

# Democratization of Energy:

Power to the People for a Sustainable World.

For All, By All.

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#### Vision

BCPG Public Company Limited ("BCPG" or "the Company") and subsidiaries (collectively called "BCPG Group") aspire to create an energy business with green innovations to drive the organization toward sustainable excellence with well-rounded and smart personnel.

#### **Mission**

To invest, develop, and operate green power plants globally with stateof-the-art technologies founded on common corporate values, management, and business principles for sustainable growth and environmental friendliness



#### Spirit Innovative

Proactively strive for innovation excellence whilst maintaining environment-friendly stance towards change.

Integrity

Value integrity as the core attribute in doing business, assuring stakeholders of good governance and transparency. **International** Build a global platform with multi-cultural adaptability and international synergy.

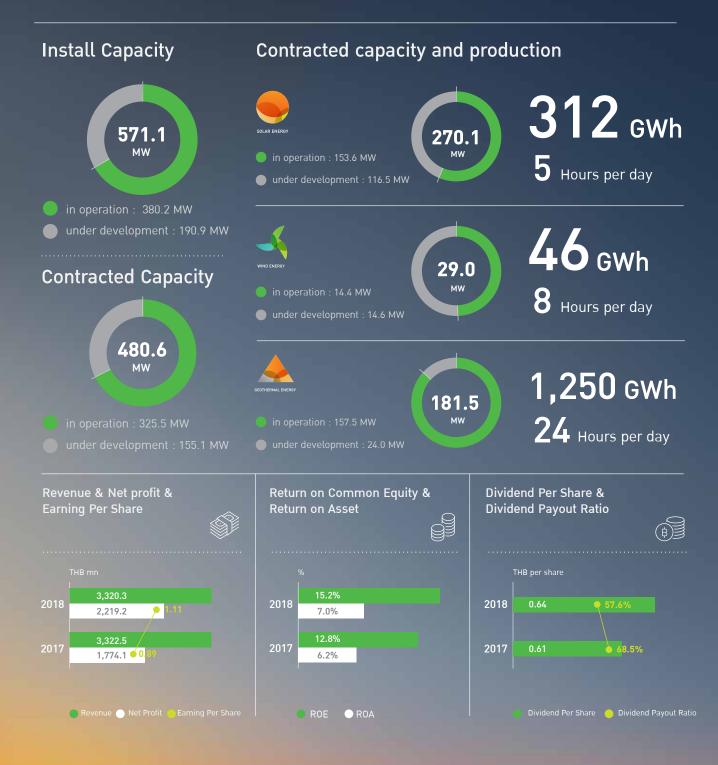
#### **Goal and Strategy**

BCPG strives for continuous growth through operation and investment in renewable energy business both domestically and internationally, through M&A activities and development of new projects with various technologies such as solar, wind and geothermal powers. Additionally, the Company is focusing on producing and delivering clean energy directly to consumers while transitioning into retail market with "energy as a service" model. Innovation will play an important role in offering more choices to consumers in order for them to be able to produce green energy by themselves at a lower cost.



The Company, established in 2015, has intended to be one of Asia-Pacific's leaders in renewable energy with different types of technologies. Additional, the Company has seek for an innovation in order to enhance fulfilment of consumers needs, and reduce environmental impacts.





### **Organization Structure**



### Carbon Dioxide Emission Reduction





## Local employment

**137**<sub>person</sub>

local labors hired in operational areas in Thailand

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## BCPG's share price information

(as of December 28, 2018)



#### Stock Price

**15.2** THB per share

52-week High/Low **28.0/14.7** THB per share

P/E ratio (x) **13.7** 

Paid-up shares **1,996.8** mn shares

Free Float (%)
28.1

ev/ebitda (x) **13.0**  DPS **0.64** THB per share

Dividend Yield (%)

CG scores

# Message from THE CHAIRMAN

#### Dear Shareholders,

BCPG Public Company Limited's planned activities in 2018 had been accomplished in line with the Company's growth strategies through investment in various technologies of renewable energy power plants. Furthermore, as the world moves towards decentralization, coupled with the sharing economy concept, which has resulted in a change in the way we consume energy in our daily lives. BCPG has thus enhanced our path forward by employing innovation into energy management and pioneered a blockchain-based Peer-To-Peer (P2P) energy trading project - the first-ever in South East Asia.

In 2018, BCPG reported total revenue of 3,3320.3 billion Baht, with an EBITDA of 2,496.0 billion Baht, a net profit of 2,219.2 million Baht, equivalent to 1.11 Baht profit per share or an increase of 24.7 % from 2017. For business expansion, the Company started commercial operations from Gotemba Project in Japan with a production capacity of 4.0 MW and from the Solar Government Projects Phase 2 with the War Veterans Organization (WVO), with a total production capacity of 8.9 MW; namely a 5-MW solar project in Phra Phutthabat, Saraburi province, a cooperation with WVO Lopburi, and 3.9-MW solar project in Tha Muang, Kanchanaburi province, with WVO Supanburi. Additionally, the Company had acquired Lomligor Company Limited, the operator of a wind farm in Pakpanang subdistrict, Nakorn Srithammarat, with total production capacity of 9.0 MW.

In the third quarter of 2018, the Company had completed the asset transaction for two solar power plants in Japan with a total production capacity of 19.3 MW; namely Nikaho and Nagi Projects, to an Infrastructure Fund in Japan. This is in line with BCPG's strategy to maximize benefits for shareholders by lowering Debt to Equity Ratio, stabilizing cash flow and seeking ways to gain more cash for the new growth plans. As of 31 December 2018, the capacity of all BCPG's projects commercially in operation totaled 325.5 MW or a total installed capacity of 380.2 MW.

The blockchain-based P2P energy trading at T77 community in Bangkok, a collaborative effort by BCPG, Power Ledger, our digital energy partner, Sansiri, and the Metropolitan Electricity Authority (MEA), officially commenced pilot run on 22 August 2018. This project which is not only is the first in South-East Asia, but also the largest in size for the project of this kind the world is expected to start trading among the member entities in the near future. This remarkable achievement once again exemplifies BCPG's leadership in the renewable energy sector and a trusted business partner in the creation of next generation innovation that will provide direct access to consumers. BCPG aspires to be an innovative business that creates sustainable future for all, enabled by renewable energy, smart technology and innovation. To realize this vision, the Company announced its Sustainable Business Development Policy on 17 April 2018, to secure executives and employees support and adherence to the policy and its framework. The Company also integrated the Vision and Business Strategy with the United Nations Sustainable Development Goals (UNSDG) to enable us to assess, improve, and communicate our performance to the public at large, as per details in this annual report.

With our strong commitment to innovatively develop business whilst also caring for the environment and society, with good governance practices, personnel and organization-centric management and development, BCPG has been on countless occasions accredited with awards, and certifications, in various areas, both domestically and internationally.

On behalf of the Board of Directors, the management and all employees of BCPG, I would like to express my sincerest appreciation to all shareholders and stakeholders for the confidence, trust and support you have always extended to us. I, herewith, reaffirm our full commitment to forge ahead in our business endeavours, whilst upholding good corporate governance for our sustainable growth.

> - Signed -Mr. Pichai Chunhavajira Chairman

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# Policy and BUSINESS OVERVIEW

BCPG was registered on July 17, 2015, with an initial registered capital of THB 20 million. The Company currently commands a paid-up capital of THB 9.984 billion, consisting of 1,997 million common shares at a par value of THB 5 per share. Bangchak Corporation Public Company Limited ("BCP") is the major shareholder, with 70.1% of the paid-up capital (data as of December 11, 2018) to conduct a power generation business based on renewable energy, including solar, wind, and geothermal energy. The Company currently has solar, wind, and geothermal projects both in Thailand and overseas, namely Japan, the Philippines, and Indonesia. Today, BCPG Group boosts a contractual capacity of 480.6 MW (installed capacity of 571.1 MW).

Chart showing power plant locations

# Канала Тhailand 147.9 мw

in operation : 138.9 MW under development : 9.0 MW Japan

## **51.2** MW

under development: 116.5 MW

### 🕻 Philippines

**20.0** MW in operation : 14.4 MW

under development : 5.6 MW

🙏 Indonesia

# 181.5 MW

in operation : 157.5 under development : 24.0 MW

in operation
 : 325.5 MW
 under development
 : 155.1 MW

Status **480.6** мw Technology **480.6** мw Wind energy 29.0

 Geothermal energy 181.5

Solar energy 270.1

#### **Major Changes and Milestones**



#### January 2016

Acquired 100% share in 164-MW solar farms in Japan BCPG, through a subsidiary.

Invested in the total shares of Huang Ming Japan, resulting in BCPG holding the license and land for developing solar farms with a total contractual capacity of 30 MW

#### September 2016

Listed on the Stock Exchange of Thailand (SET) under the Energy and Utilities Sector



# 2016



#### July 2015

established on July 17, 2015, with an initial registered capital of THB 20.0 million and with BCP holding 99.9% of its shares

#### Q3/2015

Acquired solar farms in Bang Pa-In District, Phra Nakhon Si Ayutthaya, and acquired 100% shares in a BCP subsidiary operating solar farms, resulting in a total contractual capacity of 118 MW



2018



#### July 2017

Divested Suimei Project's land worth JPY 1.6 billion or THB 495 million, generating a profit of THB 62 million

#### March 2017

12-MW cooperatives solar farms starting commercial operation at Wiset Chai Chan District, Bang Pa-in District, and Phra Nakhon Si Ayutthaya District

2017

#### May 2017

BCPG, through a subsidiary, invested in a 40.0% share in PetroWind Energy Inc., which operates a wind farm in Nabas, the Philippines, with a capacity of 36 MW (equity capacity of 20 MW)

#### July 2017

Invested in 33.3% share in Star Energy Group Holdings Pte. Ltd. (SEGHPL) as its investment in three geothermal power plants in West Java, Indonesia, with a total generating capacity of 875.0 MW (equity capacity of 157.5 MW).

#### April 2018

4-MW Gotemba Project starting commercial operation

#### June 2018

Awarded by Chiangmai University to install a 12-MW solar rooftop panel, and to sell electricity for 20 year. This project has expected to be operated in 2020.

Wholly invested in share of Lom Ligor Co.Ltd., wind farm, located in Pak Panang District, Nakorn Si Thammarat, with a total contractual capacity of 9.0 MW

#### July 2018

Phase 2 of the solar farm project for government agencies and agricultural cooperatives started its commercial operations BCPG gave support for WVO through 1) project at Phra Phutthabat District, Sara Buri, and 2) project at Tha Muang District, Kanchanaburi, with total capacity of 8.9 MW

#### August 2018

Launched a solar energy trading on rooftop by using blockchain technology at T77. This pilot project achieved by co-operation among strategic partners, and shall be for further development in other projects

#### September 2018

Divest Nikaho and Nagi projects, operating solar farms in Japan, with a combined capacity of 19.3 MW, to an infrastructure fund for JPY 10,388.0 billion (THB 3,046.0 billion) and booked a profit from asset sale of THB 793.0 million. BCPG's subsidiary also entered into a five-year operation and maintenance contract with the Fund.

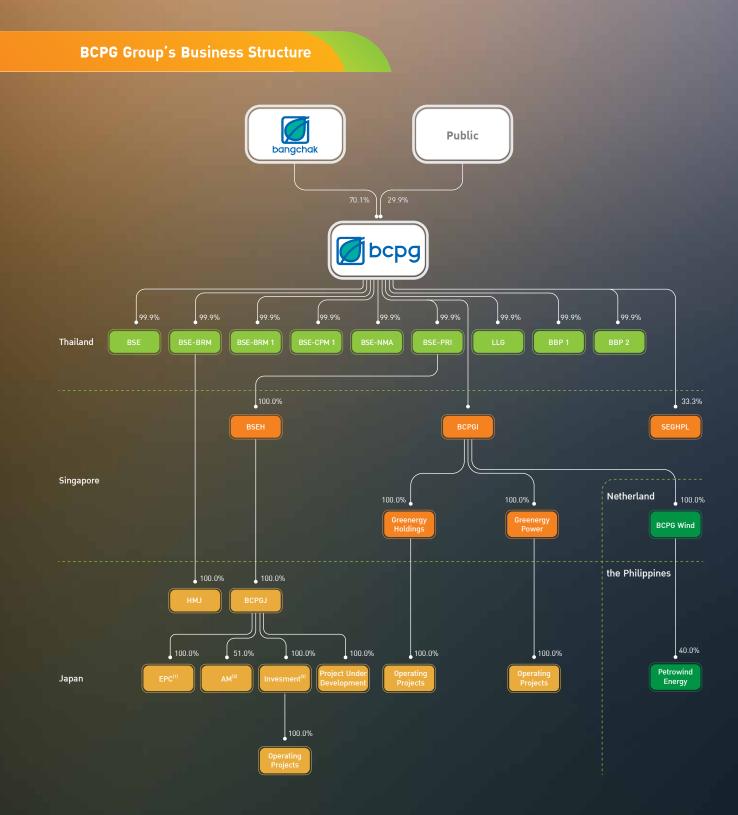




In addition to investment in various power projects, BCPG considered making use of the internet to reach a wider group of individual customers in a bid to expand the retail business. Toward the end of 2018, BCPG joined Sansiri Public Company Limited, a strategic partner, in the Sansiri Town Sukhumvit 77 (T77 Project) to run a pilot project on smart green city by leveraging the blockchain technology as the support structure of energy trading. Implemented in August 2018, the project was recognized as a change in the power production business that can be applied for further development in other projects. Later on, BCPG entered into power sales and purchase contracts with a number of private companies for installation of solar rooftop panels. The Company also secured the right to sell electricity from the installed capacity of 14.0 MW (including the solar rooftop project at Chiangmai University) for 20-25 years. These projects, currently under construction, will become a springboard for the development of the digital energy business.

In 2018, BCPG signed a number of memorandum of understandings with business allies in both public and private sectors on the development of the power business using smart energy innovation, as detailed below:

- In February 2018: BCPG signed a contract with six business allies and the Industrial Estate Authority of Thailand on industrial estate development under the Eastern Economic Corridor ("EEC").
- In March 2018: BCPG made an agreement with the Provincial Electricity Authority ("PEA") on a project to promote and develop power generation from renewable sources initially at five target provinces, namely Chiang Mai, Rayong, Phuket, Nakhon Ratchasima, and Ubon Ratchathani.
- In March 2018: BCPG inked a contract with Bangchak Corporation Public Company Limited on the development of a solar rooftop project for buildings and retail shops on the premises of Bangchak service stations. The project covers 30-50 sites.
- In August 2018: BCPG entered into an agreement with the Metropolitan Electricity Authority ("MEA") on a feasibility study to develop power generation from renewable energy and energy management as well as other businesses. The business development is meant to keep up with the current trends on energy which point towards Electrification (power distribution to manufacturers), Decentralization (decentralization of power production), and Digitalization (using innovation for making change). In this respect, innovations will be embraced for managing power generation from renewable sources.



