*	Mwh	11,298,025	11,344,574	10,670,315
Net generation**	Mwh	10,784,308	10,825,521	10,157,527
Utilization	Percent	95.45	95.42	95.19
Change in net generation	Percent	-0.4	6.58	-5.68
Hongsa Power Plant				
Installed Capacity*	Mwh	2,659,100	-	-
Net generation**	Mwh	2,401,360	-	-
Utilization	Percent	90	-	-
Change in net generation	Percent	-	-	-

Note: - Power plant in China (Luannan, Zhengding, Zouping Power Plant) in Thailand (BLCP Power Plant) and Laos (Hongsa Power plant)

* Available capacity is calculated from total operation hours minus maintenance hours.

** Production of electricity at power plants and electric distribution system. This includes the power supply to the industrial area (if any).

C. Materials procurement method

- The company process on coal production from all five company's mines in Indonesia that are Indominco, Trubaindo, Jorong, Kitadin, and Bharinto. There are six mines in Australia such as Airly mine, Angus Place mine, Charbon mine, Clarence mine, and Mandalong mine, and two coal production mines in People's Republic of China such as Hebi mine, and Gaohe mine.
- In finding more coal sources, company give an important development of coalmine possessed by the company and there is exploration on good quality of coalmines in other countries in order to match with customers need.
- The company set up a purchasing sector to buy coal from other companies to sell, this will increase company's capability in responding to customers need and also the way to rise stability in product's delivery of the company.

D. Controlling of company raw materials and products that are produced

The company makes an agreement on coal quality with their customers. The information of coal quality such as, calorific value, sulfur value, etc. will be transported to mining sector to set the production plan both in quantity and quality in accordance with the requirement. They will randomly check the quality of coals in each steps starting from the mine to warehouse of the port that will deliver to customers to make sure that coal that will deliver to customer meet the requirements. In each delivery time, there will be the professional who comes to check products quality. Therefore, the company has been certificated by a number of institutions both from domestic and international.

(2) Environmental impact from production process

The production process of the company group can be divided into two processes which is Open pit mine and underground production process and electricity and steam generation which will result to environmental impact as follows:

- Emission of greenhouse gas from fuel, electricity, as well as Methane gas in coal seam
- Changing on landscape, forest ecosystem and subsidence from underground mining and biodiversity from overburden to make a quality soil mining, soil leaching from overburden process to water quality

of coal mining such as acidity (pH) and the amount of Total Suspended Solid (TRR) from mine leaching water and the temperature of power plant condenser water.

- Weather quality such as dust in the air, subsidence, collection, and coal transportation and from exhaust emission from electricity generation process, consists of small dust, sulfur dioxide and nitrogen oxide
- Water used in mining process and electricity and steam generation
- Domestic waste and hazardous waste for examples; waste from mining operation and waste from electricity generation process such as Bottom ash, Fly ash. Company give an important to business operation that correspond to enforcing environmental regulations and regulations on other standards related to business operation namely, water quality standard, air quality, and protection measure and reduction on environmental impact which are the conditions that specify on Environmental Impact Assessment (EIA). Moreover, the company also set environmental management standard in many fields in order to apply with entire organization and also adjusted to suit with each production sectors including to environmental management system (ISO 14001) and Occupational Health and Safety Management Systems (OHSAS 18001) to apply in business units to achieve ongoing development. In the areas they have high risk on environmental quality, the company have set the standard to use only in specific areas by selecting modern technology with high efficiency and install all time quality surveillance system such as, real time treatment system and continuously monitor water quality in Australian and all time air surveillance quality in power plant in Thailand and People's Republic of China, etc. The company operates on the reduction of greenhouse gas emission together with the production process improvement to reduce energy consumption. They also get fund from Australian government to research and develop the reduction of greenhouse gas emission from methane gas (The Ventilation Air Methane After Burner (VAM RAB) in Mandalog mine. It is anticipated that the reduction of greenhouse gas emission will decrease around 30 percent after the operation.

The performance resulted in last year, the company followed all regulations and there is no environmental complaint from government sectors and Thai, People's Republic of China, and Republic of Indonesia communities. In Australia, There are complaints or anxiety from people in the communities about amount of water consumed and the quality of water that released, which the company implemented on work plan and budget to relieve such concerned such as and improve water quality before discharge, install treatment system and continuously monitor on water quality, etc.

In 2536, the company established Rehabilitation Fund by allocated a part of revenue that received from coal trading into the fund. In 2015, there is 0.06 – 0.93 US dollars per coal production ton sending to the fund. For the mine in Republic of Indonesia, this amount of fund is allocated for environmental activities, community development, and mine restoration.

2.5 Important assets of the company and subsidiary

(1) Fixed assets

Lands, Buildings, and constructions on 31 December 2015

Lands, building, and initial equipment in capital cost and show with capital cost deducts with depreciation. The depreciation is calculated by using straight-line method to reduce carrying amount of each asset type over the estimation of assets' useful life of as follows:

Lands improvement	10 years
Building, construction and building improvement	By mine ages or 5 to 20 years
depends on which on is lower	
Machine and factory equipment	5 to 20 years
Decorating Equipment	4 and 5 years
Office equipment and stationary	4 and 5 years
Car	4 and 5 years
Equipment under financial lease	5 to 15 years

▪ The details of company and subsidiary lands

Location	Possessor	Size (Rai)	Acquisition Type	Objective	Book value (US dollar)
1. Li district, Lamphun	BP	345-2-74*	No obligation	Operate mine (BP-1)	1,179,130.28
2. Mae-Tha district, Lampang	BP	209-3-62*	No obligation	Operate mine (LP-2)	74,036.13
3. Li district, Lamphun	BMC	412-3-62*	No obligation	Operate mine	62,820.01
Total					1,315,986.42

Note: *The size of land used for mining

▪ The details of building and construction of the company and subsidiaries

Lists	Company	Ownership Characteristic	Book value (US dollar)	Obligation
1. Office building and residence at Li district, Lamphun	Banpu	Banpu company is the owner	21,270.78	No obligation
2. Material storage office building and residence	Banpu	Banpu company is the	124,324.41	No obligation

at Sopprab district, Mae Tha province, Lampang		owner		
3. Office building and residence of Jorong Indonesia mine	Jorong	Jorong company is the owner	14,265.73	No obligation
4. Port of Jorong Indonesia mine	Jorong	Jorong company is the owner	59,384.52	No obligation
5. Office building and residence of Indomico Indonesia mine	Indominco	Indomico company is the owner	13,090,198.41	No obligation
6. Port of Indomico Indonesia mine	Indominco	Indomico company is the owner	34,745,919.10	No obligation
7. Machinery and equipment of Indomico Indonesia mine	Indominco	Indomico company is the owner	88,846,199.50	No obligation
8. Office building and residence of Kitadin Indonesia mine	Kitadin	Kitadin company is the owner	465,905.24	No obligation
9. Machinery and equipment of Kitadin Indonesia mine	Kitadin	Kitadin company is the owner	616,452.74	No obligation
10. Office building and residence of Turbaindo Indonesia mine	Trubaindo	Turbaindo company is the owner	4,436,941.48	There are obligation under the loan agreement with bank lender
11. Port of Turbaindo Indonesia mine	Trubaindo	Turbaindo company is the owner	174,334.96	There are obligation under the loan agreement with bank lender
12. Machinery and equipment of Turbaindo Indonesia mine	Trubaindo	Turbaindo company is the owner	3,242,525.26	No obligation
13. Office building and residence of Bharinto Indonesia mine	Bharinto	Bharinto company is the owner	598,662.64	No obligation
14. Machinery and equipment of Bharinto Indonesia mine	Bharinto	Bharinto company is the owner	5,582,095.63	No obligation
15. Office building and residence of Trust mine	Trust	Trust company is the owner	725,532.05	No obligation
16. Machinery and equipment of Trust mine	Trust	Trust company is the owner	16,928,962.59	No obligation
Total			169,672,985.04	

▪ The details of major fixed assets of company group in Australia

Lists	Company	Ownership Characteristic	Book value (US dollar)	Obligation
1. Office building and residence	Airly Coal Pty	Airly Coal Pty company is the owner	2.3	No obligation

Lists	Company	Ownership Characteristic	Book value (US dollar)	Obligation
2. Factory and machine in mine operating	Airly Coal Pty	Airly Coal Pty company is the owner	125.2	No obligation
3. Office building and residence	Charbon Coal Pty	Charbon Coal company is the owner	9.4	No obligation
4. Factory and machine in mine operating	Charbon Coal Pty	Charbon Coal company is the owner	1.4	No obligation
5. Office building and residence	Clarence Coal Pty	Clarence Coal Pty company is the owner	0.4	No obligation
6. Factory and machine in mine operating	Clarence Coal Pty	Clarence Coal Pty company is the owner	98.1	No obligation
7. Factory and machine in mine operating	Centennial Drilling Pty Limited	Centennial Drilling Pty Limited is the owner	2.8	No obligation
8. Office building and residence	Centennial Fassifern Pty	Centennial Fassifern Pty company is the owner	49.0	No obligation
9. Factory and machine in mine operating	Centennial Fassifern Pty	Centennial Fassifern Pty company is the owner	1.8	No obligation
10. Factory and machine in mine operating	Centennial Coal Infrastructure Pty	Centennial Coal Infrastructure Pty company is the owner	36.8	No obligation
11. Office building and residence	Centennial Inglenook Pty	Centennial Inglenook Pty company is the owner	0.5	No obligation
12. Factory and machine in mine operating	Centennial Inglenook Pty	Centennial Inglenook Pty company is the owner	0.2	No obligation
13. Office building and residence	Ivanhoe Coal Pty	Ivanhoe Coal Pty company is the owner	10.1	No obligation
14. Factory and machine in mine operating	Ivanhoe Coal Pty	Ivanhoe Coal Pty company is the owner	47.2	No obligation
15. Factory and machine in mine operating	Centennial Mandalong Pty	Centennial Mandalong Pty company is the owner	260.0	No obligation
16. Factory and machine in mine operating	Centennial Mannering Pty	Centennial Mannering Pty company is the owner	6.7	No obligation
17. Factory and machine in mine operating	Centennial Myuna Pty	Centennial Myuna Pty company is the owner	56.1	No obligation
18. Factory and machine in mine operating	Centennial Northern Coal Service Pty	Centennial Northern Coal Service Pty company is the owner	41.2	No obligation
19. Office building and residence	Centennial Newstan Pty	Centennial Newstan Pty company is the owner	65.7	No obligation
20. Office building and residence	Centennial Springvale Pty	Centennial Springvale Pty company is the owner	1.4	No obligation
21. Factory and machine in mine operating	Centennial Springvale Pty	Centennial Springvale Pty company is the owner	153.5	No obligation
22. Factory and machine in mine operating	Centennial Coal Company	Centennial Coal Company is the owner	3.0	No obligation

Lists	Company	Ownership Characteristic	Book value (US dollar)	Obligation
Total			972.6	

(2) The information about patent permit and right in business operation

1. The details about patent permit and the investment promotion of company, subsidiary, and joint venture .

Project	Patent permit number	District	Province	Space Rai-Ngan- Square wa	Expired	By the company	Note
DONFAI	27564/14974	Mae Tha	Lampang	181-2-10	16/11/63	Banpu Mineral Company Limited	During the request for patent permit expropriation
LP-2	24414/14475	Mae Tha-Sopprab	Lampang	200-3-74	22/12/59	Banpu Company Limited	Stop production
LP-2	27423/14663	Mae Tha-Sopprab	Lampang	237-2-28	23/06/59	Banpu Company Limited	Stop production
LP-2	27501/15020	Mae Tha-Sopprab	Lampang	297-3-80	30/06/59	Banpu Company Limited	Stop production
BP-2 Expansion	25982/16074	Li	Lamphun	285-3-12	16/01/67	Banpu Company Limited	Stop mining
BP-2 Expansion	25983/16075	Li	Lamphun	296-0-45	16/01/67	Banpu Company Limited	Stop mining

Note:

- The DONFAI project is during the request for patent permit expropriation due to the company do not want to operate the mine in concession area.
- Every concession in Mae Tha district has stopped the production. However, the concession area is the area that joint with the same mining company as Cement Thai Company Limited
- The concession in Li district, Lamphun request for stop mining

The details about patent permit and the investment promotion of company, subsidiary, and joint venture in Indonesia.