#### Remarks:

- <sup>(1)</sup> EPC means groups of companies doing such businesses as (1) a turnkey EPC contractor and (2) an operation and maintenance contractor for solar power plants in Japan.
- <sup>(2)</sup> AM means an asset management company rendering operation and maintenance service for the Tiramizu Project and its remaining shares of 49.0% are held by a juristic person who is not a related person as defined by the notification of the Capital Market Supervisory Board no. Tor. Jor. 21/2551 regarding rules for connected transactions.
- <sup>(3)</sup> Investment means companies investing in solar farms in Japan as a TK investor.

#### Detail of the Company's Subsidiaries and Associates

No.	Company Name	Nature of Business	Country of Registration	Paid-up Capital	% Shares <sup>(1)</sup>
Subsi	diaries in Thailand				
1	Bangchak Solar Energy Co., Ltd. ("BSE")	Operates solar farms in Bamnet Narong District, Chaiyaphum, and the other in Bang Pahan District, Phra Nakhon Si Ayutthaya	Thailand	THB 1.8 billion	99.9
2	Bangchak Solar Energy (Buriram) Co., Ltd. ("BSE-BRM")	Operates a solar farm in Prakhon Chai District, Buri Ram	Thailand	THB 755.0 million	99.9
3	Bangchak Solar Energy (Buriram 1) Co., Ltd. ("BSE-BRM1")	Operates a solar farm in Nong Ki District, Buri Ram	Thailand	THB 765.0 million	99.9
4	Bangchak Solar Energy (Chaiyaphum 1) Co., Ltd. ("BSE-CPM 1")	Operates a solar farm in Bamnet Narong District, Chaiyaphum	Thailand	THB 705.0 million	99.9
5	Bangchak Solar Energy (Nakhon Ratchasima) Co., Ltd. ("BSE-NMA")	Operates a solar farm in Dan Khun Thot District, Nakhon Ratchasima	Thailand	THB 684.1 million	99.9
6	Bangchak Solar Energy (Prachinburi) Co., Ltd. ("BSE-PRI")	Operates a solar farm in Kabin Buri District, Prachin Buri, and three solar power projects for state agencies and agricultural cooperatives	Thailand	THB 1.4 billion	99.9
7	BCPG Biopower 1 Co., Ltd. ("BBP 1")	Supports BCPG Group's future expansion	Thailand	THB 15.0 million	99.9
8	BCPG Biopower 2 Co., Ltd. ("BBP 2")	Supports BCPG Group's future expansion	Thailand	THB 5.0 million	99.9
9	Lom Ligor Co., Ltd., ("LLG")	Operates a wind farm in Pak Panang District, Nakhon Si Thammarat	Thailand	THB 250.0 million	100.0
Subsi	diaries and Associates in .	Japan			
10	BCPG Japan Corporation ("BCPGJ")	Develops, constructs, and operates power projects and manages investment in power projects in Japan	Japan	JPY 249.50 million	100.0
11	Tarumizu Solar Solutions Godo Kaisha ("TSS")	Renders operation and maintenance service as an asset management company	Japan	JPY 1 million	51.0 <sup>(2)</sup>
12	Nakatsugawa PV Godo Kaisha ("Nakatsugawa")	Operates solar farm in Kagoshima, Japan	Japan	JPY 1.00 (BCPGJ holds preferred shares worth JPY 1.9 million) <sup>(3)</sup>	_(3)
13	Godo Kaisha Inti	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
14	Takamori PV Godo Kaisha ("Takamori")	Operates a solar farm in Kumamoto, Japan	Japan	JPY 1.00 (BCPGJ holds preferred shares worth JPY 2.7 million) <sup>(3)</sup>	_(3)
15	Nojiri PV Godo Kaisha ("Nojiri")	Operates a solar farm in Miyasaki, Japan	Japan	JPY 1.00 (BCPGJ holds preferred shares worth JPY 2.6 million) <sup>(3)</sup>	_(3)

No.	Company Name	Nature of Business	Country of Registration	Paid-up Capital	% Shares <sup>(1)</sup>
16	Godo Kaisha Aten	Operates a solar farm project in Japan, now under development	Japan	JPY 1.00	100.0
17	Nikaho PV Godo Kaisha	Supports BCPG Group's future expansion	Japan	JPY 21 million	100.0
18	Gotenba 2 PV Godo Kaisha	Operates a solar farm project in Japan	Japan	JPY 1.00	100.0
19	Godo Kaisha Horus	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
20	Yabuki PV Godo Kaisha	Operates a solar farm project in Japan, now under development	Japan	JPY 1.00	100.0
21	Komagane PV Godo Kaisha	Operates a solar farm project in Japan, now under development	Japan	JPY 1.00	100.0
22	Godo Kaisha Helios	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
23	Godo Kaisha Lugh	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
24	Godo Kaisha Phoenix	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
25	Gotenba 1 PV Godo Kaisha	Operates a solar farm project in Japan	Japan	JPY 1.00	100.0
26	Komagane Land Lease Godo Kaisha	Holds land property for solar farms in Japan, now under development	Japan	JPY 1.00	100.0
27	Nagi PV Godo Kaisha ("Nagi")	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
28	Godo Kaisha Natosi	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
29	Godo Kaisha Amaterasu	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
30	Godo Kaisha Mithra	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
31	Godo Kaisha Sol	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
32	Godo Kaisha Saule	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
33	Godo Kaisha Shamash	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
34	Godo Kaisha Pusan	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
35	Godo Kaisha Apolo	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
36	Godo Kaisha Surya	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
37	Nagi Land Lease Godo Kaisha	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
38	Godo Kaisha Rangi	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
39	Godo Kaisha Dazbog	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
40	Godo Kaisha Narang	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
41	Godo Kaisha Malina	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
42	Godo Kaisha Legba	Supports BCPG Group's future expansion	Japan	JPY 1.00	100.0
43	J2 Investor Godo Kaisha	Invests in solar farms in Japan as a TK investor	Japan	JPY 1.00	100.0
44	J1 Investor Godo Kaisha ("J1")	Invests in solar farms in Japan as a TK investor	Japan	JPY 107.0 million	100.0

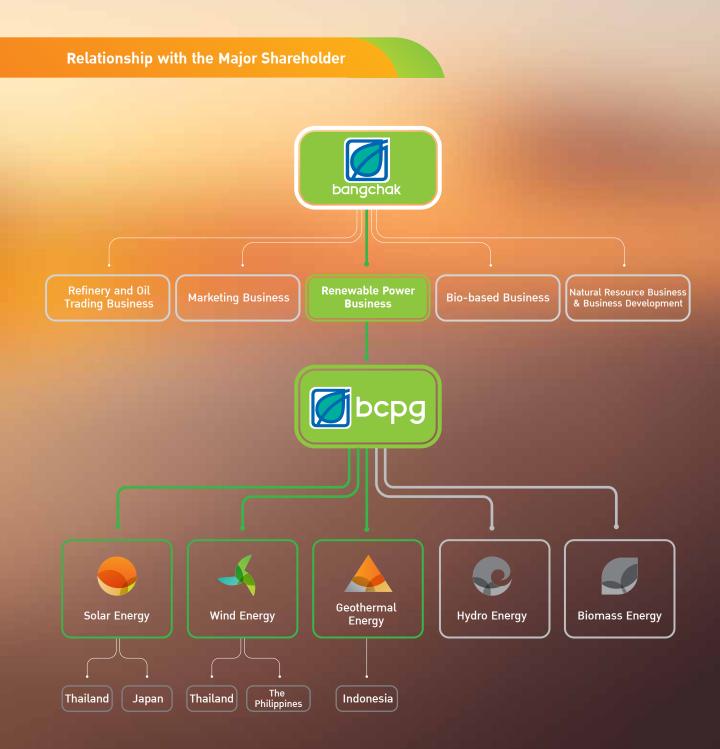
No.	Company Name	Nature of Business	Country of Registration	Paid-up Capital	% Shares <sup>(1)</sup>
45	BCPG Engineering Company ("BCPGE")	Operates a turnkey EPC contractor and provides operation and maintenance (O&M) service for solar farms	Japan	JPY 40.0 million	100.0
46	Godo Kaisha Tarumi Takatoge ("Tarumizu")	Operates solar farm in Kagoshima, Japan	Japan	JPY 0.1 million (BCPGJ holds preferred shares worth JPY 19.3 million) <sup>(3)</sup>	_(3)
47	Huang Ming Japan Co., Ltd. ("HMJ")	Operates a solar farm project in Japan, now under development	Japan	JPY 0.10 million	100.0
Subsi	diaries and Associates in S	ingapore and Other Countries			
48	BCPG Investment Holdings Pte. Ltd. ("BCPGI")	Holds shares in other overseas companies	Singapore	SGD 1.00	100.0
49	BSE Energy Holdings Pte. Ltd. ("BSEH")	Holds shares in other overseas companies	Singapore	SGD 1.00	100.0
50	Greenergy Holdings Pte. Ltd. ("Greenergy Holdings")	Invests in solar farms in Japan as a TK investor	Singapore	SGD 2.00 and USD 2 million	100.0
51	Greenergy Power Pte. Ltd. ("Greenergy Power")	Invests in solar farms in Japan as a TK investor	Singapore	SGD 2.00 and USD 5.8 million	100.0
52	Star Energy Group Holdings Pte., Ltd.	Investment	Singapore	USD 840.01 million	33.33
53	BCPG Wind Cooperatief U.A.	Investment	The Netherlands	USD 14.16 million	100.0
54	PetroWind Energy Inc.	Operates wind power business	The Philippines	PHP 1.9 billion	40.0

Remarks:

 $^{\scriptscriptstyle (1)}$  %shareholding including direct and indirect holding

<sup>(2)</sup> The remaining 49.0% of shares are held by non-related party classified under the announcement of the Capital Market Supervisory Board No. Tor Jor. 21/2551 on the criteria of related party transactions.

<sup>(3)</sup> Preferred shares in the registered capital represents the amount invested in GK Company, with no right to vote.



Source: www.bangchak.co.th, data as of December 31, 2018, and BCPG

As of December 31, 2018, Bangchak Corporation Public Company Limited ("BCP") held 70.1% of the total paid-up capital of BCPG. There is a clear distinction on the natures of businesses and primary resource consumption between the BCPG Group of Companies and BCP. BCPG Group operates commercial power generation from renewable energy sources, namely Green Energy, locally and internationally including solar, geothermal, and wind. Nevertheless, there are connected transactions supporting mutual business between BCPG Group and BCP, including the corporate image, in line with the guidelines for managing BCP Group and BCPG's corporate governance. These transactions are reported under Connected Transactions.

#### Awards of 2018







- 1. 2018 Thailand Energy Sector Visionary Innovation Leadership Award from Frost and Sullivan
- 2. 2018 Suriyasasithorn Award 1<sup>st</sup> Runner Up for best calendar and notebook design under the general category from the Public Relations Society of Thailand
- 3. Certificate of ESG100 among 100 listed companies ranked by Thaipat Institute
- 4. Best Corporate Governance 2018, Thailand Award from World Finance Magazine, UK
- 5. Best CEO: Renewable Industry Asia Award from Business Worldwide Magazine, UK
- 6. Best Clean Energy Community Solutions Southeast Asia 2018 Award from Capital Finance (CFI.co) Magazine, UK
- 7. Most Sustainable Company Thailand 2018 Award from the European Global Banking and Finance Magazine, UK
- 8. Leadership in Renewable Energy South East Asia 2018 Award from the European Global Banking and Finance Magazine, UK

#### 18 Annual Report 2018

# Nature of **BUSINESS**

BCPG Group invested in local and international renewableenergy businesses as follows:

(1) Power plant business in Thailand

1.1 Solar farms in Thailand with a total contracted power generating capacity of 138.9 MW out of a total installation capacity of 190.9 MW:

- Solar farms operated by BCPG with a total contracted power generating capacity of 38.0 MW under a 25-year power purchase agreement (PPA). Their power tariff consists of base tariff + Ft + adder of 8.0 baht/kWh for a period of 10 years.

- Solar farms operated by subsidiaries, in which BCPG holds 99.9%, including BSE, BSE-BRM, BSE-BRM 1, BSE-CPM 1, BSE-NMA and BSE-PRI, with a total contracted capacity of 80.0 MW under 25-year PPAs. Their power tariff consists of base tariff + Ft + adder of 8.0 baht/kWh for a period of 10 years.

- Solar farms supporting the development of a project on ground-mounted solar farms for agricultural cooperatives, operated through BSE-PRI, a 99.9%-owned BCPG subsidiary, totaling three projects, whose contracted and installed capacities amount to 12.0 MW under a 25-year PPA. Their tariff is 5.66 baht/kWh in Feed-in-Tariff (FiT).

- Ground-mounted solar farms for government agencies and agricultural cooperatives, phase 2, in support of a project with the War Veterans Organization of Thailand under the Royal Patronage. Two projects under this group has contracted and installed capacities totaling 8.9 MW under a 25-year PPA. Their tariff is 4.12 baht/kWh in FiT.

1.2 Wind-energy power plants at Pak Phanang District, Nakhon Si Thammarat, with a contracted capacity of 9 MW (installed capacity of 10 MW) under a 25-year PPA at a base tariff + Ft and the adder of 3.50 baht/kWh 3.5/ unit adder for a total of 10 years. Commercial operation is due in April 2019.

For fiscal year ending December 31

(2) 13 solar farms in Japan, with a total contracted capacity of about 131.2 MW (installed capacity of 168.7 MW) from 13 projects. These projects are under 20-year contract terms with FiT tariff rates of JPY 32-40 per unit.

- Five operating projects with a total contracted capacity of 14.7 MW.

- Eight projects currently under development, with a total contracted capacity of 116.5 MW.

In 2018, the revenue streams of the Group comes from the generation and distribution of solar power and related service, accounting for 78.5% of total revenue.

2016	2016		2017		
THB million	%	THB million	%	THB million	%
804.6	23.8	770.6	21.2	794.4	18.8
2,022.9	59.9	1,972.9	54.2	1,950.6	46.1
255.4	7.6	579.0	15.9	568.8	13.4
-	-	-	-	6.5	0.2
3,083.9	91.2	3,322.5	91.3	3,320.3	78.5
26.8	0.8	40.9	1.1	4.8	0.1
226.6	6.7	-	-	-	-
-	-	-	-	793.0	18.8
43.1	1.3	276.5	7.6	111.8	2.6
3,380.4	100.0	3,639.9	100.0	4,229.8	100.0
	THB million         804.6         2,022.9         255.4         -         3,083.9         26.8         226.6         -         43.1	2016         THB million       %         804.6       23.8         2,022.9       59.9         255.4       7.6         -       -         3,083.9       91.2         26.8       0.8         226.6       6.7         -       -         43.1       1.3	2016         2017           THB million         %         THB million           804.6         23.8         770.6           2,022.9         59.9         1,972.9           255.4         7.6         579.0           -         -         -           3,083.9         91.2         3,322.5           26.8         0.8         40.9           226.6         6.7         -           43.1         1.3         276.5	2016         2017           THB million         %         THB million         %           804.6         23.8         770.6         21.2           2,022.9         59.9         1,972.9         54.2           255.4         7.6         579.0         15.9           -         -         -         -           3,083.9         91.2         3,322.5         91.3           26.8         0.8         40.9         1.1           226.6         6.7         -         -           43.1         1.3         276.5         7.6	2016         2017         2018           THB million         %         THB million         %         THB million           804.6         23.8         770.6         21.2         794.4           2,022.9         59.9         1,972.9         54.2         1,950.6           255.4         7.6         579.0         15.9         568.8           -         -         -         6.5           3,083.9         91.2         3,322.5         91.3         3,320.3           26.8         0.8         40.9         1.1         4.8           226.6         6.7         -         -         -           -         -         -         793.0         43.1         1.3         276.5         7.6         111.8

#### Remarks:

<sup>(1)</sup> Revenue from interest income and dividend

 $^{\scriptscriptstyle (2)}$  Other income includes gains from asset sales, forex gains, claim from insurance, etc.



#### Solar Farms in Thailand

#### **Nature of Power Generation Business**

The Group operates and sells electricity generated from solar energy in Thailand under 12 Power Purchase Agreements (PPAs): (1) agreement with the Electricity Generating Authority of Thailand (EGAT), namely currently one SPP (small power producer) agreement with a contracted capacity of 30 MW, and (2) agreements with the Provincial Electricity Authority (PEA), currently totaling 11 VSPP (very small power producer) agreements with a contracted capacity for each agreement of 8 MW, for a total of 88.0 MW. Both are nonfirm PPAs with a five-year contract term with renewals for another five-year term and eligible for an adder rate as an incentive to renewable-energy producers at THB 8 per kilowatt-hour for a 10-year period, effective from the COD. The Group's policy is to renew all agreements every five years until project termination, which is generally 25 years.

Moreover, the Group entered three PPAs with PEA for ground-mounted solar farms for state agencies and agricultural cooperative projects, with a total combined capacity of 12.0 MW. All three contracts have seen commercial power distribution, namely Wiset Chai Chan Agricultural Cooperatives Limited of Ang Thong (5.0 MW), Bang Pa-in Agricultural Cooperatives Limited of Phra Nakhon Si Ayutthaya (2.0 MW), and Phra Nakhon Si Ayutthaya Agricultural Cooperatives of the same province (5.0 MW). All boast 25-year contract term agreements with a sales price of THB 5.66 per kWh (FiT).

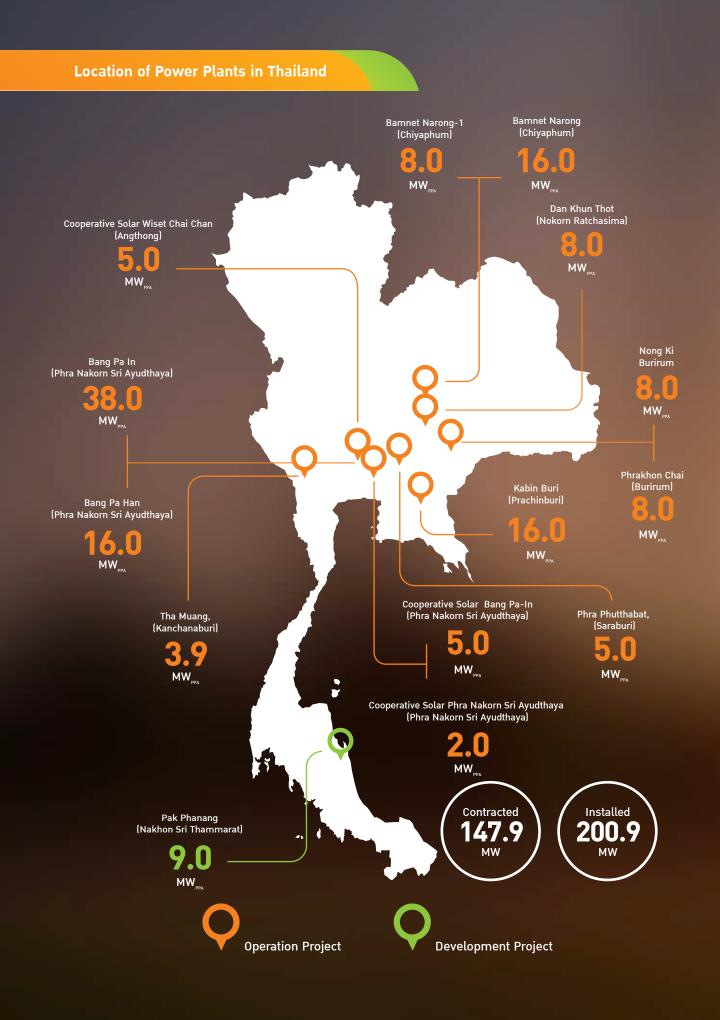
The Group also entered two PPAs with The War Veterans Organization of Thailand under the Patronage of His Majesty the King (WVO). These ground-mounted solar farms agreements specified sales of electricity to state agencies, agricultural cooperatives, and WVO, namely a 5-MW project, jointly operated with WVO-Lop Buri at Amphoe Phra Phutthabat, Sara Buri, and a 3.9-MW project, jointly operated with WVO-Suphan Buri at Amphoe Tha Muang, Kanchanaburi. These two agreements were signed with PEA for a 25-year contract term with an electricity price of THB 4.12 per kWh (FiT).

In June 2018, BCPG wholly invested in Lom Ligor Co., Ltd., which operates a wind power generation project with a total capacity of 9.0 MW (installed capacity of 10.0 MW) at Amphoe Pak Phanang, Nakhon Si Thammarat. It entered into a non-firm, five-year PPA with PEA with a renewable option for five years each time. The project qualified for THB 3.50 per KWh adder for renewable-energy power generation for 10 years from the COD.

Presently, the project is under contraction, and has expected to commercially run in Q2/2019.



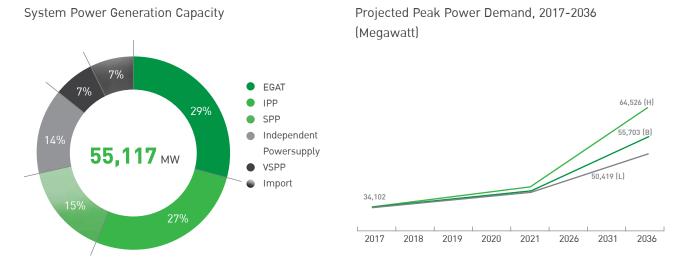
Phra Phutthabat Project, Sara Buri



#### Power consumption in Thailand

Thailand's power generation is operated by six key groups: EGAT, IPPs, SPPs, VSPPs, Independent Power Supply, and imported power. At the end of September 2018, the total generation capacity from all groups was 55,117 MW, 58% of which was natural gas-fired, 18% coal-fired, and 10% renewable energy-fired.

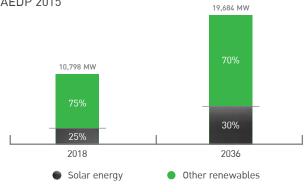
The Energy Policy and Planning Office (EPPO), Ministry of Energy, has projected peak power demand with an average growth rate of 2.1%-3.4% per year between 2017-2036, indicating the maximum demand in 2036 to be 50,419-64,526 MW.



Source: EPPO (September 2018)

#### Thailand industry trend for power generation from renewable energy

Contracted capacity for renewable energy-fired power generation in October 2018 versus target in 2036 under AEDP 2015



#### Source: AEDE

The Ministry of Energy has driven a policy to promote private participation in power generation since 1989, particularly from renewable-energy sources to spread out power generating sites to remote areas and therefore increasing participation by the private sector and communities. With this approach, system power loss would be minimized, and the government could lower its budget burden. Thanks to this policy, the total national contracted capacity from renewable energy has soared. The contracted capacities amounted to 10,798 MW this year and are expected to amount to 19,684 MW in 2036, equivalent to 3.4% p.a. growth.

Apart from providing more renewable-energy power supply, state promotion has attracted the private sector's interest in investing in such business, which in turn has intensified competition. BCPG Group continues to monitor key factors potentially affecting its future business competition, including PDP 2018 and the announcement of the Energy Regulatory Commission (ERC) on power purchase from assorted renewable-energy power generation projects so as to become ready.

#### Solar Farms in Japan

#### Nature of Japan's power business

The Group is currently operating seven solar farm projects in Japan with a total contracted capacity of 34.0 MW (installed capacity of 45 MW) under seven separate PPAs, all under 20-year terms, with effect from the first meter-reading date.

- The first five projects (Takamori, Nakatsugawa, Nojiri, Tarumizu, and Nikaho) were structured to purchase electricity with an FiT of JPY 40 per kWh. The contracted capacities total 19.5 MW (installed capacity of 26.6 MW).

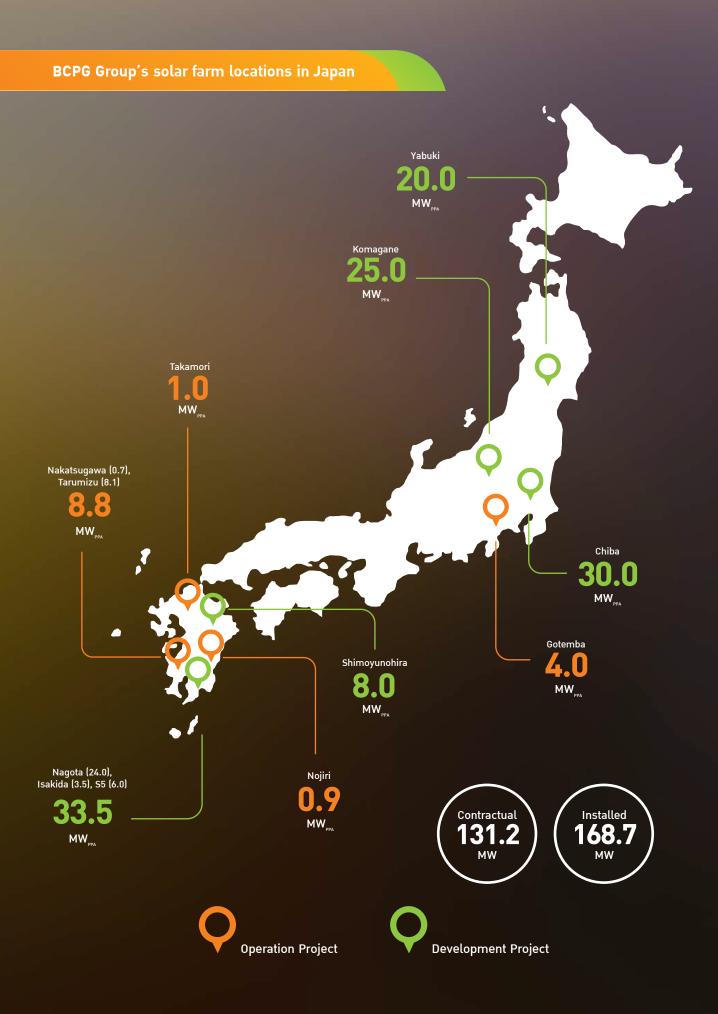
- One project (Nagi), with a contracted capacity to 10.5 MW (installed capacity of 14.0 MW), with FiT of JPY 36 per kWh.

- One project (Gotemba in Shizuoka Prefecture), with a contracted capacity of 4.0 MW (installed capacity of 4.4 MW). The agreement is under a 20-year term effectively from the first meter-reading date, with FiT of JPY 32 per kWh.

In September 2018, the company disposed of the Nikaho and Nagi solar farm projects with a total capacity of 19.3 MW to infrastructure fund. At the end of 2018, the operation solar farms has the contracted capacity of 14.7 MW (installed capacity of 17.4 MW), and the solar farms under construction and development has the contracted capacity of 116.5 MW (installed capacity of 151.3 MW).



Gotemba, Japan



#### **Power Consumption in Japan**

Following the free-market policy launched in 1995 by the Japanese government on the power industry, the industry has become highly competitive and transparent. The power industry in Japan is structured in three different facets: power generating system; transmission, delivery and grid management systems; and marketing and sales. There are currently 10 private power producers providing electricity for each region and taking charge of supply, transmission, and distribution systems from the generating and distributing ends to consumers in various locations at the other end. These companies carry terms for power supply, including power tariffs as a general condition for supplying power to consumers in controlled markets. In addition, if consumers in a free market cannot agree with power producers and suppliers (PPSs), they are bound to supply power to this group as the supplier of last resort. All 10 private power producers therefore work closely together to develop power supply stability for power users across the country.

As for power industry regulation, the Electric Power System Council of Japan (ESCJ) was formed and went into operation in April 2005 as issuer of regulations and supervisor of operation, a neutral entity that ensures transparency and fairness of power distribution systems.

Following the Fukushima Daishi nuclear power plant incident caused by the major earthquake and tsunami of 2011, the Japanese Government issued an executive order to shut down all other 48 nuclear power plants across the country for safety inspection and testing, leading to a change in the proportions of power generating fuels, causing a considerable rise in electricity rates driven by sizeable imports of fossil fuels to replace nuclear power for power generation. To resolve this problem, several policies and measures were introduced by the Japanese government to foster energy security and stability during normal market status and in crises. To this end, Japan aimed to diversify imported fuels' countries of origin and develop indigenous energy sources, that is, the promotion of power generation from renewable sources under the enhancement of the national power grid and relaxation of rules, and research and development (R&D) studies to help reduce investment and operating costs.