Project	Patent permit number	District	Province	Space Rai-Ngan- Square wa	Expired	By the company	Note
Indonesia-Kalimantan	05PB0318	Tanah Laut	South Kalimantan	4,137 Hectares 7,341	9 Dec 2029	PT. Jorong Barutama Greston (Jorong)	Production Stage Production Stage

				Hectares			
Indominco	01PB0435	Bontang, Kutai Timur	East Kalimantan	25,121 Hectares	8 May 2028	PT. Indominco Mandiri	Production Stage
Kitadin (Embalut)	KTN 2003 0006 OP	Embalut, Kutai Kartanegara	East Kalimantan	2,973.3 Hectares	25 Feb 2022	PT. Kitadin	Production Stage
Kitadin (Tandung Mayang)	98PP0103	Bontang , Kutai Timur	East Kalimantan	2,338 Hectares	16 Jun 2018	PT. Kitadin	Production Stage
Trubaindo	96PB0160	Kutai Barat	East Kalimantan	23,650 Hectares	27 Feb 2035	PT. Trubaindo Coal Mining	Production Stage
Bharinto	CCOW-BEK 20Nov1997	Barito Utara & Kutai Barat	Central & East Kalimantan	22,000 Hectares	20 Nov 2027	PT. Bharinto Ekatama	Production Stage

The details about patent permit and the investment promotion of company, subsidiary, and joint venture in Australia

Project	Patent permit number	District	Province	Space Rai-Ngan-Square wa	Expired	By the company	Note
AIRLY	ML1331	AIRLY, COCO, MORUNDUREY & BANDAMORA	NSW	2,745	11 Oct 2035	CENTENNIAL AIRLY PTY LIMITED	Production
ANGUS PLACE	ML1424	WOLGAN, COX, COOK & MARANGAROO	NSW	7,735	18 Aug 2024	CENTENNIAL SPRINGVALE PTY LTD	Care & Maintenance
ANGUS PLACE	CCL704	COX & LIDSDALE	NSW	2,541	14 Jan 2023	CENTENNIAL SPRINGVALE PTY LTD	Care & Maintenance
ANGUS PLACE	ML1699	COOK	NSW	30.6	26 June 2035	CENTENNIAL SPRINGVALE PTY LTD	Care & Maintenance
ANGUS PLACE	ML1720	COOK	NSW	158.9	23 Nov 2036	CENTENNIAL SPRINGVALE PTY LTD	Care & Maintenance
BLUE MOUNTAINS	CCL738	LETT	NSW	1,116	28 Sep 2025	HARTLEY VALLEY COAL COMPANY PTY LIMITED	Closed
BLUE MOUNTAINS	ML1457	LETT & MARANGAROO	NSW	185.1	3 Nov 2020	HARTLEY VALLEY COAL COMPANY PTY LIMITED	Closed
CHARBON	MPL505	CLANDULLA	NSW	0.4097	11 Aug 2026	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	MPL526	WELLS, CLANDULLA & RYLSTONE	NSW	7.106	14 Dec 2024	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	MPL499	CLANDULLA	NSW	0.7917	28 May 2026	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1318	CLANDULLA	NSW	983	28 Jun 2026	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1384	CLANDULLA	NSW	195.5	19 Jan 2017	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1501	CLANDULLA	NSW	13	21 Dec 2022	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1545	CLANDULLA	NSW	204.65	9 Jan 2025	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	CCL732	CLANDULLA	NSW	1024	2 Dec 2025	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	MPL670	RYLSTONE & CLANDULLA	NSW	9.92	26 Mar 2024	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1524	CLANDULLA	NSW	20.26	28 Oct 2023	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	MPL964	CLANDULLA	NSW	4.932	20 Nov 2023	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	MPL270	CLANDULLA	NSW	213.7	28 Apr 2026	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1647	CLANDULLA	NSW	570.9	17 Dec 2031	CHARBON COAL PTY LIMITED	Care & Maintenance
CHARBON	ML1663	CLANDULLA	NSW	52.5	9 Jan 2033	CHARBON COAL PTY LIMITED	Care & Maintenance
CLARENCE	CCL705	CLWYDD, MARANGAROO & ROCK HILL	NSW	3,210	20 Dec 2026	COALEX PTY LIMITED AND CLARENCE COAL INVESTMENTS PTY LIMITED	Production
CLARENCE	ML1354	CLWYDD & COOK	NSW	155.3	21 Jul 2036	COALEX PTY LIMITED AND CLARENCE COAL INVESTMENTS PTY LIMITED	Production
CLARENCE	ML1353	CLWYDD, COOK & ROCK HILL	NSW	1,075	21 Jul 2036	COALEX PTY LIMITED AND CLARENCE COAL INVESTMENTS PTY LIMITED	Production
CLARENCE	ML1583	CLWYDD, MARANGAROO, LETT	NSW	3,331	9 Jul 2027	COALEX PTY LIMITED	Production
CLARENCE	ML1721	CLWYDD	NSW	5.11	7 Dec 2036	COALEX PTY LIMITED AND CLARENCE COAL	Production

Project	Patent permit number	District	Province	Space Rai-Ngan-Square wa	Expired	By the company	Note
						INVESTMENTS PTY LIMITED	
IVANHOE	ML1627	CULLEN BULLEN	NSW	79.78	2 Feb 2030	IVANHOE COAL PTY LTD	Closed
IVANHOE	CCL712	CULLEN BULLEN, COX & FALNASH	NSW	1,628	12 Nov 2006 Renewal pending	IVANHOE COAL PTY LTD	Closed
IVANHOE	ML1301	COX	NSW	5.131	28 Sep 2034	IVANHOE COAL PTY LTD	Closed
IVANHOE	MPL348	COX	NSW	9.45	24 May 2025	IVANHOE COAL PTY LTD	Closed
MANDALONG	ML1443	MORISSET, DORA & MANDOLONG	NSW	3,648	1 Mar 2020	CENTENNIAL MANDALONG PTY LTD	Production
MANDALONG	ML1543	MANDOLONG	NSW	172.5	25 Nov 2024	CENTENNIAL MANDALONG PTY LTD	Production
MANDALONG	ML1431	MORISSET	NSW	2.093	27 May 2019	CENTENNIAL MANDALONG PTY LTD	Production
MANDALONG	MPL191	COORUMBUNG	NSW	0.5615	25 Feb 2023	CENTENNIAL MANDALONG PTY LTD	Production
MANDALONG	CCL762	DORA, AWABA, MANDOLONG, MORISSET & WALLARAH	NSW	2,940	13 Oct 2022	CENTENNIAL MANDALONG PTY LTD	Production
MANDALONG	ML1553	MORISSET	NSW	64.32	7 Sep 2025	CENTENNIAL MANDALONG PTY LTD	Production
MANDALONG	ML1722	MANDOLONG, MORISSET, WYONG & MUNMORAH	NSW	3206	17 Dec 36	CENTENNIAL MANDALONG PTY LTD	Production
MANNERING	CCL721	MORISSET & WALLARAH	NSW	3,526	29 Jul 2026	CENTENNIAL MANNERING PTY LTD	Part Subleased to Chain Valley Colliery
MANNERING	CCL719	WALLARAH	NSW	1,803.5	22 Dec 2020	CENTENNIAL MANNERING PTY LTD	Part Subleased to Chain Valley Colliery
MUNMORAH	CCL720	WALLARAH & MUNMORAH	NSW	3,735	16 Feb 2023	CENTENNIAL MUNMORAH PTY LTD	Closed
MUNMORAH	CCL722	MORISSET, WALLARAH, MUNMORAH & TUGGERAH	NSW	5,140	5 Jul 2019	CENTENNIAL MUNMORAH PTY LTD	Closed
MYUNA	MPL334	AWABA	NSW	33.3	19 Oct 2036	CENTENNIAL MYUNA PTY LTD	Production
MYUNA	ML1370	WALLARAH	NSW	635	2 Dec 2016	CENTENNIAL MYUNA PTY LTD	Production
MYUNA	ML1632	AWABA, COORUMBUNG, WALLARAH & MORISSET	NSW	7,426	13 Oct 2022	CENTENNIAL MYUNA PTY LTD	Production
NEUBECKS PROJECT	CCL756	COX	NSW	101	6 Dec 2024	CENTENNIAL SPRINGVALE PTY LTD	Project
NEWSTAN	CCL746	AWABA & COORUMBUNG	NSW	3,308	31 Dec 2028	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	CCL764	TERALBA & AWABA	NSW	108.8	18 May 2021	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	CCL763	AWABA	NSW	190.1	9 Jun 2022	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	PLL497	AWABA	NSW	20.23	24 Aug 2017	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	ML1587	AWABA	NSW	3	23 Oct 2027	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	ML1586	AWABA & COORUMBUNG	NSW	449.1	13 Oct 2022	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	ML1452	AWABA & COORUMBUNG	NSW	1587	6 Jul 2020	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance

Project	Patent permit number	District	Province	Space Rai-Ngan-Square wa	Expired	By the company	Note
NEWSTAN	CCL727	TERALBA & AWABA	NSW	2,194.08	12 Aug 2027	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	MPL328	AWABA	NSW	0.397	5 Aug 2015 Renewal pending	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	ML1380	AWABA	NSW	78	18 Sep 2016	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	MPL304	AWABA	NSW	0.07	25 Mar 2035	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	MPL305	AWABA	NSW	0.4047	25 Mar 2035	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	ML1480	AWABA	NSW	14.49	20 Jul 2023	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
NEWSTAN	MPL327	AWABA	NSW	1.041	5 Aug 2015 Renewal pending	CENTENNIAL NEWSTAN PTY LTD	Care & Maintenance
SPRINGVALE	ML1303	LIDSDALE & MARANGAROO	NSW	713	15 Dec 2034	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1588	COOK & CLWYDD	NSW	976	19 Oct 2027	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	CL377	LIDSDALE & MARANGAROO	NSW	1,105	9 Mar 2025	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	MPL314	LIDSDALE	NSW	95.98	3 Aug 2035	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1323	LIDSDALE & MARANGAROO	NSW	30.24	3 Aug 2035	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1537	MARANGAROO	NSW	4.125	16 Jun 2024	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1326	CLWYDD, COOK , COX & MARANGAROO	NSW	2157	18 Aug 2024	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1352	COX & LIDSDALE	NSW	7.6	23 Jun 2036	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1448	LIDSDALE	NSW	95.16	31 May 2020	CENTENNIAL SPRINGVALE PTY LTD	Production
SPRINGVALE	ML1670	COOK	NSW	0.3	17 Feb 2033	CENTENNIAL SPRINGVALE PTY LTD	Production
WESTERN MAIN	CL361	LIDSDALE	NSW	14.26	16 Jul 2032	CENTENNIAL SPRINGVALE PTY LTD	Closed
WESTERN MAIN	PLL133	LIDSDALE	NSW	16.51	10 Aug 2024	CENTENNIAL SPRINGVALE PTY LTD	Closed
WESTERN MAIN	ML204	LIDSDALE & COOK	NSW	10.12	27 May 2033	CENTENNIAL SPRINGVALE PTY LTD	Closed
WESTERN MAIN	CL394	LIDSDALE	NSW	17	27 May 2034	CENTENNIAL SPRINGVALE PTY LTD	Closed
WESTERN MAIN	ML564	LIDSDALE	NSW	19.75	2 May 2023	CENTENNIAL SPRINGVALE PTY LTD	Closed
WESTERN MAIN	CCL733	COX & LIDSDALE	NSW	723.5	3 Jul 2027	CENTENNIAL SPRINGVALE PTY LTD	Closed
WESTERN MAIN	ML1319	COX	NSW	1.476	5 Jul 2035	CENTENNIAL SPRINGVALE PTY LTD	Closed
AIRLY	ML1331	AIRLY, COCO, MORUNDUREY & BANDAMORA	NSW	2,745	11 Oct 2035	CENTENNIAL AIRLY PTY LIMITED	Production

Note :

- NSW : New South Wales, Australia
- The District is the Parish or Parishes included in the Concession

The details about patent permit and the investment promotion of company, subsidiary, and joint venture in China.

Project	Patent permit number	District	Province	Space Rai-Ngan-Square wa	Expired	By the company	Note
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Gaohe Mine	C100000201010 1110077581	Changzhi County, Changzhi City	Shanxi	65.4	14 Oct 2040	Shanxi Gaohe Energy Company Ltd.	Production Stage
Hebi Mine	1000000520080	Hebi City,	Henan	23.4825	14 July 2035	Hebi Zhong Tai Mining Co.,Ltd.	Production Stage

(3) The information about geology and ore reserves

The amount of resources and coal reserves

The amount of company's coal reserves and company's subsidiary that operate coalmines in Thailand, Republic of Indonesia, People's Republic of China, and Australia. The evaluated data will be used in planning, production, and development of company's coalmines in the future. For the report of coal reserves, the company conducts and examines by 2 consulting companies are SRK Consulting Company (UK), Runge Company Limited (Australia), and Marshall Miller & Association Company (USA).

The evaluation results divided coal into two types are Reserves and Resources by the guideline of International Coal Reports Standards, which can compare with the standard of The Australian Code for Reporting Mineral Resources and Ore Reserves or so called "JORE Code" report.

In the study of coal reserves, the Coal Resources part means the total amount of coals that already evaluated by the exploring method. This amount of coal reserves is calculated only the amount that have economic potential and get accepted internationally. The amount Marketable Coal Reserves is included in as a part of Coal Resources. There is an engineering study together with the evaluation of coal reserves amount that estimated to commercially produce by concerning with income and capital factors.

Coal Reserve and Resources of company at 31 December 2015

Unit : Million tons

Coal Mine/Project	Coal Reserve		
	Coal Reserve	Coal Sale	Coal Reserve
	At 31 December 2014	2015	At 31 December 2015
1. Indonesia	251.2	27.8	223.4
1.1 Jorong	2.5	1.3	1.2
1.2 Indominco	88.3	13.0	75.3
1.3 Kitadin	8.0	3.6	4.4
1.4 Trubaindo	52.7	7.1	45.6
1.5 Bharinto	99.7	2.8	96.9
2. Australia	377.4	14.8	362.6

2.1 Airly	32.5	0.7	31.8
2.2 Angus Place	66.5	0.3	66.2
2.3 Charbon	0.6	0.5	0.1
2.4 Clarence	46.4	2.3	44.1
2.5 Mandalong	94.7	5.7	89.0
2.6 Myuna	33.6	1.7	31.9
2.7 Springavale	39.4	3.5	35.9
2.8 Newstan	56.2	-	56.2
2.9 Neubeck (Project)	7.5	-	7.5
3. China	192.3	9.0	183.3
3.1 Gaohe	22.1	1.2	20.9
3.2 Hebi Zhongtai	170.2	7.8	162.4
Total	820.9	51.6	769.3

2.6 Revenue Structure

In past 3 years period, ending at 31 December

(1) Banpu Company Limited

Product or service	Operated by	Company shareholding percent	2015		2014		2013	
			Revenue (M.USD)	%	Revenue (M.USD)	%	Revenue (M.USD)	%
<u>Sales Revenue</u>								
1. Domestic Sales	BP	100.00	0.47	0.32	0.15	0.21	0.46	0.88
2. Imported Sales	BP	100.00	146.05	99.44	71.33	99.52	51.66	99.12
3. Other Revenue	BP	100.00	0.35	0.24	0.19	0.27	-	-
Total Sales Revenue			146.87	100.00	71.67	100.00	52.12	100.0

(2) Banpu Company Limited and subsidiary

Product or Service	Operated by	Company shareholding percent	2015		2014		2013	
			Revenue (M.USD)	%	Revenue (M.USD)	%	Revenue (M.USD)	%
<u>Revenue from Domestic Sales:</u>								
1. Domestic/Imported Sales	BP	100.00	146.52	5.92	61.98	1.97	44.99	1.34
	BMC	99.99	41.37	1.67	-	-	-	-
	BPI	99.99	6.68	0.27	27.87	0.89	31.64	0.94
	CMMC	100.00	0.02	0.00	94.43	3.00	79.27	2.37
2. Coal in Indonesia	Indominco	65.13	150.60	6.08	183.93	5.85	165.05	4.93
	Kitadin	65.13	-	-	5.32	0.17	5.69	0.17
	Bharinto	64.49	21.41	0.86	25.10	0.80	7.09	0.21
	Trubaindo	65.13	24.71	1.00	19.22	0.61	26.26	0.78
	Jorong	65.13	17.33	0.70	22.69	0.72	23.77	0.71

3. Coal in Australia	CEY	100.00	343.74	13.88	469.97	15.80	459.59	13.72
4. Other revenues			22.39	0.90	27.92	0.89	31.23	0.93
Total sales revenue - domestic			774.77	31.28	965.43	30.70	874.58	26.10
<u>Revenue from International Sales::</u>								
1. International trading	Indominco	65.13	599.62	24.21	914.40	29.08	1,083.12	32.32
	Kitadin	65.13	31.18	1.26	40.18	1.28	81.07	2.42
	Bharinto	64.49	131.30	5.30	111.58	3.55	52.62	1.57
	Trubaindo	65.13	432.55	17.47	471.05	14.98	597.05	17.82
	Jorong	65.13	14.14	0.57	14.40	0.46	17.62	0.52
	CEY	100.00	302.42	12.21	459.80	14.61	453.79	13.54
2. Electricity business	BMC	99.99	21.49	0.87	-	-	-	-
2. Electricity business	BIC	100.00	169.11	6.83	168.09	168.09	191.40	5.71
Total sales revenue - International			1,701.81	68.72	2,179.50	69.30	2,476.31	73.90
Total Sales Revenues			2,476.58	100.00	3,144.93	100.00	3,350.89	100.00
Profit Sharing (deficit) from capital investment			51.87		86.55		95.43	
Total Revenues			2,528.45		3,231.48		3,446.32	

Note: 1. Other revenues consist of other services

2. The company does not know the electricity business in the country selling revenue that shareholding proportion is less than 50 percent

3. The list of executives and major shareholders

3.1 Board of Directors

Management Structure

The company's management structure as of 31 December 2015 consists of Board of directors and Executive officers. The Board Directors 13 persons consist of independent directors 6 persons, non-executive directors 5 persons, and executive directors 2 person. Independent directors account for 46% of The Board membership

The Board set up 3 sub-committee namely, the Audit Committee 3 persons, Corporate Governance and Nomination Committee 4 person, and Compensation Committee 3 persons

The Board also requires that Chairman of the Board, Chairman of the Audit Committee, Chairman of the Corporate Governance and Nomination Committee, Chairman of the Compensation Committee and all directors in the Audit Committee be independent directors.

The Board of Directors consists of:

1. Mr. Kirk-Krai Jirapaet	Chairman of the Board of Directors Independent Director
2. Mr. Anothai Techamontrikul	Vice Chairman Independent Director
3. Mr. Rutt Phanijphand	Independent Director
4. Mr. Teerana Bhongmakapat	Independent Director
5. Mr. Suthad Setboonsarng	Independent Director
6. Mr. Sudiarso Prasertio	Independent Director
7. Mr. Metee Auapinyaku	Director
8. Mr. Chanin Vongkusolkrit	Director
9. Mr. Ongart Auapinyakul	Director
10. Mr. Rawi Corsiri	Director
11. Mr. Buntoeng Vongkusolkrit	Director
12. Mr. Verajet Vongkusolkrit	Director
13. Ms. Somruedee Chaimongkol	Director

Remarks: Annual General Meeting of shareholders for 2015 approved the member of Company's directors from 12 to 13 persons and appointed Ms. Somruedee Chaimongkol to be a new director, effective from 4 April 2015 onwards.

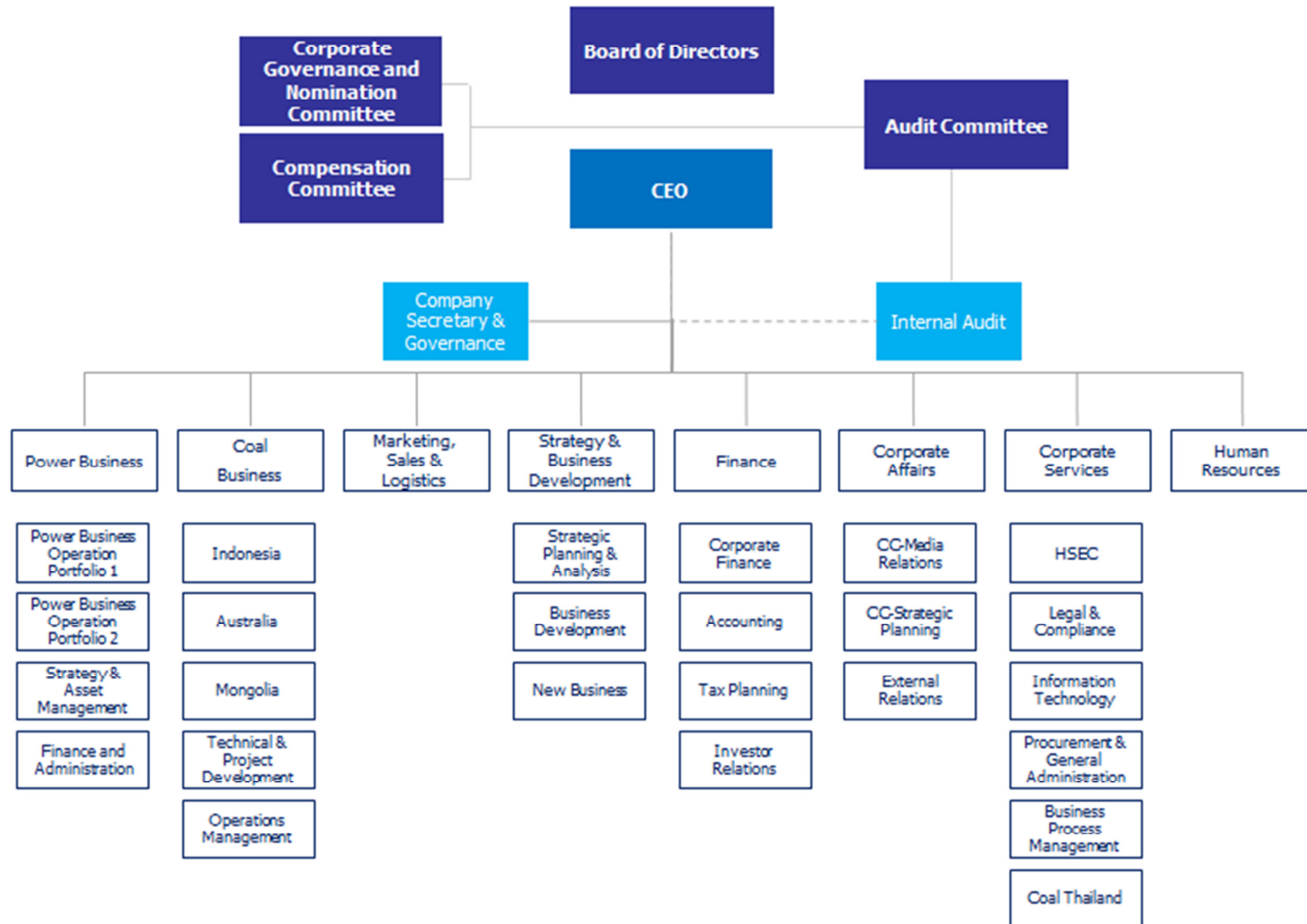
3.2 The Management

The management* consists of

1. Ms. Somruedee Chaimongkol	Chief Executive Officer
2. Mr. Somyot Ruchirawat	Deputy Chief Executive Officer
3. Mr. Voravudhi Linananda	Chief Operating Officer
4. Mr. Peter Parry	Chief Financial Officer
5. Mr. Sathidpong Wattananuchit	Assistant Chief Executive Officer - Corporate Services
6. Mr. Akaraphong Dayananda	Head of Strategy and Business Development
7. Ms. Udomlux Olarn	Senior Vice President - Corporate Affairs

Note: * After the CEO, the next four executives as announced in the company's organisation structure effective from 1 January 2009, revised in 2013 and 2015 are appointed to manage the coal business unit, the power business unit, finance, corporate services, strategy and business development and corporate affairs respectively. Mr. Somyot Ruchirawat has been appointed as Deputy Chief Executive Officer and Mr. Voravudhi Linananda has been appointed as Chief Operating Officer since 1 January 2013.