The Ministry of Economy, Trade and Industry (METI) has set a preliminary goal to raise the renewable-energy ratio to 22-24% of the total capacity by 2030 to arrive at suitable power-generating fuel proportions with due regard for safety, economic efficiency, environmental impacts, and energy security. Japan's national assembly also announced The Act on Purchase of Renewable Energy Sourced Electricity by Electric Utilities on July 1, 2012, under which a scope was designed for power purchase under the FiT model for renewable energy. METI, in the meantime, is to set power tariffs in the annual FiT format, under which tariffs for power farms under 2 MW are to be 21 yen/kWh in 2017 and 18 yen/kWh in 2018; for those larger than 2 MW, tariffs are to undergo bidding, with effect from October 2017.

In 2018, METI announced for solar power plants, which has the capacity of more than 2 MW, granted for the license during 2012-2014, and under the development stage and not commercially operate, has to submit the application within September 2019, and connect to the transmission line within 1 year. Then, the project shall be got the same FIT rate. These projects has the FIT of 32, 36, 40 JPY/kWh. If any plant has unable to achieve these conditions, the FIT shall be reduced to 21 JPY/kWh. Regarding to the regulatory change, the management has set and monitor the work plan of each project in order to meet authority's timeline.



Gotemba, Japan

#### **Revenue Structure Classified by Each Power Plant**

The electricity sales revenues of BCPG Group as reported in the consolidated financial statements for fiscal years ending December 31, 2016, 2017, and 2018 are detailed below.

		For the fiscal year ending December 31					
	2	2016 2017			2018		
	%	THB million	%	THB million	%	THB millior	
BCPG							
Base Tariff	204.5	6.6	194.1	5.8	198.2	6.0	
Adder	513.6	16.7	497.6	15.0	489.2	14.7	
Feed in Tariff	-	-	-	-	25.7	0.8	
BSE							
Base Tariff	240.2	7.8	235.3	7.1	242.8	7.3	
Adder	602.5	19.5	600.5	18.1	591.8	17.8	
BSE-BRM							
Base Tariff	61.5	2.0	58.9	1.8	60.8	1.8	
Adder	155.0	5.0	150.6	4.5	149.4	4.5	
BSE-BRM 1							
Base Tariff	59.5	1.9	56.2	1.7	58.9	1.8	
Adder	148.8	4.9	143.5	4.3	144.8	4.4	
BSE-CPM 1							
Base Tariff	61.4	2.0	57.8	1.7	60.1	1.8	
Adder	155.0	5.0	147.9	4.5	147.3	4.4	
BSE-NMA							
Base Tariff	59.0	1.9	56.6	1.7	58.3	1.8	
Adder	148.6	4.8	145.0	4.4	142.8	4.3	
BSE-PRI							
Base Tariff	118.7	3.8	111.7	3.4	115.4	3.4	
Adder	299.4	9.7	287.7	8.7	285.3	8.6	
Feed in Tariff	2.1	0.1	97.6	2.9	98.5	3.0	
Revenue from Thai operations	2,830.6	91.8	2,841.0	85.5	2,869.2	86.4	
Natkatsugawa	12.6	0.4	12.6	0.4	12.4	0.4	
Takamori	17.9	0.6	17.4	0.5	16.8	0.5	
Nojiri	17.3	0.6	16.3	0.5	15.3	0.5	
Tarumizu	130.3	4.2	125.5	3.8	109.3	3.3	
Nikaho	75.2	2.4	144.0	4.3	115.9	3.5	
Nagi	-	-	165.8	5.0	138.2	4.2	
Gotemba	_	-	-	-	36.7	1.0	
Revenue from Japan operations	253.3	8.2	481.5	14.5	444.6	13.4	
Revenue from O&M service	-	-		-	6.51	0.2	
Total Revenues	3,083.9	100.0	3,322.5	100.0	3,320.3	100.0	

#### **Investment in Power Plant Projects through Associates**



#### Wind power project in the Philippines

A wind power plant in Nabas, the Philippines, with BCPG holding 40.0% of the total paid-up capital, came into operation on June 10, 2015. The current capacity is 36 MW (equity capacity of 14 MW). Another 14-MW capacity is under development (equity capacity of 6 MW). The project is under a 20-year contract term with an FiT of PHP 7.40 kWh, after which market prices are to apply.

This year the plant generated a total of 45.8 GWh, versus 18.8 GWh in 2016, or 143.8% of the rise in capacity factor, which improved from 30.5% last year to 37.1% this year. As a result, this year's profit share before the amortization of BCPG amounted to THB 72.6 million.

As for the power industry of the Philippines, the entire generation system accounted for 22,700 MW this year, most of which came from coal-fired power plants (35.4%) and oil & gas-fired ones (33.4%). Wind power generated 1.9% of the total figure.

The Philippines still featured steep rises in power demand, with the government projecting average peak growth rates at 5.8% a year, prompting it to set a goal of expanding the total capacity to sustain domestic demand by 49,300 MW by 2040, most of which is to come from coal-fired power plants. Nevertheless, the government has promoted investment in renewable energy in parallel. The capacity growth goal for solar farms and wind power plants totals about 5,100 MW by 2040.

Source: Department of Energy, Philippines, Asian Development Bank, BloombergNEF

#### **Geothermal Power Plant Project in Indonesia**

Three operating geothermal power plant projects in West Java, Indonesia, commanded a total generating capacity of 875.0 MW (equity capacity, 157.5 MW), whereas 120.0 MW was under development (equity capacity, 24.0 MW). The average tariff was US\$0.06-0.09/kWh, a function of assorted inflation indices (including foreign currency rates, consumers' price index, and oil index).

		Geothermal Power Pla	nt	
Project name	Wayang-Windu	Salak <sup>(1)</sup>	Darajat <sup>(1)</sup>	
Location	Pangalengan Regency	Sukabumi Regency	Garat Regency and Bandung regency	
Indirect equity	20%	17.3%	17.3%	
Purchaser	PT Perusahaan Listrik Negara (PLN) <sup>(2)</sup>	PT Perusahaan Listrik Negara (PLN) <sup>(2)</sup>	PT Perusahaan Listrik Negara (PLN) <sup>(2)</sup>	
Contracted capacity				
Steam:		Units 1-3: 180 MW	Unit 1: 55 MW	
(For PLN's power generation)	-			
Power:		Units 4-6: 197 MW	Units 2-3: 216 MW	
Operating projects	Units 1-2: 227 MW	-	-	
Developing projects	Units 3-4: 120 MW			
Total capacity	347 MW	377 MW	271 MW	
Equity capacity				
Steam:	-	Units 1-3: 31.1 MW	Unit 1: 9.5 MW	
Power:				
Operating projects	Units 1-2: 45.4 MW	Units 4-6: 34.1 MW	Units 2-3: 37.4 MW	
Developing projects	Units 3-4: 24.0 MW <sup>(3)</sup>	-	-	
Total equity capacity	69.4 MW	65.2 MW	46.9 MW	

#### Remarks:

- $^{\left( 1\right) }$  Salak and Darajat were acquired by Star Energy from Chevron on March 31, 2017.
- <sup>(2)</sup> PLN is the state enterprise of Indonesia, the sole state enterprise whose key role is to provide domestic power system service.
- <sup>(3)</sup> Under exploratory drilling to confirm viability.



This year the geothermal power plant projects successfully generated 1,249.8 GWh, based on percent of shareholding, increased from the previous year of 509.6 GWh, or 145.3% due to full year operation. As a result, this year's profit sharing before the amortization for BCPG Group came to THB 761.3 million.

As for Indonesia's power industry, the power generation capacity was about 62,000 MW this year, most of which came from coal-fired and natural gas-fired power plants (50% and 27.4%). Geothermal capacity accounted for only 2.7% of the total figure.

Today, Indonesia continues to face power shortages in remote areas, particularly to the east. The electrification ratio of the population is 87.5%, prompting the government to focus on power plant development to sustain demand, which is projected to grow by 8.8% a year. The goal is to hike the total installed capacity to 91,000 MW by 2022, of which 7,007 MW (7.7%) is to come from geothermal power plants.

Source: BloombergNEF, Global Business Guide Indonesia



# Shareholding Structure

#### Registered and paid-up capital

On September 29, 2016, BCPG was listed on the Stock Exchange of Thailand (SET) under the Energy and Utilities Sector. As of December 31, 2018, its registered capital was THB 10 billion, consisting of 2 billion common shares at THB 5.0 par value, and paid-up capital of THB 9,984,137,300 consisting of 1,996,827,460 common shares at THB 5.0 par value.

19.00

3.3045

11.304

#### Shareholder's structure

As of December 11, 2018  $^{\scriptscriptstyle (1)},$  the major shareholders were as follows:

Major Shareholders	Number of Shares	Shareholding (%)
BCP <sup>(2)</sup>	1,399,999,994	70.1
Social Security Office	34,600,289	1.7
Thai NVDR Co., Ltd.	15,836,746	0.8
Ms. Pitcha Hemvachiravarakorn	12,000,000	0.6
South East Asia UK (Type C) Nominees Limited	10,152,168	0.5
Total major shareholders	1,472,589,197	73.7
Total shares	1,996,827,460	100.0

#### Remarks:

 $^{\scriptscriptstyle (1)}$  Latest closing date of the shareholder roster.

<sup>(2)</sup> BCP is a SET-listed company which engages in the business of oil refinery and distribution of refined products. As of September 7, 2018, the latest closing date of shareholder roster, the top 10 major shareholders were as follows:

Top 10 Major Shareholders	Number of Shares	Shareholding (%)
Social Security Office	199,128,697	14.5
Ministry of Finance	137,442,767	10.0
Thai NVDR Co., Ltd.	120,439,428	8.8
Vayupak Fund 1 by MFC Asset Management Public Co., Ltd.	100,936,800	7.3
Vayupak Fund 1 by Krung Thai Asset Management Public Co., Ltd.	100,936,800	7.3
South East Asia UK (Type C) Nominees Limited	33,642,198	2.4
STATE STREET BANK EUROPE LIMITED	31,304,143	2.3
AIA Company Limited - EQ4-P	30,000,069	2.2
Bangkok Life Assurance PCL	23,056,200	1.7
Krungsri Dividend Stock LTF	22,045,400	1.6
Total 10 major shareholders	798,932,502	58.1
Total shares	1,376,923,157	100.0

Source: SET, www.set.or.th

#### **Other securities offered**

The 2017 AGM of April 4, 2017, passed a resolution approving the issuance of up to 10 million units of warrants under the Employee Stock Option Program (BCPG ESOP Warrant Scheme) to be offered to directors, executives and employees of the Company and its subsidiaries, with details as follows:

Security	:	Warrants to purchase common shares of BCPG PcI. specifically offered to directors, executives and employees of the Company and its subsidiaries
Туре	:	To specific names and non-transferrable, except under specified conditions
Warrant term	:	Five years after the issuance, non-extendable, and conversion to common shares to be fully completed before expiry of the warrant
Number of warrants allocated	:	10,000,000 units
Number of common shares allocated	:	10,000,000 shares, about 0.50% of the total shares of the Company fully subscribed
Date of warrant	:	April 18, 2017
Price per unit	:	THB 0 (Zero Thai Baht)
Limitation of rights	:	1:1 or one warrant unit for the right to purchase one common share, except where there is an adjustment in the limitation of rights under the adjustment
Purchasing price	:	<ul> <li>An individual warrant holder can exercise the right to subscribe to common shares at the following prices:</li> <li>(1) THB 10.00 per share for 50% of the total right to which each director, executive or employee is allotted.</li> <li>(2) THB 13.82 per share for the remaining 50% of the total right to which each director, executive or employee is allotted.</li> </ul>
Exercise dates	:	Every 25th day of February, May, August and November of the year until the expiry of the warrant, with the first exercise date being May 25, 2017, and the last exercise date is five work days before the expiry date of the five-year period warrant, effective from the date of warrant issuance. If such date falls on a holiday observed by the Company, the prior date will be valid for the exercise date.
Other rights and benefits apart from the rights and benefits of the	:	-None-

from the rights and benefits of the common share

Secondary market for warrant	:	BCPG will not register these warrants as securities on SET.
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Secondary market for common : The Company will convert all exercised warrants to common shares and register on SET.

As of December 31, 2018, the Company has 3.2 million units of unexercised warrants in the book, equivalent to 0.2% of the paid-up capital.

#### **Dividend Policy**

BCPG's policy is to pay out dividends to the shareholders at a rate of at least 40% of the net profit reported in the Company's separate financial statements after deduction of all reserves required by its Articles of Association and applicable laws. The Board's resolutions on dividend payout will be submitted for approval of shareholders' meetings, except interim dividends, which can be authorized by the Board but must be reported in the subsequent shareholders' meeting. Generally, dividend payment is subject to the current economic situation, BCPG's cash flow and the BCPG Group's investment plans, and other concerns considered appropriate by the Board.

#### Subsidiaries

#### Subsidiaries in Thailand

Subsidiaries in Thailand hold dividend payout of at least 80% of the net profit reported in each company's separate financial statements, after deduction of all reserves required by each company's articles of association and applicable laws. However, such payment is subject to cash flow, obligations of the company, annual investment plans, and other considerations as seen fit by the board of each company.

#### Overseas subsidiaries

Overseas subsidiaries hold the same policy of dividend payout at a rate of at least 40% of each company's net profit reported in its separate financial statements, after deduction of all provisions required by each company's articles of associations and applicable laws. Dividend payment is also subject to each company's cash flow, obligations, annual investment plans, and other concerns considered necessary and appropriate by its own board of directors.

Dividend payment by overseas subsidiaries to BCPG may be subjected to applicable expenses, such as withholding tax, other related taxes, transaction fees and forex gains or losses.