Banpu Organization Structure



3.3 Major Shareholders**Ten Major Shareholders** as of 28 March 2016

Major Shareholders	Amount of Shares Held	Percentage
1. The Vongkusolkrit Family	271,827,560	10.53
Mitr Phol Sugar Corp., Ltd.	144,064,080	5.58
TME Capital Co., Ltd.	63,116,000	2.44
City Holding Co., Ltd.	26,950,000	1.04
United Farmer and Industry Co., Ltd.	17,794,450	0.69
MP Particle Board Co., Ltd.	15,209,650	0.59
Mid-Siam Capital Co., Ltd.	7,453,500	0.29
Pacific Sugar Corporation Ltd.	6,819,050	0.26
Ufinves Co., Ltd.	6,606,110	0.26
Mitr Phol Bio-Power Phu Viang Co., Ltd.	6,152,000	0.24
Mitr Kalasin Sugar Co., Ltd.	4,800,000	0.19
2. Thai NVDR Company Limited	189,969,982	7.36
3. MR. PRATEEP TANGMATITHAM	58,718,300	2.27
4. SOCIAL SECURITY OFFICE	46,249,000	1.79
5. STATE STREET BANK EUROPE LIMITED	35,887,990	1.39
6. UBS AG SINGAPORE BRANCH	34,668,000	1.34
7. CHASE NOMINEES LIMITED	23,073,050	0.89
8. MR. THAVEECHAT JURANGKOOL	19,050,000	0.74
9. MR. SUPACHAI SUTHIPONGCHAI	17,736,000	0.69
10. EAST FOURTEEN LIMITED-DIMENSIONAL EMER MKTS VALUE FD	17,340,100	0.67
Total	1,013,484,822	39.25

Notes :

1. Mitr Phol Sugar Corp., Ltd.
Mid-Siam Sugar Corp., Ltd. holds 99.99% of its paid-up capital.
2. TME Capital Co., Ltd.
The Vongkusolkrit Family holds 54.23% of its paid-up capital.
Ufinves Co., Ltd. holds 15.23% of its paid-up capital.

3. City Holding Co., Ltd.
The Vongkusolkrit Family holds 100% of its paid-up capital.
4. United Farmer and Industry Co., Ltd.
Mitr Phol Sugar Corp., Ltd. holds 87.56 of its paid-up capital.
5. MP Particle Board Co., Ltd.
United Farmer and Industry Co., Ltd. holds 99.99% of its paid-up capital.
6. Mid-Siam Capital Co., Ltd.
Mid-Siam Sugar Corp., Ltd. holds 99.99% of its paid-up capital.
7. Pacific Sugar Corporation Ltd.
Mitr Phol Sugar Corp., Ltd. holds 99.99% of its paid-up capital.
8. Ufinves Co., Ltd.
TME Capital Co., Ltd. holds 100% of its paid-up capital.
9. Mitr Phol Bio-Power Phu Viang Co., Ltd.
United Farmer and Industry Co., Ltd. holds 51.04% of its paid-up capital.
10. Mitr Kalasin Sugar Co., Ltd.
United Farmer and Industry Co., Ltd. holds 99.99% of its paid-up capital.

4 .Capital increase and dividend history

4.1 Capital increase history in past three years

The company does not increase capital during past 3 years

4.2 Dividend payment policy and dividend payment during past three years

The company's policy is to pay dividend in 50 percent of total financial budget net profit after deducts all types of reserve money that company specify. However, the dividend payment rate will depend on cash flow and investment conditions of the company and subsidiary including to legal and other restrictions.

The subsidiary company policy is to pay dividend from business operation net profit after provident as the law prescribe. The board of direction will consider about profits from the operation, financial condition, and capital requirement, and propose to shareholders to approve dividend payment of past 5 years of Banpu Company Limited as follows:

Year	Net Profit rate (loss) per stock (Baht per stock)	Special Dividend (Baht per Stock)	Yearly dividend payment	Total (Baht per stock)	Dividend payment rate per net profit (%)
2011	73.82	3.00	18.00	21.00	28%
2012	34.19	-	18.00	18.00	53%
2013	1.22*	-	1.20**	1.20**	98%
2014	1.038	-	1.20	1.20	119%
2015	(0.594)	-	1.00	1.00	n.a.

Note:

* The Extraordinary General Meeting of Shareholders on 9 September 2013, the shareholders have approved the changing in stocks value from 10 baht to 1 baht per share and the amount of listed securities from 354,050,479 shares to 3,540,504,790 shares and the amount of listed securities that already released and has been paid from 2,717,478,550 shares to 2,717,478,550 shares. The company has implemented these changes and registered with the Ministry of Commerce on 19 September 2013.

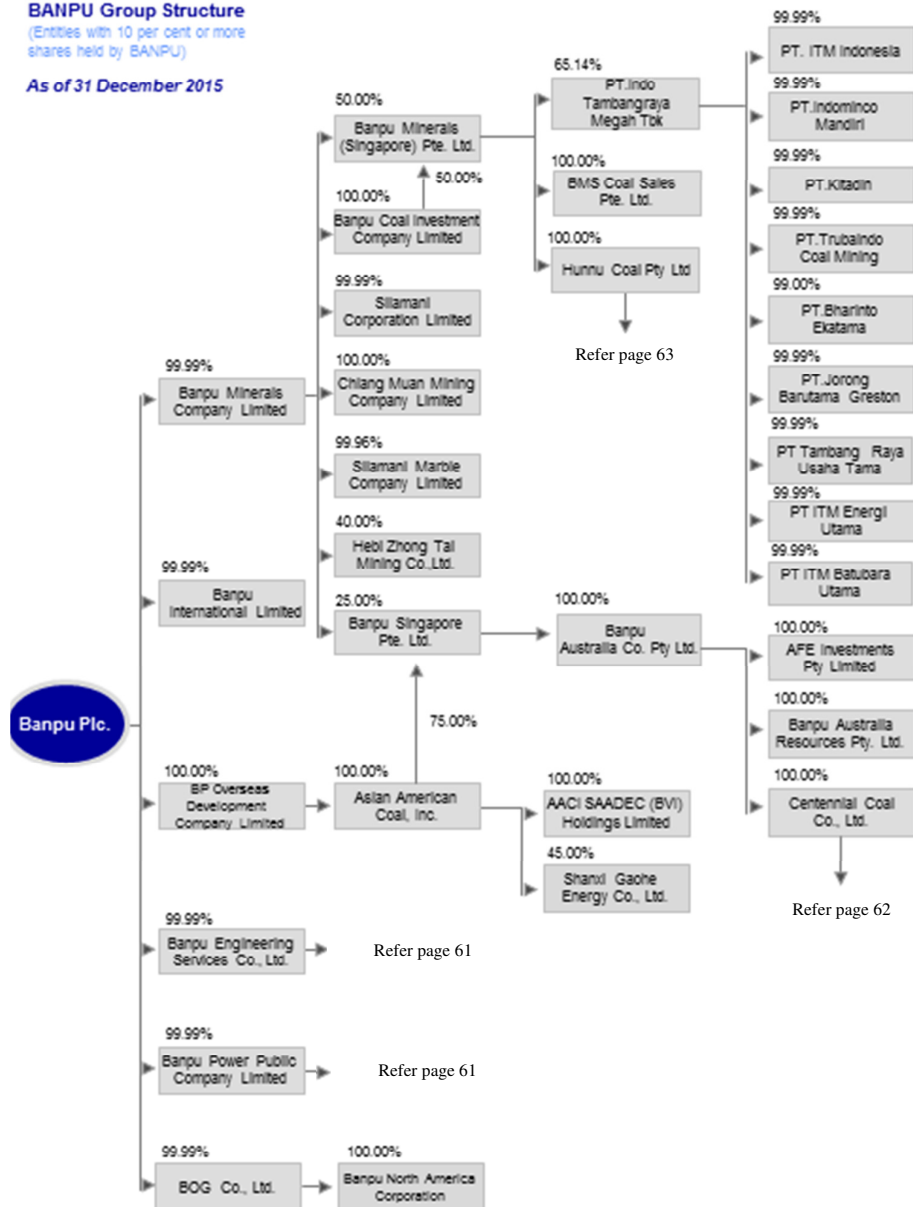
**On 18 February 2559, the board of direction has approved to dividend payments of the company to pay dividend 1.00 baht per share, which this payment is for the operation results for 2015, on 1 January – 31 December 2015 (the dividend has been paid 0.50 per share on 25 September 2015 with the rate of 0.50 baht per share). Therefore, the remaining amount of dividend for the operation results in 2015 is 0.50 baht each share. The company is suggested to pay accumulated profit and operation results on 1 July 2015 to 31 December 2015 to shareholders with the rate of 0.50 baht per share, paid from the profits that get exemption not to include and calculate in corporate income tax, which the dividend receivers will not get credit tax. The tax will be paid on 13 May 2559.

5.The subsidiary Subsidiaries and Affiliates

5.1 Banpu Group Structure

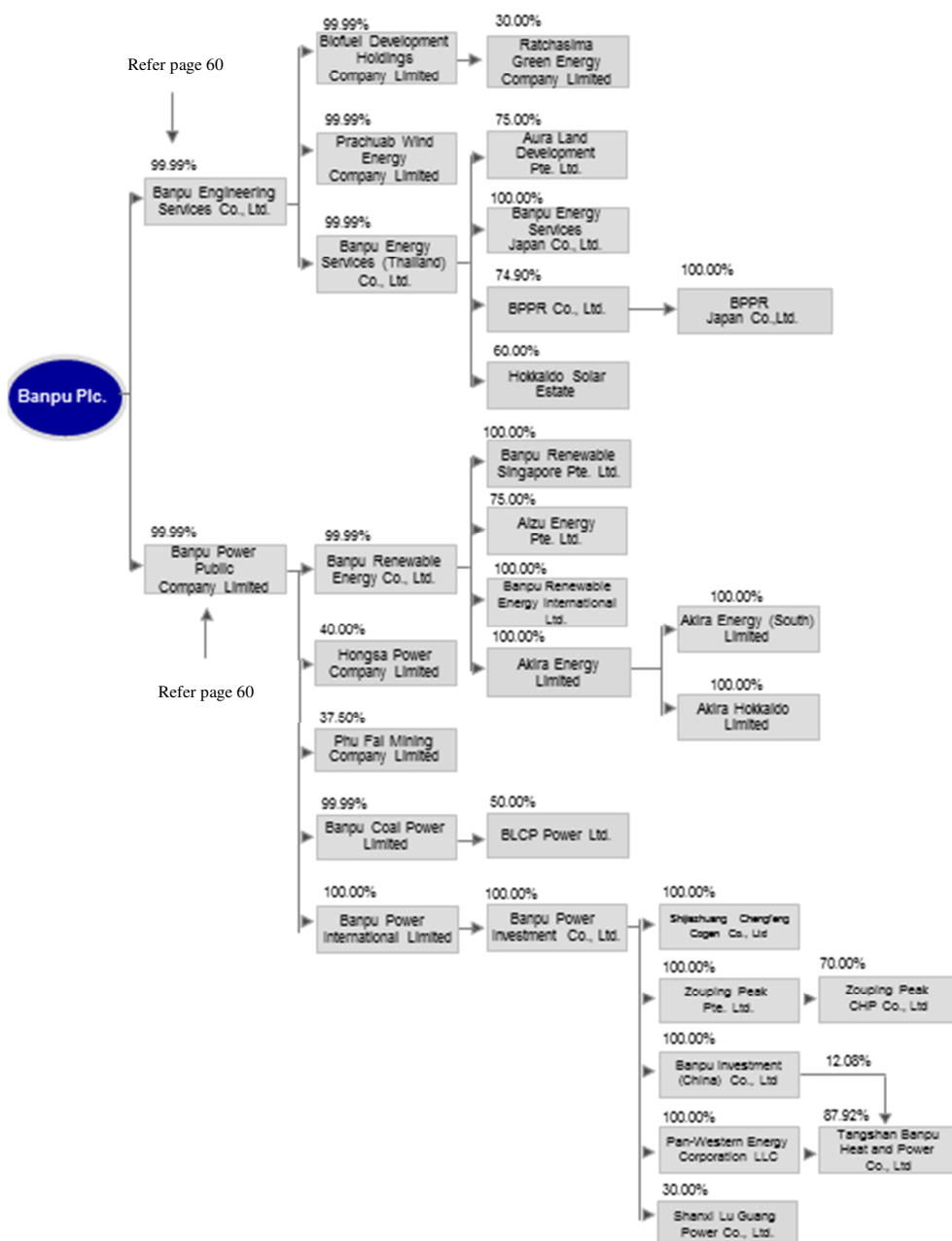
BANPU Group Structure (Entities with 10 per cent or more shares held by BANPU)

As of 31 December 2015



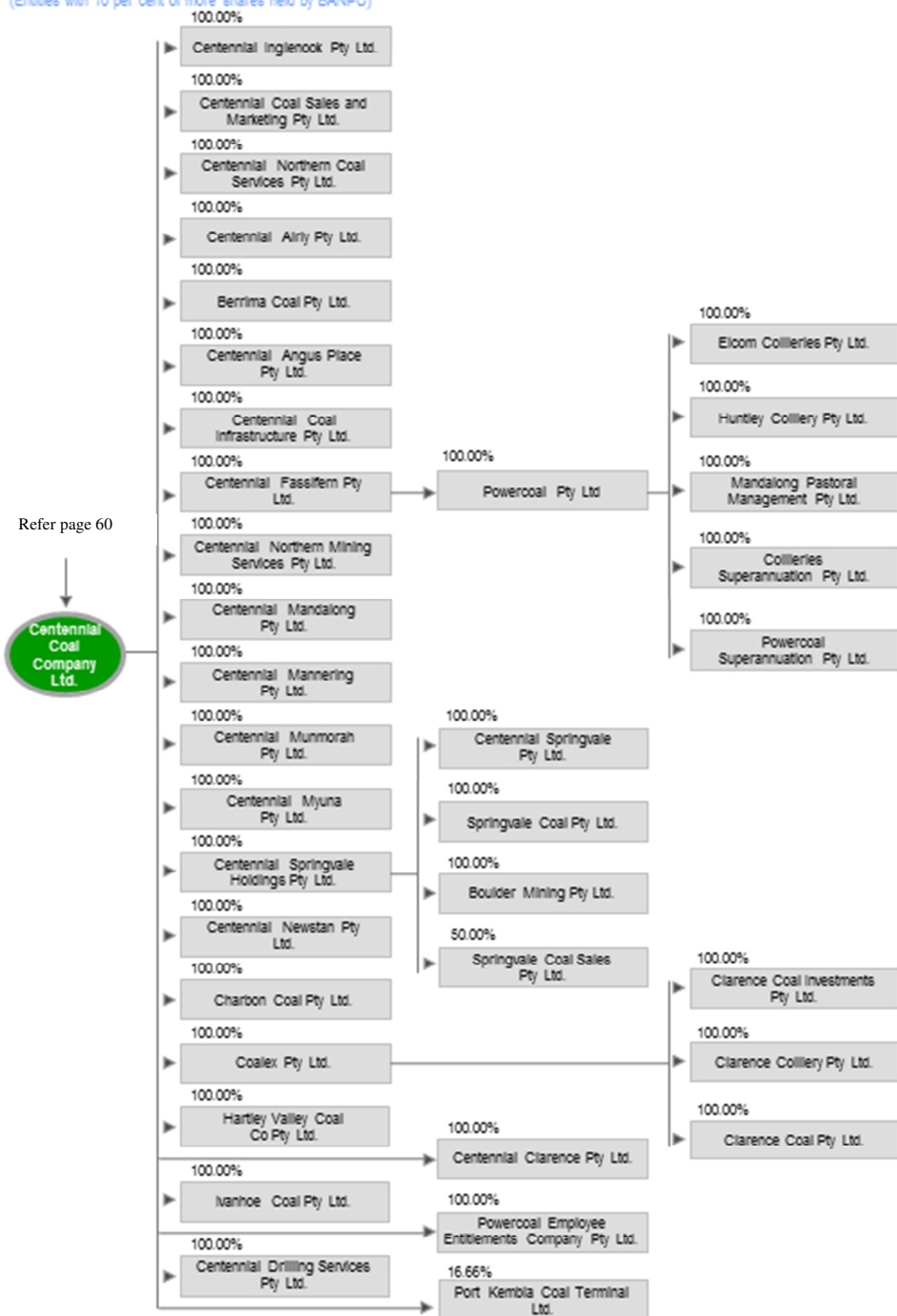
BANPU Group Structure

(Entities with 10 per cent or more shares held by BANPU)



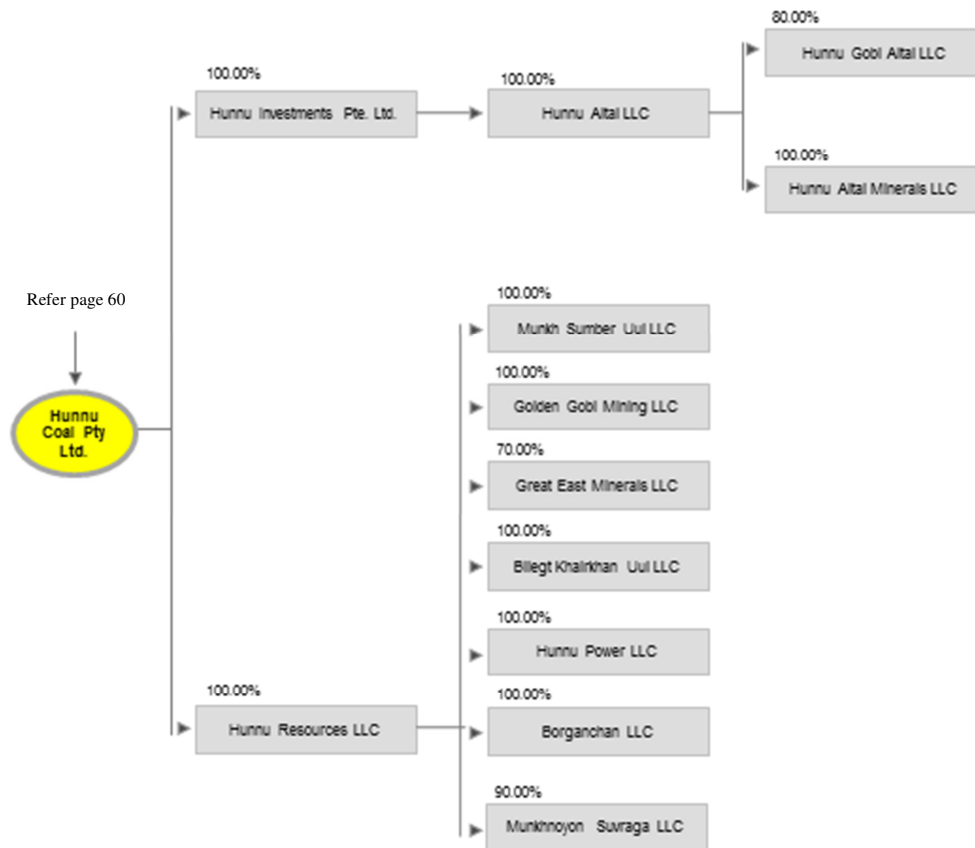
BANPU Group Structure

(Entities with 10 per cent or more shares held by BANPU)



BANPU Group Structure

(Entities with 10 per cent or more shares held by BANPU)