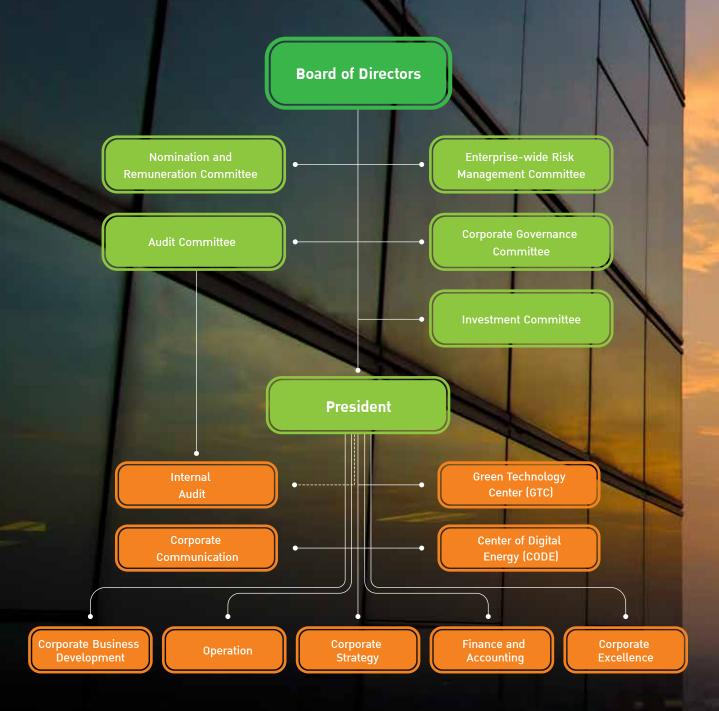
#### **Dividend Payment History**

The Company made dividend payments during 2017-2018:

	2017		2018	
Dividend payment		Jan - Mar	Apr - Jun	Jul - Sep
Profit per share (THB/share)	0.64	0.21	0.17	0.19
Interim dividend (THB/share)	0.61	0.16	0.16	0.16
Dividend payout (%)	95.3	76.1	94.1	84.2

# Management Structure

BCPG's management structure consists of the Board of Directors and five subcommittees, namely the Audit Committee, Nomination and Remuneration Committee, Enterprise-wide Risk Management Committee, and Investment Committee, Corporate Governance Committee. The various functions are summarized below:



# **Board of Directors**

As of December 31, 2018, BCPG had ten directors:

	Attendance / Number of Meetings in 2018					
Name	Position	Directors	Non-Executive Directors / Independent Directors			
1. Mr. Pichai Chunhavajira <sup>(1)</sup>	Chairman	11/12	-			
2. Admiral Sithawat Wongsuwan <sup>(2)</sup>	Vice Chairman / Independent Director / Chairman, Nomination and Remuneration Committee	11/12	2/2			
3. General Kanit Sapitaks <sup>(3)</sup>	Independent Director / Chairman, Corporate Governance Committee / Member of Nomination and Remuneration committee	12/12	2/2			
4. General Utis Sunthorn $^{\scriptscriptstyle (4)}$	Independent Director / Member of Audit Committee / Member of Enterprise-wide Risk Management Committee	12/12	2/2			
5. Mrs. Vilai Chattanrassamee $^{\scriptscriptstyle (5)}$	Independent Director / Chairman, Audit committee Member of Corporate Governance Committee	12/12	2/2			
6. Mr. Narong Boonyasaquan <sup>(6)</sup>	Independent Director	11/12	2/2			
7. Mrs. Pankanitta Boonkrong $^{\scriptscriptstyle (7)}$	Independent Director / Member of Audit committee	12/12	2/2			
8. Mr. Thammayot Srichuai <sup>(8)</sup>	Director / Member of Investment Committee	2/2	- (11)			
9. Prof. Dr. Suchatvee Suwansawat $^{\scriptscriptstyle{(9)}}$	Independent Director / Chairman of Enterprise-wide Risk Management committee / Member of Nomination and Remuneration Committee	10/12	2/2			
10. Mr. Bundit Sapianchai <sup>(10)</sup>	President / Member of Investment Committee / Member of Enterprise-wide Risk Management Committee / Member of Corporate Governance Committee / Secretary to the Board of Directors	12/12	_ (1)			
Director who resigned during the	year					
1. Mr. Chaiwat Kovavisarach	Vice Chairman / Chairman of Investment Committee	9/9	-			

#### Remarks: :

<sup>(1)</sup> The Chairman does not serve on subcommittees under SET's 2012 CG Code, but as he represented Bangchak Corporation PcI, BCPG's major shareholder, he is not defined as an independent director.

 $^{\scriptscriptstyle (2)}$  Appointed director on December 1, 2015, and NRC Chairman on March 25, 2016

<sup>(3)</sup> Appointed director on December 1, 2015, CGC Chairman and Member NRC on March 25, 2016

- (6) Appointed director on January 1, 2018 (replacing Mr. Thammayot Srichuai)
- $^{\scriptscriptstyle (7)}$  Appointed director and AC member on January 2, 2017

<sup>&</sup>lt;sup>(4)</sup> Appointed director on December 1, 2015, and AC member and ERMC member on March 25, 2016

<sup>&</sup>lt;sup>(5)</sup> Appointed director on December 1, 2015, and AC Chairman and CGC member on March 25, 2016

<sup>(8)</sup> Appointed director and IC member on November 1, 2018 (replacing Mr. Chaiwat Kovavisarach)

<sup>&</sup>lt;sup>(9)</sup> Appointed director on December 1, 2015, NRC member and ERMC member on March 25, 2016, and ERMC Chairman on October 17, 2016

<sup>(10)</sup> Appointed director on July 17, 2015, and CGC Secretary, CGC member, ERMC member and IC member on March 25, 2016

 $<sup>^{\</sup>scriptscriptstyle (11)}$  As IC member is defined as Executive Director, he is not defined as an independent director.

## Duly Authorized Directors (according to BCPG's Certificate ended December 31, 2018)

BCPG's duly authorized signatories are Mr. Pichai Chunhavajira, Chairman, jointly signing with Mr. Bundit Sapianchai, President, with affixation of BCPG seal, or Mr. Pichai Chunhavajira, or Mr. Bundit Sapianchai, jointly signs with Admiral Sithawat Wongsuwan or General Utis Sunthorn or Ms. Vilai Chattanrassamee or Mr. Suchatvee Suwansawat or General Kanit Sapitaks or Ms. Pankanitta Boonkrong, or Mr. Narong Boonyasaquan or Mr. Thammayot Srichuai, with affixation of BCPG seal.

#### **Board Composition**

1. The Board consists of at least 5 and no more than 12 directors, with at least half of the directors being residents of the Kingdom of Thailand, with qualifications in accordance with the laws and the Regulations as Specified by BCPG

2. The Board must consist of independent directors of at least one-third of all directors and no fewer than three.

3. The Board must consist of directors with knowledge, expertise and experience in renewable-energy businesses, international business, finance and accounting, internal control, law, organizational development, social, environment and safety issues, as well as risk and crisis management. At least one independent director must be an expert in finance and accounting. The Board is to nominate a director as its Chairman. If deemed appropriate, the Board may select a director or directors for Vice Chairmanship. The Board is authorized to appoint and dismiss the President. The President, by position, is to serve as secretary to the Board.

4. The Chairman of the Board must not be the same person as BCPG's President. Additionally, the Chairman of the Board should not serve on any of the subcommittees for the sake of clarity in distribution of roles, responsibilities, and operations.

#### **Independent Directors**

The Board consists of six independent directors, which is more than one-third of the entire Board, to ensure that they constitute a key mechanism to oversee good corporate governance and BCPG's and the shareholders' interests by balancing the decision-making power of the entire Board, including awareness of performing their duties based on righteousness and ability to make unbiased comments without being under any party's or individual's influence. The Board has therefore stipulated the following definitions and qualifications of the independent director under the Good Corporate Governance Policy (Article 3) as follows:

1. Holds no more than 0.5% of the voting shares of BCPG, the parent company, subsidiaries, joint ventures, major shareholders, or authorized controlling persons of BCPG, including the shares held by persons related to the independent director.

2. Is not or has never been a director affiliated with the management of BCPG's businesses, temporary employees, employees, advisers on regular pay, or authorized controlling persons of BCPG, the parent company, subsidiaries, joint ventures, sister companies, major shareholders, or authorized controlling persons of BCPG, unless they are already relieved from such roles for at least two years. However, the prohibited roles do not include cases where the independent director used to be a government official or an adviser in government agencies that are major shareholders or authorized controlling persons of BCPG.

3. Is not a related family member or by legal registration the father, mother, spouse, sibling, or offspring, or spouse of the offspring of other directors, executives, major shareholders, authorized controlling persons or others who will be nominated for directorship, executives, or authorized controlling persons of BCPG or subsidiaries.

4. Does not or has never had business relation with BCPG, the parent company, subsidiaries, joint ventures, major shareholders, or authorized controlling persons of BCPG that may obstruct independent views of the independent director. Is not or has never been a biased shareholder or is an authorized controlling person of a person with business relation with BCPG, the parent company, subsidiaries, joint ventures, major shareholders, or authorized controlling persons of BCPG, unless already relieved from the roles for at least two years.

5. Is not or has never been the auditor of BCPG, the parent company, subsidiaries, joint ventures, major shareholders, or authorized controlling persons of BCPG, and is not a shareholder who may be perceived to have authorization or is a partner of an auditing firm in which the auditor is attached to BCPG, the parent company, subsidiaries, joint ventures, major shareholders, or authorized controlling persons of BCPG, unless already relieved from any of the roles for at least two years.

6. Is not or has ever been a professional service provider in any way, which includes providing legal services or financial services with service fees of more than THB 2 million a year from BCPG, the parent company, subsidiaries, joint ventures, major shareholders, or authorized controlling persons of BCPG. Is not a biased shareholder, an authorized person, or partner of the professional service provider, unless already relieved from the roles for at least two years.

7. Is not a director appointed to represent BCPG, the parent company, major shareholders, or a shareholder connected to a major shareholder.

8. Is not engaged or involved in any similar business activities, or participated in any competing activities with BCPG or subsidiaries. Is not a shareholder with a significant shareholding or a director involved in management, temporary employees, employees, advisers on regular payroll, or holds more than 1% of the voting stocks of all the other companies that operate a similar business and in significant competition with BCPG or subsidiaries.

9. Has no other characteristics that hinder expression of independent views on BCPG's operations.

## Scope of Board Authority, Duties, and Responsibilities

The Board of Directors, at its meeting No. 12/2018 on December 18, 2018, approved the revised Company's CG policies and scope of the Board's authority, duties, and responsibilities as follows:

1. New directors are to attend an orientation session on BCPG's business operations.

2. Perform their duties under the law, BCPG's objectives and Articles of Association, and resolutions of the AGM with integrity, and duly protect BCPG's interests and accountability to shareholders.

3. Formulate BCPG's policies and directions, and monitor and supervise operations to ensure that the Executive Management efficiently and effectively conduct business under BCPG's policies and regulations under good corporate governance to maximize economic value and shareholders' wealth, and that innovation and modern technology are applied in resource allocation to create value for sustainable business.

4. Oversee BCPG's operations for long-term sustainable growth, including a personnel development plan and a succession plan.

5. Regularly monitor BCPG's operations under laws and regulations as shown in BCPG's contracts by assigning the Executive Management to report BCPG's operations and other key issues to the Board at its meetings to ensure effective operations.

6. Regularly and completely report to the shareholders BCPG's status, including outlooks, both positive and negative, with sufficient supporting reasons.

7. Ensure that BCPG commands an effective and reliable accounting system, financial reporting, internal control, and internal audit.

8. Annually review and approve the policy on corporate governance.

9. Assume a substantial role in conducting risk management by setting up due and adequate directions and measures to manage risk, complete with regular follow-up.

10. Supervise and ensure that the Executive Management treats all stakeholders with ethics and fairness.

11. Independent directors and external directors should be prepared to exercise their discretion independently in strategy formulation, management, use of resources, appointment of directors, and formulation of business operation standards, and to disagree with any actions of other directors or the management when there are different views on issues affecting equitable treatment of all shareholders.

12. Where necessary, at BCPG's expense, the Board can seek professional advice from external advisers on business operations.

13. Appoint the Company Secretary under the securities and exchange law to produce and maintain documents and any other duty specified by the Capital Market Supervisory Board, and assist in conducting activities of the Board and BCPG, namely the Board's and shareholders' meetings; also, to regularly advise directors and BCPG on their performance and operations under applicable laws and regulations, and ensure that the directors and BCPG disclose information with accuracy, completeness, and transparency.

14. Provide a code of corporate conduct, a code of business ethics, and a code of ethics for directors, executives, and employees to guide their implementation within the corporation.

15. Abstain from trading securities at least one month before the announcement of financial statements and at least three days after such announcement.

16. Report to the Board meetings asset and futures contract ownership held by themselves, their spouses, their cohabiting partner (1), or their children under legal age (2), and juristic persons in which the directors, person under (1) and (2) together hold more than 30% of voting shares which is the highest shareholding of such juristic person which holds shares in BCPG and its subsidiaries of such change (purchase, sale, transfer, or receipt) and promptly notify BCPG.

17. Attend at least one of the training programs for directors by the Thai Institute of Directors (IOD), namely the Director Accreditation Program (DAP) or the Director Certification Program (DCP), or an equivalent program to enhance their skills.

18. The non-executive members of the Board must conduct the President's annual performance assessment.

19. Non-executive and independent directors should hold meetings as necessary, at least twice a year, to discuss management problems of their interest in the absence of the management and report such meeting resolutions to the President.

20. Each director can serve as director in up to five SET-listed companies.

21. Appoint and define subcommittees' roles and responsibilities as needed to support the functions of the Board.

22. Put in place a mechanism to monitor subsidiaries to protect BCPG's investment. The Board is responsible for considering the suitability of each person to be assigned as director in each subsidiary to ensure that person's execution complies with BCPG's policies and transactions performed comply with the securities and exchange law and SET's notifications.

23. Approve asset acquisitions or disposals, investment in new businesses actions, borrowing, or lending from financial Institutions, guaranteeing, or any action under laws, notifications, regulations, and applicable provisions of securities and exchange laws.

24. Comment on related transactions or on engagement in transactions (in case such transaction does not require approval from the shareholders' meeting), or both, of BCPG and its subsidiaries, under related laws, notifications, regulations, and applicable provisions.

25. Report the Board's responsibility for financial reports in parallel display with the auditor report in the annual report, covering material issues under SET's Code of Best Practices for Directors of Listed Companies.

26. Approve the payment of interim dividends to the shareholders and report such payment at the next shareholders' meeting.

27. Approve the appointment of those without any prohibitions under the Public Limited Companies Act B.E. 2535 (including its amendments), the Securities and Exchange Act B.E. 2535 (including its amendments), and various laws, as well as other related notifications, or regulations when directors' positions are vacant for any reason apart from term expiry, appointment of new directors, and determination of compensation, and present these to the shareholders' meeting for approval.

28. Assign a director, directors, or any other person to represent the Board. However, such authorization must not be authorization or sub-authorization that empowers the director or the director's proxy to approve a transaction that they or a related party may have conflicts of interest or any other conflict with BCPG or its subsidiaries, except when the approval of the transaction follows policies and criteria that the shareholders' meeting or the Board have already approved.