5.2 Details of The Company, Its Subsidiaries and Associated Companies and Joint Ventures

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
	Thailand								
1	Banpu Minerals Company Limited	Coal mining and trading	THB 3,200,000,000	THB 3,200,000,000	3,200,000	1,000	99.99%	58/1, Moo 1, Tambon Thungkwaw, Amphoe Muang Phrae, Phrae Province, Thailand	0 2694 6600
2	Banpu International Limited	Investment in coal mining	THB 250,000,000	THB 250,000,000	25,000,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
3	Chiang Muan Mining Company Limited	Limited Coal mining and trading	THB 57,837,500	THB 57,837,500	5,783,750	10	100.00%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
4	Banpu Engineering Services Co., Ltd. Banpu Engineering Services Co., Ltd.	Investment in alternative energy	THB 247,000,000	THB 247,000,000	24,700,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
5	Banpu Energy Services (Thailand) Co., Ltd	Investment in alternative energy	THB 150,000,000	THB 150,000,000	15,000,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
6	Biofuel Development Holdings Company Limited	Investment in alternative energy	THB 76,000,000	THB 76,000,000	7,600,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
7	Prachuab Wind Energy Company Limited	Investment in alternative energy	THB 10,000,000	THB 10,000,000	1,000,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
8	BOG Co., Ltd.	Investment in energy business	THB 110,000,000	THB 110,000,000	1,100,000	100	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
9	Silamani Corpora- tion Limited	Coal trading	THB 75,000,000	THB 75,000,000	7,500,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
10	Silamani Marble Company Limited	Coal trading	THB 50,000,000	THB 50,000,000	500,0000	100	99.96%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
11	Banpu Power Public Company Limited	Investment in power	THB 19,956,920,000	THB 12,971,995,000	1,297,199,500	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6000
12	Banpu Coal Power Limited	Investment in powe	THB 5,921,587,160	THB 5,921,587,160	592,158,716	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6000
13	Banpu Renewable Energy Co., Ltd.	Investment in alternative energy	THB 960,000,000	THB 508,750,000	96,000,000	10	99.99%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6000
Indonesia									
14	PT. Indo Tambangraya Megah Tbk	Construction in mining, electricity support business, Transportation, Workshop, General Trading, Industry, Services in Indonesia	IDR 1,500,000,000,000	IDR 564,962,500,000	1,129,925,000	500	65.14%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100
15	PT. Indominco Mandiri	Coal Mining in Indonesia	IDR 20,000,000,000	IDR 12,500,000,000	12,500	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
16	PT. Jorong Barutama Greston	Coal Mining in Indonesia	IDR 318,855,000,000	IDR 318,855,000,000	21,257	15,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100
17	PT. Trubaindo Coal Mining	Coal Mining in Indonesia	IDR 100,000,000,000	IDR 63,500,000,000	63,500	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100
18	PT. Kitadin	Mining, Contractor & Trading in Indonesia	IDR 1,000,000,000,000	IDR 377,890,000,000	188,945	2,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100
19	PT. Bharinto Ekatama	Coal Mining in Indonesia	IDR 68,000,000,000	IDR 17,000,000,000	17,000	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100
20	PT. ITM Indonesia	Coal trading including coal agent and coal blending, transportation business	IDR 40,000,000,000	IDR 11,000,000,000	11,000	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6221 29328100
21	PT. Tambang Raya Usaha Tama	Mining services	IDR 500,000,000,000	IDR 125,000,000,000	12,500	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6222 29328100
22	PT. ITM Energi Utama	Energy business	IDR 40,000,000,000	IDR 11,000,000,000	11,000	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6223 29328100
23	PT. ITM Batubara Utama	Coal mining business	IDR 40,000,000,000	IDR 11,000,000,000	11,000	1,000,000	99.99%	Pondok Indah Office Tower 3, 3rd floor, Jl. Sultan Iskandar Muda, Pondok Indah Kav. V-TA, Jakarta 12310, Indonesia	6224 29328100
Australia									
24	Banpu Australia Co. Pty Ltd	Investment in coal mining in Australia	AUD 2,428,021,000	AUD 2,428,021,000	2,428,021,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
24	Centennial Coal Company Ltd	Coal Mining and Marketing	AUD 2,449,783,562	AUD 2,449,783,562	395,126,381	\$6.20	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
26	Centennial Northern Coal Services Pty Ltd	Employer Company for Newstan Washery	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
27	Berrima Coal Pty Ltd	Dormant	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
28	Centennial Airly Pty Ltd	Coal Mining	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
29	Centennial Angus Place Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
30	Centennial Coal Infrastructure Pty Ltd	Coal exporting logistics and infrastructure	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
31	Centennial Coal Sales and Marketing Pty Ltd	Coal Marketing	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
32	Centennial Fassifern Pty Ltd	Coal Mining	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
33	Centennial Northern Mining Services Pty Ltd	Employer Company for Newstan	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
34	Centennial Inglenook Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
35	Centennial Mandalong Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
36	Centennial Mannering Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
37	Centennial Munmorah Pty Ltd	Coal Mining (now Dormant)	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
38	Centennial Myuna Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
39	Centennial Newstan Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
40	Charbon Coal Pty Ltd	Coal Mining	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
41	Coalex Pty Ltd	Coal Mining - Clarence JV	AUD 7,500,000	AUD 7,500,000	750,000	10	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
42	Clarence Coal Investments Pty Ltd	Coal Mining - Clarence JV	AUD 19,500,002	AUD 19,500,002	15,500,002 Ord A shares 4,000,000 Ord B shares	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
43	Clarence Colliery Pty Ltd	Coal Mining - Clarence JV	AUD 10,000	AUD 10,000	10,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
44	Clarence Coal Pty Ltd	Coal Mining - Clarence JV	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
45	Centennial Clarence Pty Ltd	Coal Mining - Clarence JV	AUD 8,800,000	AUD 8,800,000	8,800,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
46	Powercoal Pty Ltd	Dormant Holding company	AUD 4,590,001	AUD 4,590,001	4,590,001	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
47	Powercoal Superannuation Pty Ltd	Superannuation Company (Dormant)	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
48	Collieries Superannuation Pty Ltd	Superannuation Company (Dormant)	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
49	Elcom Collieries Pty Ltd	Dormant	AUD 1,500,000	AUD 1,500,000	750,000	2	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
50	Huntley Colliery Pty Ltd	Dormant	AUD 354,000	AUD 354,000	177,000	2	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
51	Mandalong Pastoral Management Pty Ltd	Dormant	AUD 2,736,028	AUD 2,736,028.00	10,000,000 Ord partly paid shares - \$0.20 368,014 Ord Shares - \$2.00	2	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
52	Powercoal Employees Entitlements Company Pty Ltd	Employee Trust Company Ex Powercoal	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
53	Hartley Valley Coal Co Pty Ltd	Dormant	AUD 1,000,000	AUD 1,000,000	1,000,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
54	Ivanhoe Coal Pty Ltd	Coal Mining	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
55	Centennial Drilling Services Pty Ltd	Drilling Services	AUD 1,250,000	AUD 1,250,000.00	750,000 A Class Shares 250,000 B Class shares 250,000 C Class shares	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
56	Centennial Springvale Holdings Pty Ltd	Coal Mining	AUD 1	AUD 1	1	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
57	Centennial Springvale Pty Ltd	Coal Mining	AUD 1,000,000	AUD 1,000,000	1,000,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
58	Springvale Coal Pty Ltd	Coal Mining	AUD 2,000,000	AUD 2,000,000	2,000,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
59	Springvale Coal Sales Pty Ltd	Coal Marketing	AUD 2	AUD 2	2	1	50.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
60	Boulder Mining Pty Ltd	Coal Mining	AUD 1,000	AUD 1,000	1,000	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
61	AFE Investments Pty Limited	Mining Investment	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
62	Banpu Australia Resources Pty Ltd	Investment in coal mining	AUD 2	AUD 2	2	1	100.00%	Level 18, BT Tower, 1 Market Street, Sydney NSW 2000, Australia	61 2 9266 2700
63	Hunnu Coal Pty Ltd	Coal mining and trading	AUD 222,160,154	AUD 222,160,154	353,761,242	No par value*	100.00%	Level 1, 330 Churchill Avenue, Subiaco, WA 6008, Australia	61 8 9328 6262
China									
64	Shijiazhuang Chengfeng Cogen Co., Ltd	Power and heat production and sales	USD 30,516,000	USD 24,125,883	6,390,117	NA	100.00%	North Beiguan, Zhengding County, Shijiazhuang City 050800, Hebei Province, PRC	(86311) 85176918
65	Banpu Investment (China) Co., Ltd.	Investment in electrical power business	USD 30,000,000	USD 30,000,000	NA	NA	100.00%	9A, 9th Floor, Tower B, Gateway Plaza, No. 18 Xia Guang Li, North Road of East Third Ring, Chaoyang District, Beijing, PRC 100027	(8610) 5758 0388
66	Tangshan Banpu Heat and Power Co., Ltd	Power and heat production and sales	USD 47,504,000	USD 47,504,000	NA	NA	100.00%	West of Gujiaying Villiage, Benshi Road, Luannan County, Tangshan City 063500, Hebei Province, PRC	(86315) 4168274
67	Zouping Peak CHP Co., Ltd	Power and heat production and sales	RMB 261,800,000	RMB 261,800,000	NA	NA	70.00%	Xiwang Industrial Region, Handian Town, Zouping County, Binzhou City 256209, Shandong Province, PRC	(86543) 4615655
Mongolia									
68	Hunnu Altai LLC	Foreign Trade , Minerals Mining	MNT 93,142,351,744	MNT 93,142,351,744	672,557	138,490	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul	(976) 75551221, (976) 75551551

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
								district, Ulaanbaatar 17011, Mongolia	
69	Munkh Sumber Uul LLC	Foreign Trade	MNT 2,131,220,000	MNT 2,131,220,000	213,122	10,000	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
70	Golden Gobi Mining LLC	Foreign Trade, Mineral exploration	MNT 11,605,810,000	MNT 11,605,810,000	1,160,581	10,000	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
71	Great East Minerals LLC	Foreign Trade, Mineral exploration	MNT 1,000,000	MNT 1,000,000	100	10,000	70.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
72	Bilegt Khaikhhan Uul LLC	Foreign Trade, Mineral exploration	MNT 4,412,186,900	MNT 4,412,186,900	441,218.69	10,000	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
73	Hunnu Power LLC	Foreign Trade	MNT 1,000,000	MNT 1,000,000	100	10,000	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
74	Borganchan LLC	Foreign Trade	MNT 11,586,000	MNT 11,586,000	11,586	1,000	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
75	Munkhnoyon Suvraga LLC	Foreign Trade, Minerals mining, Tourism, and Construction	MNT 1,000,000	MNT 1,000,000	1,000	1,000	90.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
76	Hunnu Gobi Altai LLC	Foreign Trade, Mineral exploration, Mining	MNT 155,000,000	MNT 155,000,000	155,000	1,000	80.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
77	Hunnu Altai Minerals LLC	Foreign Trade, Minerals Exploraiton	MNT 145,000,000	MNT 145,000,000	145,000	1,000	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
78	Hunnu Resources LLC	Foreign Trade	MNT 245,560,550,508.40	MNT 245,560,550,508.40	153,037,879	1,604.57	100.00%	Suite 1502, Fides Tower, Gegeenten Complex, 15th khoroo, Khan-Uul district, Ulaanbaatar 17011, Mongolia	(976) 75551221, (976) 75551551
Singapore									
79	Banpu Minerals (Singapore) Pte. Ltd.	Investment in coal mining	SGD 17,670,002 USD 11,000,000	SGD 17,670,002 USD 11,000,000	17,670,002 11,000,000	No par value*	100.00%	One Marina Boulevard, #28-00 Singapore 018989	65 6890 7188

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
80	BMS Coal Sales Pte. Ltd.	Coal trading including coal agent and coal blending	USD 5,000,000	USD 5,000,000	5,000,000	No par value*	100.00%	One Marina Boulevard, #28-00 Singapore 018989	65 6890 7188
81	Banpu Singapore Pte. Ltd.	Coal trading	SGD 1,500,000 USD 300,000,000 USD 2,219,211,708	SGD 1,500,000 USD 300,000,000 USD 2,219,211,708	1,500,000 300,000,000 2,219,211,708	No par value*	100.00%	8 Marina Boulevard #05-02, Marina Bay Financial Centre, Singapore 018981	65 6338 1888
82	Hunnu Investments Pte. Ltd.	Foreign Trade	SGD 100 USD 34,708,188.82	SGD 100 USD 34,708,188.82	100 34,708,188	No par value*	100.00%	One Marina Boulevard, #28-00 Singapore 018989	65 6890 7188
83	Banpu Power Investment Co., Ltd.	Investment in electrical power business	USD 84,177,391	USD 84,177,391	77,132,663	No par value*	100.00%	One Marina Boulevard, #28-00 Singapore 018989	65 6890 7188
84	Zouping Peak Pte. Ltd.	Investment in electrical power business	SGD 2	SGD 2	2	No par value*	100.00%	8 Marina Boulevard #05-02, Marina Bay Financial Centre, Singapore 018981	65 6338 1888
85	Banpu Renewable Singapore Pte. Ltd.	Investment in energy business	USD 1	USD 1	1	No par value*	100.00%	8 Marina Boulevard #05-02, Marina Bay Financial Centre, Singapore 018981	65 6338 1888
Mauritius									
86	Banpu Coal Investment Company Limited	Investment in coal mining	USD 11,050,500	USD 11,050,500	11,050,500	1	100.00%	4th Floor, Ebene Skies, Rue de L' Institut, Ebene, Republic of Mauritius	230 404 8000
87	BP Overseas Development Company Limited	Investment in coal mining	USD 515,533,002	USD 515,533,002	515,533,002	1	100.00%	4th Floor, Ebene Skies, Rue de L' Institut, Ebene, Republic of Mauritius	230 404 8000
88	Banpu Power International Limited	Investment in power	USD 63,050,000	USD 63,050,000	63,050,000	1	100.00%	4th Floor, Ebene Skies, Rue de L' Institut, Ebene, Republic of Mauritius	230 404 8000
89	Banpu Renewable Energy International Ltd.	Investment in solar and other renewable energy business	USD 100	USD 100	100	1	100.00%	4th Floor, Ebene Skies, Rue de L' Institut, Ebene, Republic of Mauritius	230 404 8000
British Virgin Islands									
90	Asian American Coal, Inc.	Investment in coal mining	USD 50,000,000	USD 40,917,026	40,917,026	1	100.00%	Geneva Place, 2nd Floor, #333 Waterfront Drive, Road Town, Tortola, British Virgin Islands	284 494 4388
91	AACI SAADEC (BVI) Holdings Limited	Investment in coal mining	USD 50,000	USD 1	1	1	100.00%	P.O. Box 957, Offshore Incorporations Centre, Road Town, Tortola, British Virgin Islands	284 494 2233

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
	Cayman Islands								
92	Pan-Western Energy Corporation LLC	Investment in power	USD 100,000	USD 100,000	10,000,000	0.01	100.00%	PO Box 309, Ugland House, Grand Cayman, KY1-1104 Cayman Islands	1 345 949 8066
	Japan								
93	Banpu Energy Services Japan Co., Ltd.	Cosultancy services to the operator of power generation in Japan	JPY 50,000,100	JPY 50,000,100	500,001	No par value*	100.00%	1-1 Marunouchi 3-chome, Chiyo-ku, Tokyo	81 3 5219 8777
94	Hokkaido Solar Estate	Land owner of Solar project	JYP 10,000,000	JYP 10,000,000	NA	No par value*	60.00%	7-1-1 Moto-akasaka, Minato-ku, Tokyo	81 3 3560 1115
	United States of America								
95	Banpu North America Corporation	Investment in oil and gas business	USD 100	USD 100	10,000	0.01	100.00%	2711 Centerville Road, Suite 400, Wilmington, Delaware 19808	1 302 654 7584
	Hong Kong								
96	Akira Energy Limited	Investment in solar energy business	HKD 62,017,100	HKD 62,017,100	62,017,100	1	100.00%	9th Floor, York House, The Landmark, 15 Queen's Road, Central, Hong Kong	852 2522 8101
97	Akira Energy (South) Limited	Investment in solar energy business	HKD 19,120,063	HKD 19,120,063	19,120,063	1	100.00%	9th Floor, York House, The Landmark, 15 Queen's Road, Central, Hong Kong	852 2522 8101
98	Akira Hokkaido Limited	Investment in solar energy business	HKD 500	HKD 500	500	1	100.00%	9th Floor, York House, The Landmark, 15 Queen's Road, Central, Hong Kong	852 2522 8101
	Associated companies								
	Thailand								

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
99	BPPR Co., Ltd.	Investment in consultancy services to the operator of power generation	THB 100,000	THB 100,000	1,000	100	75.00%	1550, Thanapoom Tower, 27th Floor, New Petchburi Road, Makkasan, Ratchathewi, Bangkok 10400, Thailand	0 2694 6600
100	BLCP Power Ltd. P	Power generation and sales	THB 12,010,000,000	THB 12,010,000,000	120,100,000	100	50.00%	9 I-8 Road, Map Ta Phut Industrial Estate, Muang District, Rayong, Thailand	038 925100
101	Ratchasima Green Energy Company Limited	Investment in alternative energy	THB 250,000,000	THB 250,000,000	25,000,000	10	30.00%	2 Sukhumvit Road, Klongtoey, Bangkok 10110, Thailand	0 2794 1000
China									
102	Shanxi Gaohe Energy Co., Ltd.	Coal mining in China	RMB 1,519,860,000	RMB 1,519,860,000	NA	NA	45.00%	Changzhi County, Changzhi City, Shanxi, P.R. China	(8610) 5820 3663
103	Hebi Zhong Tai Mining Co., Ltd	Investment in coal mining	RMB 783,330,000	RMB 783,330,000	NA	NA	40.00%	No. 98, Hongqi Street, Hebi, Henan Province, the PRC	(86) 392 291 7401-2
104	Shanxi Lu Guang Power Co., Ltd.	Power and heat production and sales	RMB 1,500,000,000	RMB 60,250,000	389,750,000	NA	30.00%	Songcunxiang, Zhangzi County, Changzhi City, Shanxi Province, China	(86355) 8580511
Australia									
105	Port Kembla Coal Terminal Limited	Shiploading Coal Port	AUD 600,000	AUD 600,000	600,000	1	16.66%	Port Kembla Road, Inner Harbour, Wollongong NSW 2520, Australia	61 2 4228 0288
Singapore									
106	Aura Land Development Pte. Ltd.	Investment in property for solar energy business	USD 3,840,989.20	USD 3,840,989.20	3,840,988	No par value*	75.00%	8 Marina Boulevard #05-02 Marina Bay Financial Centre, Singapore 018981	65 6338 1888
107	Aizu Energy Pte. Ltd.	Investment in solar energy business	USD 2,080,061.12	USD 2,080,061.12	2,080,059	No par value*	75.00%	8 Marina Boulevard #05-02 Marina Bay Financial Centre, Singapore 018981	65 6338 1888
Japan									
108	BPPR Japan Co., Ltd.	Consultancy services to the operator of power generation in Japan	JYP 100,000	JYP 100,000	1,000	No par value*	100.00%	4th Floor, Olympia Building, 13-3 Tomizawa-cho, Nihonbashi, Chuo-ku, Tokyo	81 3 6661 0328

	Company	Type of business	Registered Share Capital	Paid-up share capital	No. of Paid-up Capital (shares)	Par Value per Share	% of Holding	Address	Telephone
	Laos								
109	Hongsa Power Company Limited	Power Generating and Sales	USD 927,000,000	USD 431,000,000	7,600,000	10	40.00%	Souphanouvong Road, Sithanneau Village, Sikhottabong District, Vientiane Capital, Lao PDR	865(0)212 22482
110	Phu Fai Mining Company Limited	Investment in Coal Mining and Limestone Mining	USD 50,000	USD 50,000	5,000	10	37.50%	Souphanouvong Road, Sithanneau Village, Sikhottabong District, Vientiane Capital, Lao PDR	865(0)212 22483

Note: * under Corporate Law

Part 3
Financial information

Comparative financial information for the past 3 years

Banpu Consolidated Financial Statement

Starting on January 1, 2013, the Company has determined the currency used in operations (Functional Currency) as the US dollar. (US\$), which pursuant to Accounting Standard No. 21 (revised 2009) in topic of the Effects of Changes in Foreign Exchange Rates. The Company Reported financial statements under accounting standard Thai Financial Reporting Standard (TFRS) was first used by the US dollar currencies in preparing the financial statements.

Therefore, The Company offers financial year 2013, year 2014 and year 2015 were denominated in US dollars. (US \$)

Banpu Public Company Limited
Statement of Financial Position
As at 31 December 2015, 2014 and 2013

US Dollar'000

	31 December		31 December		31 December	
	2015	%	2014	%	2013	%
			Restated		Restated	
Assets						
Current assets						
Cash and cash equivalents	396,126	6.05	390,974	5.66	445,916	6.25
Short-term investments	52,917	0.81	32,262	0.47	12,262	0.17
Trade accounts receivable, net	185,819	2.84	306,627	4.44	280,638	3.94
Amounts due from related parties	209	0.00	255	0.00	191	0.00
Current portion of dividend receivables from a related party	53,909	0.82	45,506	0.66	57,903	0.81
Advances to related parties	810	0.01	11	0.00	-	-
Inventories, net	136,786	2.09	174,682	2.53	158,200	2.22
Spare parts and machinery supplies, net	22,918	0.35	31,180	0.45	37,720	0.53
Financial derivative assets due in one year	-	-	687	0.01	1,293	0.02
Short-term loans to related companies	5,229	0.08	-	-	-	-
Short-term loans to other companies	-	-	2,399	0.03	275	0.00
Current portion of deferred exploration and development expenditures and deferred overburden expenditures/stripping costs	55,900	0.85	58,314	0.84	65,760	0.92
Other current assets	115,839	1.77	140,563	2.04	145,023	2.03
Total current assets	1,026,462	15.66	1,183,460	17.14	1,205,181	16.90
Non-current assets						
Loans to employees	586	0.01	652	0.01	697	0.01
Dividend receivables from a related party	167,464	2.56	171,569	2.49	157,932	2.21
Long-term loans to related parties	20,256	0.31	-	-	-	-
Investments in joint ventures	644,268	9.83	562,036	8.14	552,890	7.75
Other investments, net	19,718	0.30	17,636	0.26	18,204	0.26
Investment property, net	2,260	0.03	2,404	0.03	2,406	0.03
Property, plant and equipment, net	1,180,099	18.01	1,331,604	19.29	1,455,819	20.42
Deferred income tax assets, net	100,409	1.53	98,527	1.43	122,193	1.71
Financial derivative assets	3	0.00	384	0.01	675	0.01
Deferred exploration and development expenditures and deferred overburden expenditures/stripping costs, net	748,747	11.43	794,916	11.52	831,220	11.66
Mining property rights, net	1,887,449	28.80	1,950,451	28.26	2,051,015	28.76
Goodwill	525,016	8.01	524,120	7.59	524,120	7.35
Other non-current assets	230,157	3.51	265,162	3.84	208,074	2.92
Total non-current assets	5,526,432	84.34	5,719,461	82.86	5,925,245	83.10
Total assets	6,552,894	100.00	6,902,921	100.00	7,130,426	100.00

Banpu Public Company Limited
Statement of Financial Position
As at 31 December 2015, 2014 and 2013

US Dollar'000

	31 December 2015		31 December 2014 Restated		31 December 2013 Restated	
		%		%		%
Liabilities and shareholders' equity						
Current liabilities						
Short-term loans from financial institutions	230,459	3.52	63,310	0.92	151,566	2.13
Trade accounts payable	36,652	0.56	37,401	0.54	70,382	0.99
Current portion of long-term borrowings, net	185,070	2.82	160,196	2.32	280,636	3.94
Current portion of debentures, net	58,176	0.89	75,811	1.10	67,045	-
Financial derivative liabilities due in one year	28,560	0.44	54,033	0.78	40,164	0.56
Accrued overburden and coal transportation costs	116,653	1.78	164,837	2.39	165,607	2.32
Accrued interest expenses	27,140	0.41	27,482	0.40	17,577	0.25
Accrued royalty expenses	16,884	0.26	12,873	0.19	35,623	0.50
Accrued income taxes	12,045	0.18	13,706	0.20	21,343	0.30
Accrued employee benefits	64,358	0.98	76,231	1.10	82,919	1.16
Other current liabilities	273,585	4.18	316,178	4.58	308,833	4.33
Total current liabilities	1,049,582	16.02	1,002,058	14.52	1,241,695	17.41
Non-current liabilities						
Long-term loans from other company	604	0.01	675	0.01	738	0.01
Long-term borrowings, net	1,686,810	25.74	1,715,783	24.86	1,672,152	23.45
Debentures, net	1,180,109	18.01	1,220,240	17.68	1,057,634	14.83
Deferred income tax liabilities, net	225,489	3.44	224,575	3.25	245,710	3.45
Employee benefits obligation	40,697	0.62	47,025	0.68	33,409	0.47
Deferred unfavourable contract liabilities, net	116,389	1.78	157,835	2.29	221,125	3.10
Financial derivative liabilities	107,890	1.65	70,307	1.02	74,083	1.04
Other liabilities	80,158	1.22	78,806	1.14	82,727	1.16
Total non-current liabilities	3,438,146	52.47	3,515,246	50.92	3,387,578	47.51
Total liabilities	4,487,728	68.48	4,517,304	65.44	4,629,273	64.92

Banpu Public Company Limited
Statement of Financial Position
As at 31 December 2015, 2014 and 2013

US Dollar'000

	31 December 2015		31 December 2014 Restated		31 December 2013 Restated	
		%		%		%
Shareholders' equity						
Share capital						
Registered share capital						
3,404,904,790 ordinary shares of Baht 1 each						
(31 December 2014: 3,404,904,790 ordinary shares of Baht 1 each)						
(1 January 2014: 3,540,504,790 ordinary shares of Baht 1 each)	100,834		100,834		104,850	
Issued and paid-up share capital						
2,581,878,550 ordinary shares of Baht 1 each						
(31 December 2014: 2,581,878,550 ordinary shares of Baht 1 each)						
(1 January 2014: 2,717,478,550 ordinary shares of Baht 1 each)	76,461	1.17	76,461	1.11	80,477	1.13
Premium on share capital	149,800	2.29	149,800	2.17	149,800	2.10
<u>Less</u> Treasury stocks	-	-	-	-	(133,379)	(1.87)
Retained earnings						
Appropriated						
- Legal reserve	79,358	1.21	76,967	1.11	74,979	1.05
- Other reserves	53,628	0.82	20,592	0.30	152,944	2.14
Unappropriated	1,767,948	26.98	1,936,491	28.05	1,954,023	27.40
Other components of shareholders' equity	(375,758)	(5.73)	(213,715)	(3.10)	(115,374)	(1.62)
Total parent's shareholders' equity	1,751,437	26.73	2,046,596	29.65	2,163,470	30.34
Non-controlling interests	313,729	4.79	339,021	4.91	337,683	4.74
Total shareholders' equity	2,065,166	31.52	2,385,617	34.56	2,501,153	35.08
Total liabilities and shareholders' equity	6,552,894	100.00	6,902,921	100.00	7,130,426	100.00