### **Director Nomination**

The NRC is assigned by the Board to recruit and nominate qualified professionals to the Board or the shareholders. As for the selection criteria, BCPG emphasizes qualified professionals with comprehensive knowledge, experience, sound career paths, leadership, vision, righteousness, ethics, good attitude toward BCPG, and ability to dedicate time for the benefit of BCPG's business. The NRC also takes into consideration board diversity and develops a Board Skill Matrix to specify the required qualifications. With the matrix, missing skills and suitable qualifications for the Board composition and structure under BCPG's strategies are identified. The IOD's Director Pool database is also employed. The nomination process is based on transparency, reinforcing shareholders' confidence. BCPG has specified the qualifications of the Board as follows:

1. Command qualifications under the criteria stated in Article 68 of the Public Limited Companies Act B.E. 2535, and Article 89/3 of the Securities and Exchange Act B.E. 2535.

2. Possess leadership skills, broad vision, righteousness, ethics, and a decent career path.

3. Command interest in BCPG's activities and can dedicate time and ability.

4. Not engaged or involved in any similar business activity or participate in any competing activities, whether in self-interest or other interests, except where the AGM has been notified before the appointment.

The NRC provides an opportunity for directors and shareholders to nominate qualified candidates. The shareholders' meeting may appoint a director through a majority vote.

If a director's position is vacant due to causes other than term completion, the Board will consider the appointment of a qualified candidate with no prohibiting characteristics mentioned above at the next Board meeting. If the vacant term will expire in less than two months, the director appointed by the Board may serve only until the completion of the term of the director he or she replaces. The resolution to nominate a qualified candidate to replace a director's position must receive no less than three-quarters of the votes of the remaining directors.

#### **Director Dismissal**

At every AGM, one third of the directors are to retire from directorship. If this number is not a multiple of three, the number of directors retired is to be nearest to one-third. Directors who have completed their terms may be re-elected. However, directorships should not exceed three consecutive terms, except for those who are considered appropriate to do so. The Board will consider independence and efficiency of work performance of the director in question and present his or her work performance and the supporting reasons for his or her term extension to the shareholders.

Other than term expiry, a director may retire for the following reasons:

- 1. Death
- 2. Resignation
- 3. Lack of qualifications under Article 68 of the Public Limited Companies Act B.E.2535.

4. Resolution of the shareholders' meeting to dismiss a director under Article 76 of the Public Limited Companies Act B.E. 2535.

5. Court order

6. Lack of qualifications or possession of prohibited characteristics specified under Article 89/4 of the Securities and Exchange Act B.E. 2535.

## **Director Tenure**

At every AGM, one third of the directors are to retire from directorship. If this number is not a multiple of three, the number of directors retired is to be nearest to one-third. Directors who have completed their terms may be re-elected. However, directorships should not exceed three consecutive terms, except for those who are considered appropriate to do so. The Board will consider independence and efficiency of work performance of the director in question and present his or her work performance and the supporting reasons for the term extension to the shareholders. Independent directors can serve for up to three consecutive terms from the date of the first appointment as independent directors. If considered

appropriate for independent directors to serve a longer period, the Board will consider such necessity and, if appointed, they will not be considered independent directors.

### **Board Meetings**

1. The Board is to meet regularly, at least once every quarter and when necessary. Meeting agendas are set in advance throughout the year.

2. The meeting documents are to be sent to directors or their proxies at least seven days before the meeting date. To urgently maintain the rights and interests of BCPG, it may move a meeting to an earlier date and notify the directors through several different channels and in a timely manner. The Executive Management must provide suitable and timely information to directors. The Chairman is to ensure that meeting documents are delivered to directors at least five days ahead of the meeting to provide sufficient time to study, consider, and make proper decisions at the meeting. The Chairman also ensures that the meeting minutes are completed within seven days after the meeting so that they may be reviewed before their adoption at the next meeting.

3. Each Board meeting should be attended by no less than three-quarters of the Board. The same applies to the number of directors in attendance for each voting agenda item.

4. The directors should attend no less than 75% of the total meetings held annually.

5. The Chairman approves meeting agendas in consultation with the Executive Management, who is also to consider proposals from directors who wish to include other significant items on the agenda of the next meeting.

6. The Chairman should duly allocate time for the Executive Management to present documents for the Board's discussions of crucial matters.

7. At the meeting the Chairman summarizes key issues for directors' consideration, encourage and allow them to express views, which will be compiled and concluded as meeting resolutions.

8. When considering an agenda item in which a given director has potential conflicts of interest, the director has no right to vote and must not attend the meeting during the consideration of the item.

9. Directors can have access to and can request from the Executive Management documents, advice, or services about BCPG's business operations. They can also request independent comments from external consultants.

### **Orientation for New Directors**

BCPG provides orientation sessions, including lectures and overview presentations of its businesses (such as vision, mission, values, and business goals, management structure and executives, businesses, organization strategic plans, investment plans and progress, and past performances), major policies, socio-environmental corporate responsibility, directors' roles, duties, and responsibilities, relevant laws and corporate governance principles. BCPG also arranges for new directors to undertake a study trip to its renewable-energy (RE) power plants for business insights, including a handbook covering relevant information on the Board and the management as a guide in performing their duties and corporate governance (CG) principles.

### **Director Development**

BCPG encourages the Board to participate in development training and seminar to enhance their knowledge and understanding of corporate governance principles, rules and regulations, and the roles and responsibilities of the directors for their effective performance. Other training provided in 2018 is listed below:

	Name	DAP	DCP	Others
1.	Mr. Pichai Chunhavajira	2006	2009	-
2.	Admiral Sithawat Wongsuwan	-	2009	-
3.	General Kanit Sapitaks	2016	-	-
4.	General Utis Sunthorn	2016	-	-
5.	Mrs. Vilai Chattanrassamee	-	2006	-
6.	Mr. Thammayot Srichuai	-	2017	-
7.	Mrs. Pankanitta Boonkrong	-	2006	Advanced Audit Committee Program (AACP), Class 29/2018
8.	Prof. Dr.Suchatvee Suwansawat	-	2008	-
9.	Mr. Bundit Sapianchai	2004	2005	-
10.	Mr. Narong Bonsaquan	-	2003	-

Summary training courses by Thai Institute of Directors Association : IOD

- BCPG invited a representative from a leading international consultancy company to make a presentation and exchange views with its directors and executives under the "Future of Electricity" topic at the 2018 Corporate Strategy Seminar on July 24, 2018.

- A study trip and a visit to the Research Center of Huawei Technologies Deutschland GmbH in Nuremberg, Germany, to share expertise in technology and innovation related to BCPG Group's businesses.

- Mr. Pichai Chunhavajira, Chairman of the Board, gave a talk on "Investment Concept for Directors" attended by BCPG directors, namely Mrs. Vilai Chattanrassamee and Mrs. Pankanitta Boonkrong, and BCP's management and employees on October 25, 2018.

### **Director Performance Assessment**

BCPG provides, at least once a year, performance assessment of the Board and subcommittees. The assessment serves as a scope for assessing the annual performance against their duties and authority, and corporate governance principles. It also serves as a basis for development planning for the following year.

The Board approved the performance assessment forms for the Board and subcommittees as follows:

#### 1. Performance Assessment Form for the Board

- Individual directors (self-assessment): Assessment topics consist of responsibility for performing roles and responsibilities, training and self-development, and compliance with good governance policy.

- Individual directors (cross-group assessment): one director assessed by three - four anonymous directors): Assessment topics consist of responsibility for performing roles and responsibilities, and independence of the individual.

- The entire Board: Assessment topics consist of Board policy, composition and qualifications, performance, meetings, and self-development.

# 2. Performance Assessment Form for each subcommittee:

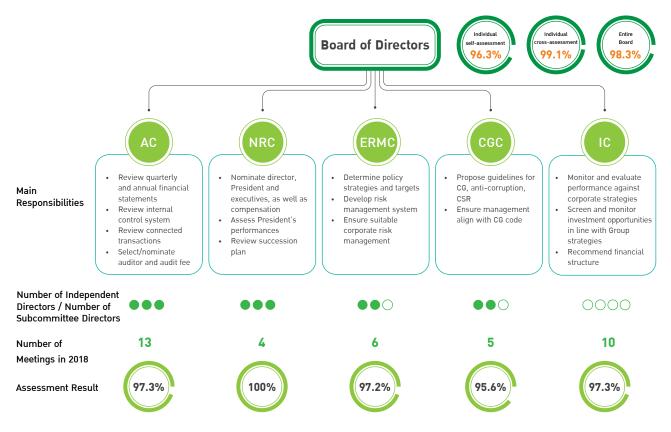
Assessment topics consist of performance against the roles and responsibilities and meetings A scoring system is adopted for the assessment so that the Board can compare the assessment for each topic. The scoring is defined as follows:

- 1 = Absolutely disagree, or no actions taken
- 2 = Disagree, or a few actions taken
- 3 = Agree, or reasonable actions taken
- 4 = Rather agree, or substantial actions taken
- 5 = Absolutely agree, or outstanding actions taken.

Under the scoring system, the rating criteria are as follows:

Over 85 percent	=	Excellent
Over 75 percent	=	Very good
Over 65 percent	=	Good
Over 50 percent	=	Satisfactory
Less than or equal to 50 percent	=	Need improvement

# Assessment Results of Board of Directors and Subcommittees in 2018



Remarks: AC = Audit Committee, NRC = Nomination and Remuneration Committee, ERMC = Enterprise-wide Risk Management Committee, CGC = Corporate Governance Committee, IC = Investment Committee

## **Subcommittees**

The Board, valuing good corporate governance, has appointed subcommittees to support its mission to follow up and supervise the Group's operations and business performance to ensure effectiveness, efficiency and compliance with good governance. In 2015 the Board appointed the Audit Committee, whose duties and responsibilities were to ensure good governance practices and internal audit. Board Meeting No. 2/2559 dated March 9, 2016, appointed four subcommittees which were later approved by the AGM on March 24, 2016, namely Nomination and Remuneration Committee (NRC), Enterprise-wide Risk Management Committee (ERMC), Corporate Governance Committee (CG), and Executive and Investment Committee

## Audit Committee (AC)

The AC must possess the qualities as stipulated by SEC's and SET's laws and regulations. It comprises no fewer than three independent directors, and at least one member must have sufficient knowledge and experience in finance and accounting or auditing to perform an audit of the credibility of BCPG Group's financial statements. Ms. Tipparat Sulkim, Internal Audit Assistant Manage (Acting Interned Audit Manager) acted as secretary.

## AC Attendance in 2018

Name	Position	Attendance
Mrs. Vilai Chattanrassamee (1)	Chairman	13/13
General Utis Sunthorn	Member	12/13
Mrs. Pankanitta Boonkrong (1)	Member	13/13

Remarks:

<sup>(1)</sup> Commands sufficient knowledge and experience to perform an audit of the credibility of BCPG Group's financial statements.

## Scope of Authority, Duties, Roles, and Responsibilities

1. Ensure that BCPG has accurate and adequate financial reports that meet the accounting standards as specified by applicable laws.

2. Ensure that BCPG has a suitable and efficient internal control system and internal audit procedures, as well as efficient and adequate risk management procedures.

3. Verify that BCPG complies with the laws and regulations of SEC and SET, as well as other laws that govern BCPG's business.

4. Review connected transactions or transactions of potential conflicts of interest, or acquisition and disposal of assets to ensure compliance with the laws and SET's regulations, sensibility, and in the best interests of BCPG.

5. Review and consider with the management substantial shortcomings and subsequent responses of the management.

6. Verify and investigate all related parties under the AC's authority, and hire experts to assist in the verification and investigation under BCPG's regulations.

7. Produce an Audit Committee report and disclose it in BCPG's annual report. Such report must be signed by its chairman.

8. Consider, recruit, and nominate an independent person as BCPG's external auditor, recommend its audit fee and propose removal of the external auditor, and attend a meeting with the auditor in the absence of the management at least once a year.

9. Consider auditing scopes and plans of the external auditor and the Internal Audit Office so that they may mutually benefit and reduce redundancy of financial auditing.

10. Approve the charter, audit plans, budget, training programs and manpower of the Internal Audit Office

11. Appoint, transfer, dismiss, and evaluate the annual operation of the head of the Internal Audit Office and review the independence of the office.

12. Verify the efficiency and effectiveness of the IT system related to internal control and risk management.

13. If, in the regular operation of the Audit Committee, there is a transaction or action that is found to have (or suspected to have) a substantial effect on the financial position and operating outcomes of BCPG, namely:

- Transaction with conflicts of interest
- Substantial corruption, malfeasance or defects found in the internal control system.
- A breach of SEC's and SET's laws and regulations or laws applicable to BCPG's business.

The Audit Committee is to report facts and findings to the Board in order for the responsible units to rectify it within the time the AC deems appropriate. If the Board or executives fail to rectify it within due time, any member of the AC may report such transaction or action to SEC and SET.

14. Perform other Board-assigned duties with approval of the Audit Committee.

## Nomination and Remuneration Committee (NRC)

The Nomination and Remuneration Committee is made up of at least three members, and more than half should be independent directors. At least one member must be knowledgeable or experienced in personnel management. The Chairman of the NRC must be an independent director.

NRC Attendance in 2018

Name	Position	Attendance
Admiral Sithawat Wongsuwan	Chairman	4/4
General Kanit Sapitaks	Member	4/4
Prof. Dr. Suchatvee Suwansawat .	Member and Secretary	4/4

Scope of Duties and Responsibilities

1. Define and review the nomination method and qualifications of those to be appointed directors, President and senior management.

2. Select and nominate to the Board qualified candidates for the positions of Directors, President and senior management.

3. Define criteria of compensation for directors, President and senior management.

4. Consider and propose directors' compensation to the Board for endorsement and submit it to the shareholders for approval.

5. Submit the compensation for the President and the management to the Board for approval.

6. Assess the performance of the President and provide recommendations for proper compensation for the Board' approval.

7. Review and report to the Board progress on annual succession planning for the President and the management.

8. Assess its own performance, report it to the Board, and disclose it in the annual report.

9. Consider a qualified Company Secretary for the Board's approval.

10. Perform other Board-assigned duties.

# Enterprise-wide Risk Management Committee (ERMC)

The ERMC comprises at least three directors, and at least one member must have expertise in business or risk management, or both. The President is an ERMC member and secretary by position.

## ERMC Attendance in 2018

Name	Position	Attendance
Prof. Dr. Suchatvee Suwansawat	Chairman	6/6
General Utis Soonthorn	Member	6/6
Mr. Bundit Sapianchai	Member and Secretary	6/6

Scope of Duties and Responsibilities

- 1. Set the policy, strategies and objectives of enterprise-wide risk management.
- 2. Develop an enterprise-wide risk management system for ongoing efficiency.
- 3. Promote enterprise-wide risk management across the corporation.
- 4. Ensure that BCPG has appropriate and efficient risk management.
- 5. The ERMC Chairman reports the outcomes to the Board at its next meeting.
- 6. Perform other Board-assigned duties.

## Corporate Governance Committee (CG)

The CGC comprises no fewer than three directors, and more than half of its members should be independent directors. At least one director must command knowledge and understanding of good governance principles under international standards and practices. The President is a CGC member and secretary by position.

## CGC Attendance in 2018

Name	Position	Attendance
General Kanit Sapitaks	Chairman	5/5
Ms. Vilai Chattanrassamee	Member	5/5
Mr. Bundit Sapianchai	Member and Secretary	5/5

Scope of Duties and Responsibilities

1. Propose guidelines for corporate governance, anti-corruption, and CSR to the Board.

2. Assign policies on corporate governance, anti-corruption, and CSR to the CG taskforce to support corporate governance operation as seen fit.

3. Ensure that the performance of the Board and the management aligns with corporate governance and anticorruption principles.

4. Review the policy and guidelines for corporate governance, anti-corruption, and CSR by comparing them with international standards and practices, and propose due revision to the Board to keep them up to date.

5. Perform other Board-assigned duties.

## Investment Committee (IC)

The IC comprises directors and other experts with competency and experience in energy or related businesses; finance and accounting; business management; or technology. More than half of the IC are directors, and the President is an IC member by position. The IC may appoint a secretary, currently Mr. Charnvit Trangadisaikul, Executive Vice President, Corporate Business Development.

### IC Attendance in 2018

Name	Position	Attendance
Mr. Chaiwat Kovavisarach (1)	Chairman	10/10
Mr. Thammayot Srichuai <sup>(2)</sup>	Member	1/1
Mr. Bundit Sapianchai	Member	10/10
Mr. Suchat Chiaranussati (1)	Member	10/10
Mr. Thanwa Laohasiriwong	Adviser	10/10

#### Remarks:

 $^{\scriptscriptstyle (1)}$  Not a member of the Board.

 $^{\scriptscriptstyle (2)}$  Mr. Thammayot Srichuai was appointed director on November 1, 2018.

### Scope of Duties and Responsibilities

1. Follow up and evaluate performance under the corporate strategy and sustainably develop the corporation, taking into account the current business profile, limitations, diversity, and capacity to expand the business, both domestically and internationally, in line with the directions, business goals and policies set by the Board.

2. Screen and monitor projects and investment opportunities compatible with BCPG's strategies, and present them with supporting views to the Board for approval.

3. Recommend a financial structure that fits BCPG's strategy and present it to the Board for approval.

4. Perform other Board-assigned duties

#### **Operating Authority**

1. Approve procurement, purchasing, hiring and investment for projects for which plans and budgets have already been approved by the Board of up to THB 300 million.

2. Approve procurement, purchasing, and hiring, including hiring advisers for a new business project, of which plans and budgets have not been approved by the Board, of up to THB 100 million.

3. Appoint and set a compensation for each adviser to the IC.

4. Direct and request information from the management as seen fit.

### **Director Compensation**

1. Compensation of the Board is approved by the AGM. The compensation is to be compatible with industry peers and is related to corporate performance and individual directors' performance.

2. Each director who conducts additional duties and responsibilities (for instance, a subcommittee member) is to receive additional compensation proportional to such assignment.

3. The Board provides a report on the compensation of individual directors and executives, which includes the disclosure of compensation they receive for service at subsidiaries, in the annual report in keeping with the good governance policy

## **Director Compensation Determination**

BCPG sets the Board's compensation that suits their duties and responsibilities and is compatible with listed companies in the same industry and the same size. The compensation is sufficient to motivate directors to deliver quality performance in gearing the company for its business directions and achieve its goals in a transparent manner, and to foster trust of the shareholders.

The NRC annually determines proper compensation for directors and propose it to the Board for endorsement and then to the 2018 AGM for approval. At Meeting dated April 24, 2018, the AGM approved the 2018 compensation of the Board and the subcommittees as follows:

- 1. Fixed compensation for the Board:
  - The Board at THB 30,000 each a month
  - The Audit Committee at THB 10,000 each a month.
- 2. Meeting allowance, which will be paid to attendants only:
  - The Board at THB 30,000 each a meeting
  - Subcommittees at TBH 15,000 each a meeting.

Monthly compensation and meeting allowances for the Board Chairman and chairman of each committee is 25% higher than that of other members and 12.5% high for the Vice Chairman.

3. The Board receives an annual bonus at 0.75% of the net profit and up to THB 3 million each. The bonus was prorated to each director's term, with the Board Chairman and Vice Chairman receiving 25% and 12.5% more than other members.

4. In addition, BCPG has issued warrants for the Board, executives, and employees of BCPG and its subsidiaries (the ESOP Program), amounting to 10,000,000 units, 3,300,000 of which were allotted to the directors in April 2017. The offer corresponded to the details disclosed and subsequently approved by the 2017 AGM.



Phrakhon Chai Project, Burirum

# Summary of Director Compensation in 2018

					Compe	nsation i	n Cash (T	нв)		
	Name	BoD	AC	NRC	ERMC	CGC	IC	2017 Performance Bonus	Gain from ESOP <sup>(4)</sup>	Net Total
1.	Mr. Pichai Chunhavajira	862,500	-	-	-	-	-	1,874,520	1,931,250	4,668,270
2.	Admiral Sithawat Wongsuwan	776,250	-	75,000	-	-	-	1,687,069	1,296,000	3,834,319
3.	General Kanit Sapitaks	720,000	-	60,000	-	93,750	-	1,499,616	1,152,000	3,525,366
4.	General Utis Sunthorn	720,000	300,000	-	90,000	-	-	1,499,616	1,152,000	3,761,616
5.	Mrs. Vilai Chattanrassmee	720,000	393,750	-	-	75,000	-	1,499,616	1,545,000	4,233,366
6.	Mr. Narong Boonyasaquan <sup>(1)</sup>	690,000	-	-	-	-	-	-	-	690,000
7.	Mrs. Pankanitta Boonkrong	720,000	315,000	-	-	-	-	1,499,616	1,545,000	4,079,616
8.	Mr. Thammayot Srichuai $^{\scriptscriptstyle (2)}$	120,000	-	-	-	-	15,000	874,776	1,545,000	2,554,776
9.	Prof. Dr. Suchatvee Suwansawat	660,000	-	60,000	112,500	-	-	1,499,616	1,545,000	3,877,116
10.	Mr. Bundit Sapianchai	720,000	-	-	90,000	75,000	150,000	1,499,616	2,317,500	4,852,116
Tot	al	6,708,750	1,008,750	195,000	292,500	243,750	165,000	13,434,061	14,028,750	36,076,561
Dire	ector resigned during the year:									
11.	Mr. Chaiwat Kovavisarach (3)	624,375	-	-	-	-	187,500	1,687,069	1,738,130	4,237,074
Gra	and Total	7,333,125	1,008,750	195,000	292,500	243,750	352,500	15,121,130	15,766,880	40,313,635

Remarks :

<sup>(1)</sup> Appointed director on January 1, 2018

 $^{\scriptscriptstyle(2)}$  Appointed director and IC member on November 1, 2018

 $^{\scriptscriptstyle (3)}$  Resigned from the Board and Vice Chairman with effect from October 15, 2018

(4) Calculated by the difference between exercise price of warrant and the average price on the month that a warrant is exercised

# Directors' Other Expenses

BCPG does not define other compensation except for directors' expenses arising from performing their duties as follows:

- A vehicle was provided to the Board Chairman to facilitate his performance
- Fuel credit card for actual spending in duty performing, for up to 400 liters per month
- Internet service for duty performing, for up to THB 900 per month
- Directors' and executives' indemnity insurance, totaling THB 250 million

# **Management Executive and Staff**

Executive Management consists of 7 members as follows:

Name	Position
1. Mr. Bundit Sapianchai	President
2. Ms. Revadee Pornpatkul	Senior Executive Vice President, Operations
3. Ms. Sattaya Mahattanaphanij	Senior Executive Vice President, Corporate Excellence, and Company Secretary
4. Ms. Phatpuree Chinkulkitnivat	Senior Executive Vice President, Finance and Accounting
5. Ms. Nintira Abhisinha (1)	Acting Senior Vice President, Corporate Strategy
6. Mr. Pavan Siamchai <sup>(2)</sup>	Executive Vice President, Operations,
	and Country Manager, BCPG Japan Corporation,
	and Acting Executive Vice President, Green Technology Center (GTC)
7. Mr. Charnvit Trangdisaikul (3)	Executive Vice President, Corporate Business Development

#### Remarks:

<sup>(1)</sup> Appointed by the Board as Acting Senior Executive Vice President, Corporate Strategy, effective from February 1, 2018

<sup>(2)</sup> Appointed by the Board as Acting Executive Vice President, Green Technology Center (GTC), effective from April 1, 2018

<sup>(3)</sup> Appointed by the Board as Executive Vice President, Corporate Business Development, effective from February 1, 2018.

### Scope of Duties and Responsibilities

1. Manage and perform day-to-day business activities in line with its policies, work plans, goals, rules and regulations specified by the Board

2. Manage and conduct business under the Board's resolutions and within the approved budget in a strict, honest, and careful manner for the best interests of BCPG and its shareholders

3. Report at every Board meeting a progress update of the implementation under the Board's resolutions and BCPG's significant business performance

4. Operate the business under corporate governance principles as defined by the Board

5. Not engaged or involved in any similar business activities or participate in competing activities, whether in selfinterests or other interests, unless the superior and Internal Audit were notified and approvals granted

6. The President's directorship in other companies or any position in other business entities must be first approved by the Board. The Executive Management from vice presidents upward need a prior approval from the President in the same case, except for taking up a position in a joint-venture company, the action of which will require the Board's approval.

7. The Executive Management, namely the first four executives below the President, including all equivalent to the fourth executive and all executives at vice presidents (or equivalent) upward in the accounting and finance function must not engage in securities trading at least one month before the date of disclosure of the financial statements and at least three days after the disclosure date. These officers must declare to the Board meeting changes in holdings of the securities of BCPG and subsidiaries of their own, their spouses cohabitation partners (1) and children under legal age (2) and the juristic person himself, persons of (1) and (2) together hold shares more than 30% of the voting right of such juristic person, and their shares are the highest volumes of such juristic person or its subsidiary.

8. Attend BCPG-sponsored training related to business operations and day-to-day administration to enhance knowledge and working skills. In addition, executives at the senior executive vice president level are encouraged to participate in IOD's or IOD-equivalent Director Certification Program (DCP) to enhance their understanding of the roles and duties of BCPG's directors. This would lead to effective organization management.

### Management Nomination

The Board must ensure that a succession plan for each key position, such as the President and top management, is in place. The President must report the progress of the implementation under the plan to the Board at least once a year. The Board also sets a policy on selection of candidates for the position of the President, specifying that, if qualifications are met and for the best interests of BCPG, outsiders as well as its own employees from vice presidents upward are eligible for nomination for the position of President / Senior Executive Vice Presidents. The NRC is assigned to define criteria and method for the selection, development, and performance assessment of the President as well as criteria and a compensation structure.

To ensure that the President and top management possess essential skills and qualifications to drive the corporation in line with corporate strategic plans and achieve goals, the Board assigns Human Resources Development and Administration to manage training and development of knowledge and competency of the management. The President is also required to report to the Board annually on actions taken during the year in parallel with the succession plan. Apart from this, the Board has set additional development guidelines for rotation of responsibilities among the top executives to bring about understanding, experience, and readiness for the overall management of the corporation. Scope of Duties and Responsibilities of the President

1. Define policies, the vision, objectives, strategies, business plans, and budgets jointly with the Board

2. Monitor, manage, and operate day-to-day business to benefit BCPG, under the policies, vision, objectives, strategies, business plans, and budgets as agreed and approved by the Board or the shareholders' meeting, or both

3. Manage BCPG's business under the vision and missions specified by the Board under the business plans, budgets, and business strategies agreed and approved by the Board or the shareholders' meeting, or both

4. Corporate with the AC to ensure that business operations and risk management comply with BCPG's objectives and articles of association, as well as the resolutions of the Board or the shareholders' meeting, or both

5. Monitor and ensure that overall financial, marketing, human resources, and other operations comply with the policies and business plans agreed and approved by the Board or the shareholders' meeting, or both

6. Negotiate and enter into contracts or any transactions, or both, of normal business practices within the authorized limitation specified in the schedule prescribing approval authority approved by Board meetings

7. Order and issue rules and regulations, notification and internal memos in the conduct of business in line with BCPG's policies to benefit, and keep the corporation well organized

8. Follow up, investigate, and control operations of BCPG, its subsidiaries, or associated companies, or all of these, to achieve target performances and report these to the Board every quarter and find opportunities to further improve and enhance BCPG's performance

9. Develop the corporation to improve operation and performance and ensure continuity of development for sustainable growth

10. Pursue investment opportunities in potential projects by conducting comprehensive and proper technical and financial study for decision-making

11. Hire, appoint, remove, determine, promote, demote, reduce the salary or wages of, relocate, and terminate any employees, excluding senior executive vice presidents or above, where the approval of the Board is required

12. Transfer executive vice presidents. However, their hiring, appointment, removal, determination, promotion, demotion, salary or wage reduction, and termination must have the approval of the Board

13. Approve business transactions that are normal business practices and other transactions in supporting BCPG's businesses under general commercial terms and conditions within the authorized approval granted provided by the Board

14. Conduct business in compliance with SEC's and SET's rules for connected transactions and acquisitions and disposals of assets, and with the approval authority schedule approved by the Board

15. Appoint advisers as seen fit for BCPG's operations

16. Assign the power of attorney or delegate to persons or groups of persons (or both) performance of specific tasks provided that the action complies with the document concerning the power of attorney or rules, regulations, or directives of the Board and does not cause conflicts of interest or other conflicts in any form with BCPG or its subsidiaries. If there appears to be a conflict of interest, such transaction should be presented to the Board or the shareholders' meeting (or both) for consideration and approval unless such transaction is considered a general transaction of BCPG having the same criteria as an arm's length transaction

17. Perform other tasks as assigned by the Board.

The President can approve any expenditure for BCPG's business over and above those specified in contracts or obligations and is also authorized to proceed or determine and approve a procurement transaction of up to THB 50 million.

#### **Executive Management Compensation**

Compensation for the Executive Management consists of (1) monetary compensation, which consists of the salary and the bonus, and (2) compensation for executives (including BCPG's employees) in other forms, namely annual medical check-ups, vaccination, and medical allowances, provident fund, and insurance premiums. In addition, BCPG has set up an ESOP program for directors, executives and employees. In 2018, executive compensation in the forms of salary, bonus, and contributions to provident fund amounted to THB 44.10 million.