Banpu Public Company Limited
Statement of Comprehensive Income
For the year ended 31 December 2015, 2014 and 2013

US Dollar'000

	2015	%	2014	%	2013	%
		of income		of income		of income
Total Sales and service income	2,579,145	100.00	3,278,507	100.00	3,520,960	100.00
Sales and service income	2,476,578	96.02	3,144,931	95.93	3,350,891	95.17
Cost of sales and services	(1,672,161)	(64.83)	(2,137,905)	(65.21)	(2,301,176)	(65.36)
Gross profit	804,417	31.19	1,007,026	30.72	1,049,715	29.81
Selling expenses	(227,810)	(8.83)	(276,384)	(8.43)	(271,661)	(7.72)
Administrative expenses	(167,003)	(6.48)	(174,166)	(5.31)	(225,401)	(6.40)
Royalty fee	(238,852)	(9.26)	(302,774)	(9.24)	(324,978)	(9.23)
Dividend income from other companies	416	0.02	441	0.01	378	0.01
Interest income	7,039	0.27	8,573	0.26	12,130	0.34
Net losses from financial derivatives	(61,207)	(2.37)	(5,039)	(0.15)	27,005	0.77
Management fee and others	19,225	0.75	35,325	1.08	43,174	1.23
Net gains on exchange rate	24,041	0.93	2,691	0.08	(27,036)	(0.77)
Interest expenses	(122,595)	(4.75)	(120,926)	(3.69)	(116,240)	(3.30)
Other finance costs	(7,602)	(0.29)	(10,615)	(0.32)	(10,454)	(0.30)
Share of profit from joint ventures	51,846	2.01	86,546	2.64	87,382	2.48
Profit before income taxes	81,915	3.18	250,698	7.65	244,014	6.93
Income taxes	(98,453)	(3.82)	(69,741)	(2.13)	(90,119)	(2.56)
Reversal of deferred income tax assets for the Minerals Resource Rent Tax in Australia	-	-	(24,232)	(0.74)	-	-
Profit (loss) for the year	(16,538)	(0.64)	156,725	4.78	153,895	4.37
Other comprehensive income (expense), net after taxes:						
Items that will not be reclassified to profit or loss						
- Remeasurements of post-employment benefit	2,229	0.09	(9,098)	(0.28)		
Items that will be reclassified subsequently to profit or loss						
- Losses on remeasuring on available-for-sale investments	(153)	(0.01)	(1,219)	(0.04)	(5,963)	(0.17)
- Gains (losses) on cash flow hedge reserve	11,964	0.46	(2,650)	(0.08)	(71,527)	(2.03)
- Translation differences	(174,782)	(6.78)	(93,151)	(2.84)	(198,916)	(5.65)
Total items that will be reclassified subsequently to profit or loss, net of taxes	(162,971)	(6.32)	(97,020)	(2.96)	(276,406)	(7.85)
Total comprehensive income (expense) for the year	(177,280)	(6.87)	50,607	1.54	(122,511)	(3.48)
Attributable to:						
Owners of the parent	(42,776)	(1.66)	82,735	2.52	78,025	2.22
Non-controlling interests	26,238	1.02	73,990	2.26	75,870	2.15
	(16,538)	(0.64)	156,725	4.78	153,895	4.37
Total comprehensive income (expense) attributable to:						
Owners of the parent	(202,606)	(7.86)	(20,754)	(0.63)	(198,683)	(5.64)
Non-controlling interests	25,326	0.98	71,361	2.18	76,172	2.16
	(177,280)	(6.87)	50,607	1.54	(122,511)	(3.48)
Earnings (losses) per share						
Basic earnings (losses) per share	(0.017)		0.032		0.030	

Banpu Public Company Limited
Statement of Cash Flows
For the year ended 31 December 2015, 2014 and 2013

US Dollar' 000

	2015	2014	2013
Cash flows from operating activities			
Profit for the year before income taxes	81,915	250,698	244,014
Adjustment to reconcile profit for cash receipts (payments) from operations			
- Depreciation and amortisation	188,196	220,604	226,117
- Write-off property, plant and equipment	399	2,281	6,937
- Allowance for impairment of property, plant and equipment	-	12	-
- Write-off investment property	14	-	767
- Allowance for impairment of investment property	81	-	19
- Write-off investment in other company	240	431	-
- Reversal of dividend payables	-	-	(725)
- Allowance for doubtful debts	3,484	747	(1,081)
- Reversal of allowance for net realisable value of coal	-	(11)	11
- Allowance for slow-moving of spare parts and machinery supplies	2,270	527	(108)
- Interest expenses	122,595	120,926	116,240
- Other finance costs	7,602	10,615	10,454
- Interest income	(7,039)	(8,573)	(12,130)
- Share of profit from joint ventures	(51,846)	(86,546)	(87,382)
- Dividend income from other companies	(416)	(441)	(378)
- Gains on disposal of investment property	(104)	-	(4)
- Gains on disposal of property, plant and equipment	(669)	(476)	-
- Accounting gains on a business combination achieved in stages	(537)	-	-
- Gains on disposal of other companies	-	-	(3,665)
- Net unrealised losses from financial derivatives	12,539	10,990	73,967
- Net unrealised gains on exchange rate	(27,440)	(36,474)	(195,154)
Cash flow before changes in working capital	331,284	485,310	377,899
Changes in working capital			
- Trade accounts receivable	105,412	(31,879)	38,994
- Amounts due from related parties	46	(64)	8
- Advance to related parties	(799)	(11)	45
- Inventories	35,992	(19,589)	40,068
- Spare parts and machinery supplies	5,001	5,141	(4,907)
- Other current assets	24,115	5,117	13,829
- Deferred exploration and development expenditures and deferred overburden expenditures/stripping costs	48,975	43,750	(10,930)
- Loans to employees	-	-	(238)
- Other non-current assets	33,438	(54,532)	(102,513)
- Trade accounts payable	1,073	(17,882)	(34,638)
- Accrued overburden and coal transportation costs	(48,184)	(770)	(20,070)
- Accrued royalty expenses	4,011	(22,750)	(10,962)
- Employee benefits obligation	(18,201)	6,928	(17,984)
- Other current liabilities	(44,875)	7,345	2,470
- Other liabilities	1,352	(3,921)	(6,114)
Cash generated from operating activities	478,640	402,193	264,957
- Interest paid	(122,937)	(111,021)	(110,899)
- Income tax paid	(111,693)	(97,484)	(126,994)
Net cash receipts from operating activities	244,010	193,688	27,064

Banpu Public Company Limited
Statement of Cash Flows
For the year ended 31 December 2015, 2014 and 2013

US Dollar'000

	2015	2014	2013
Cash flows from investing activities			
Cash payments for short-term investments	(18,438)	(20,000)	10,898
Cash receipts from loans to employees, net	66	45	-
Cash payments for short-term loan to a related party	(5,216)	-	-
Cash receipts for long-term loan to a related party	2,534	-	-
Cash payments for long-term loan to a related party	(23,062)	-	-
Cash payment from short-term loan to other company	-	(2,124)	(275)
Cash receipts from short-term loan to other company	275	-	-
Cash payment for increase in ownership of a subsidiary	(2,000)	-	-
Cash receipts from disposal of other investments	611	2,767	7,381
Cash payments for purchase of other investments	(155)	(6,158)	(8,037)
Cash payments for additional of investments in joint ventures	(152,234)	(6,713)	-
Cash payments for projects under development	-	-	(101)
Cash payments for purchase of property, plant and equipment	(197,455)	(214,729)	(208,625)
Cash receipts from disposal of investment property	122	-	41
Cash receipts from disposal of property, plant and equipment	22,838	24,636	5,236
Interest received	7,037	8,523	13,016
Cash receipts from dividends from joint ventures	45,406	93,084	103,591
Cash receipts from dividends from other investments	416	441	378
Net cash receipts from business acquisition	339	-	-
Net cash payments from investing activities	(318,916)	(120,228)	(76,497)
Cash flows from financing activities			
Cash receipts from short-term loans from financial institutions	467,519	277,123	318,144
Repayments of short-term loans from financial institutions	(299,385)	(362,831)	(174,836)
Cash payments for finance leases	(7,194)	(7,349)	(8,041)
Cash receipts from long-term loans from financial institutions	256,461	734,347	397,295
Repayments of long-term loans from financial institutions	(222,647)	(763,669)	(691,265)
Cash payments for finance costs	(5,499)	(11,420)	(7,509)
Cash receipts from debentures	111,989	246,070	292,727
Repayments of debentures	(69,993)	(68,074)	(5,160)
Cash payments for treasury stocks	-	-	(133,379)
Dividend paid to shareholders	(91,810)	(96,120)	(123,439)
Dividend paid to non-controlling interests	(49,355)	(70,023)	(94,167)
Net cash receipts (payments) from financing activities	90,086	(121,946)	(229,630)
Net increase (decrease) in cash and cash equivalents	15,180	(48,486)	(279,063)
Exchange gains (losses) on cash and cash equivalents	(10,028)	(6,456)	(19,910)
Cash and cash equivalents at beginning of the year	390,974	445,916	744,889
Cash and cash equivalents at end of the year	396,126	390,974	445,916
Non cash transactions			
Significant non-cash transactions as at 31 December is as follow:			
Other payables for purchase of property, plant and equipment	33,927	18,896	33,977
Increase in investment in a joint venture convert from dividend receivable	-	17,470	-
Purchase consideration for business acquisition			
Increase in investments in a joint venture	1,788	-	-
Decrease in short-term loan to and interest receivable from other company	2,132	-	-

Banpu Public Company Limited
For the year ended 31 December 2015, 2014 and 2013

		2015	2014	2013
Liquidity ratio				
Current ratio	(Time)	0.98	1.18	0.97
Quick ratio	(Time)	0.61	0.73	0.60
Cash flow liquidity ratio	(Time)	0.39	0.24	0.65
Account receivables turnover ratio	(Time)	10.05	10.70	10.21
Collection period	(Days)	35.83	33.64	35.27
Inventory turnover ratio	(Time)	10.74	12.84	11.74
Average day sales	(Time)	33.53	28.03	30.67
Account payable period	(Time)	45.16	39.67	27.40
Payment period	(Days)	7.97	9.07	13.14
Cash cycle	(Days)	61.38	52.59	52.80
PROFITABILITY RATIO				
Gross profits	(%)	32.48	32.02	31.33
Operating profits	(%)	3.31	8.13	7.28
Other profits	(%)	3.98	4.00	4.83
Cash to earning	(%)	4.91	1.04	2.99
Net Profits	(%)	(1.66)	2.53	2.22
Earning per share	(%)	(1.92)	3.39	2.56
EFFICIENCY RATIO				
Return on asset	(%)	(0.64)	1.18	1.02
Return on fixed asset	(%)	11.58	21.76	20.40
Asset cycle	(Time)	0.38	0.47	0.46
Total debt to equity ratio	(Time)	2.17	1.89	1.85
Net debt to equity ratio	(Time)	1.40	1.18	1.10
Interest coverage ratio	(Time)	5.18	4.26	8.73
Dividend payout ratio	(%)	n.a	116.18	158.20