# **Company Secretary**

The Company Secretary plays a key role in supporting the Board's work and activities to ensure that they are conducted under laws, rules, regulations, and the corporate policy, including rules of regulators, and the Securities and Exchange Act. The Board appoints the Company Secretary with duties and responsibilities under the Securities and Exchange Act, including: Providing initial advice on relevant laws and regulations Scheduling and organizing meetings of the BCPG Board and subcommittees, subsidiaries' boards, shareholders, and Board activities to ensure efficiency, effectiveness, and utmost benefits for the company Coordinating with relevant departments to ensure that the Board' resolutions are complied with Ensuring shareholders' rights Disclosing information and preparing the annual report (Form 2-56) Preparing and maintaining key documents, including the Board roster, annual reports, notices and minutes of Board meetings, notices and minutes of shareholders' meetings, and maintaining reports on conflicts of interest declared by directors or executives.

In addition, the Company Secretary plays a key role in corporate governance by supporting the Board's and the President's tasks and activities, and being responsible for corporate compliance via compliance.

In 2018 Ms. Sattaya Mahattanaphanij, Senior Executive Vice President, Corporate Excellence, was appointed Company Secretary under the resolution of Board Meeting No. 6/2560 dated May 30, 2017.

## **Changes in Securities Held by Directors and Executives**

Directors and executives must prepare and disclose reports on their securities holding and the holding of securities by their spouses and children not yet of age and file them to SEC within 30 days of the appointment date, and must report changes in securities holding within three business days. In 2018, securities holdings of directors and executives (including spouses and minor children) are as follows:

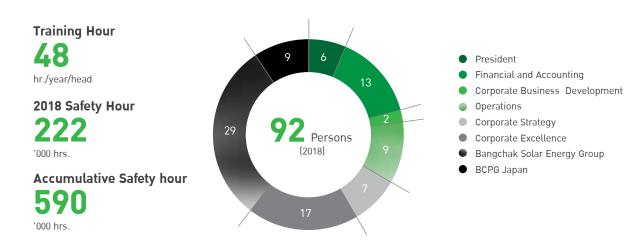
Name	Amount carried over to Jan 1, 2018	Exercised +ac		ne Stock Market d / - sell he year	Number of Shares as at Dec 31, 2018
Director (1)					
1. Mr. Pichai Chunhavajira	493,750	187,500	-	-	681,250
2. Admiral Sithawat Wongsuwan	374	168,750	+ 50,000	- 168,374	50,750
3. General Kanit Sapitaks	-	150,000	-	- 100,000	50,000
4. General Utis Sunthorn	75,000	150,000	-	-	225,000
5. Mrs.Vilai Chattanrassamee	77,500	150,000	-	-	227,500
6. Mr.Thammayot Srichuai <sup>(2)</sup>	-	-	-	-	225,000
7. Mrs. Pankanitta Boonkrong	75,000	150,000	-	-	225,000
8. Mr. Narong Boonsaquan	-	-	-	-	-
9. Prof. Dr. Suchatvee Suwansawat	75,000	150,000	-	-	225,000
10. Mr. Bundit Sapianchai	214,096	225,000	-	-	439,096
Executives (1)					
1. Ms. Revadee Pornpatkul	74,050	146,600	-	-	220,650
2. Ms. Sattaya Mahattanaphanij	62,000	93,000	-	-	155,000
3. Ms. Phatpuree Chinkulkitnivat $^{\scriptscriptstyle{(3)}}$	-	-	-	-	-
4. Ms. Nintira Abhisinha	157,800	-	-	-	157,800
5. Mr. Pavan Siamchai	-	188,500	-	-	188,500
6. Charnvit Trangadisaikul <sup>(4)</sup>	999	40,000	-	- 40,900	99

#### Remark:

- <sup>(1)</sup> There were no holdings nor changes in securities holding in BCPG and its subsidiaries during the year 2018 of the persons related to the directors and the executives, as defined in Sec.69 of the Securities and Exchange Act B.E. 2535 (including any modification thereafter), who are spouses or cohabitation partners and children under legal age (2) and a juristic person that directors and/or executives, persons of (1) and (2) together hold shares more than 30% of the voting right of such juristic person, and their shares are the highest volumes of such juristic person.
- <sup>(2)</sup> According to the resolution of Board Meeting No. 10/2561 dated October 30, 2018, Mr. Thammayot Srichuai was appointed director, effective from November 1, 2018, replacing of Mr. Chaiwat Kovavisarach, who resigned from the Board. Mr. Srichuai reported to BCPG that he held 225,000 shares when he entered directorship.
- <sup>(3)</sup> Ms. Phatpuree Chinkulkitnivat was appointed Senior Executive Vice President, Finance and Accounting, effective from July 1, 2018.
- <sup>(4)</sup> Mr. Charnvit Trangadisaikul was appointed Executive Vice President, Corporate Business Development, under the resolution of Board Meeting No. 1/2561 dated January 23, 2018.

### Personnel

As of December 2018, 31, BCPG and affiliates had a headcount of 96 (excluding executives) as follows:



# 2018 Personnel Headcount (excluding executives)

## Compensation

BCPG set short-term and long-term compensation for employees to ensure fair pay commensurate with their performance, which includes:

1. Salaries and bonuses based on individual responsibilities in comparison with other listed companies in a similar business, experience, and qualifications as well as the business performances of BCPG and subsidiaries

2. Welfare, such as provident fund, social security fund, health, life and accident insurance, annual check-up allowances, out-patient medical allowances for employees and their families, vaccination allowances, travel expenses, and per diem when travelling aboard

3. Others, such as the ESOP program.

In addition, employees are provided with the rights under related policies and laws, including the rights for annual leave and other types of leave.

In 2018, compensation for employees (excluding executives) in the forms of salary, bonus, contribution to the provident fund and the social security fund totaled THB 200 million (approximately).

## Labor Disputes

In 2018 there was no major labor dispute.

### Personnel Development

BCPG's policy is to regularly provide opportunities for learning and development to all employees to enhance their knowledge, skills, proficiency, and work efficiency. Employees are also encouraged to develop themselves through on-thejob training, in-house training, as well as knowledge-sharing activities. Executives and employees regularly attend training and seminars relating to their functions so that they can apply their knowledge in improving BCPG's operations. The development activities included:

- Employees are encouraged to attend in-house courses for BCPG Group, such as management courses (financial analysis, business planning and budgeting for investors, proactive decision- making in cross-functional work, finance for non-finance management), and courses to enhance effectiveness of performance (Microsoft Office, English language, Kaizen in office) Moreover, the company encourages its personnel to attend external training and seminars so as to develop functional skills and capabilities.

- Knowledge-sharing activities for employees from different functions to share their experience gained from work to enhance their knowledge and understanding of the work of other functions, which will strengthen cooperation among the groups as well as creating knowledge and collaboration between job functions.

- Management members are encouraged to attend training courses of leading external training institutes, such as IOD or other leading academic institutes which provide training courses for top executives, so that they may learn and understand the roles and expectations of the Board and are duly able to align with the expectations and the Board's policy.



Lom Ligor Project, Nakorn Si Thammarat



1. Mr. Pichai Chunhavajira	Chairman and Authorized Signing Director
2. Admiral Sithawat Wongsuwan	Vice Chairman (Independent Director) and Authorized Signing Director Chairman of Nomination and Remuneration Committee
3. General Kanit Sapitaks	Independent Director and Authorized Signing Director Chairman of the Corporate Governance Committee Director of Nomination and Remuneration Committee
4. General Utis Sunthorn	Independent Director and Authorized Signing Director Director of Audit Committee Director of Enterprise-wide Risk Committee
5. Mrs. Vilai Chattanrassamee	Independent Director and Authorized Signing Director Chairman of the Audit Committee Director of Corporate Governance Committee



6. Mr. Narong Boonyasaquan	Independent Director and Authorized Signing Director
7. Mrs.Pankanitta Boonkrong	Independent Director and Authorized Signing Director Director of Audit Committee
8. Mr. Thammayot Srichuai	Director and Authorized Signing Director Director of Invesment Committee
9. Professor Dr. Suchatvee Suwansawat	Independent Director and Authorized Signing Director Chairman of the Enterprise-wide Risk Management Committee Director of Nomination and Remuneration Committee
10. Mr. Bundit Sapianchai	President and Authorized Signing Director Enterprise-wide Risk Management Committee, Corporate Governance Committee, Investment Committee, Secretary to the Board of Directors

# **Board of Directors**

## Mr. Pichai Chunhavajira

Chairman and Authorized Signing Director

(Date of Appointment: 25 March 2016)

Age 70

Education / Training

- Master's Degree (Business Administration), Indiana University of Pennsylvania, USA
- Bachelor's Degree (Accounting), Thammasat University
- Honorary Ph.D. (Accounting), Thammasat University
- Honorary Ph.D. (Financial Management), Mahasarakam University
- Honorary Ph.D. (Accounting), Sripatum University
- Diploma, National Defence College, The Joint Stage Private Sector Course Class 13, Thailand National Defence College, National Defence Studies Institute
- Certified Auditor
- Certificate, Director Accreditation Program (DAP 49/2006), Thai Institute of Directors (IOD)
- Certificate, Director Certification Program (DCP 143/2011), Thai Institute of Directors (IOD)
- Certificate, Leadership Program (Class 5), Capital Market Academy

Experience

- 2013 Present : Chairman, The Bangchak Corporation Public Company Limited
- 2014 2017 : Member of Board, Bank of Thailand
- 2001 2013 : Director, PTT Exploration and Production Public Company Limited
- 2010 2012 : Chairman, Thaioil Public Company Limited
- 2008 2012 : Chairman, Thaioil Ethanol Company Limited
- 2009 2011 : Director, PTT Public Company Limited
  - : Director, IRPC Public Company Limited
- 2005 2011 : Director, Thai Airway International Public Company Limited
- 2000 2011 : Director, Thaioil Power Company Limited
- 1998 2011 : Director, The Bangchak Corporation Public Company Limited

Other directorship positions / Other positionss at present

- Other listed companies
  - Chairman, The Bangchak Corporation Public Company Limited
- Non-listed companies
  - Chairman, BBGI Public Company Limited
  - President, Thailand Boxing Association
  - Vice President, National Olympic Committee of Thailand
  - AIBA Executive Committee Member

Shareholding in the Company : 681,250 shares (as at 31 December 2018)

# Admiral Sithawat Wongsuwan

Vice Chairman (Independent Director) and Authorized Signing Director (Date of Appointment: 25 March 2016)

Chairman of the Nomination and Remuneration Committee

Age 71

# Education / Training

- Bachelor's Degree, Science (Marine Engineering), Royal Thai Naval Academy
- Naval Command and Staff College Program (Class 43), Royal Thai Navy
- Naval War College Program (Class 26), Royal Thai Navy
- Training Program on Maintenance and Overhaul of MTU Engine, Germany
- Training Program on Gas Turbine Engine Repairing Course, UK
- Certificate, Director Certification Program (DCP 117/2009), Thai Institute of Directors (IOD)

# Experience

- 2009 : Director, Provincial Electricity Authority, Ministry of Interior
  - : Chairman of the Board, National Housing Authority
- 2007 : Special Advisor, Royal Thai Army
- 2002 : Deputy Commander, Royal Thai Fleet Department, Royal Thai Army
- 1998 : Chief of Workshop Department, Sattahip Naval Base, Royal Thai Army

Other directorship positionss / Other positionss at present

- Other listed companies
  - None -
  - Non-listed companies
    - Member of National Legislative Assembly
- Shareholding in the Company : 50,750 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# **General Kanit Sapitaks**

Independent Director and Authorized Signing Director

(Date of Appointment: 25 March 2016)

- Chairman of the Corporate Governance Committee
- Director of Nomination and Remuneration Committee

Age 66

# Education / Training

- Chulachomklao Royal Military Academy, Class 24
- Armed Forces Academies Preparatory School, Class 13
- Diploma, National Defence Collage, The National Defence Course Class 49
- Regular Course (Class 63), Command and General Staff College
- Certificate, Director Accreditation Program (DAP 129/2016), Thai Institute of Director (IOD)

# Experience

- 2014 2017 : Chairman, Aeronautical Radio of Thailand Limited
  - 2011 : Chairman of the Advisory Board, Ministry of Defence
    - : Royal Guard of Special Assignments
    - : Judge, Military Supreme Court
- 2010 : Special Advisor, Royal Thai Army
- 2008 : 1<sup>st</sup> Army Area Commander

Other directorship positions / Other positionss at preset

- Other listed companies
  - None -
- Non-listed companies
  - Member of National Legislative Assembly
  - Director, Five Province Bordering Forest Preservation Foundation
- Shareholding in the Company : 50,000 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# **General Utis Sunthorn**

Independent Director and Authorized Signing Director

- (Date of Appointment: 25 March 2016)
- Director of Audit Committee
- Director of Enterprise-wide Risk Committee

Age 64

Education / Training

- Master's Degree, Management in Social Development, National Institute of Development Administration
- Chulachomklao Royal Military Academy, Class 25
- Armed Forces Academies Preparatory School, Class 14
- Army Chief of Staff Course, Command and General Staff Officer Course (CGSOC), Class 65, Command and General Staff College, Institute of Advances Army Academics
- Diploma, National Defence Collage, The National Defence Course Class 50, Thailand National Defence College, National Defence Studies Institute
- Certificate, Director Accreditation Program (DAP 129/2016), Thai Institute of Directors (IOD)

# Experience

- 2017 2018 : Member of National Legislative Assembly
- 2012 2014 : Chief of Working Team to Drive the Policy and Execution of the Commanding Officers' Directives in the Resolutions of the Problems in the Southern Provinces of Thailand. Southern Provinces of Thailand.

Other directorship positions / Other positionss at present

- Other listed companies
  - None -
- Non listed companies
  - Member of National Legislative Assembly
  - Secretary and Energy Commissioner, National Legislative Assembly
  - Natural Resources and Environment Commissioner, National Legislative Assembly
  - Vice Chairman of Natural Resources and Environment Sub-Committee in the Natural Resources and Environment Board of Commissioner, National Legislative Assembly

Shareholding in the Company : 225,000 shares (as at 31 December 2018)

# Mrs. Vilai Chattanrassamee

Independent Director and Authorized Signing Director (Date of Appointment: 25 March 2016) Chairman of the Audit Committee Director of Corporate Governance Committee Age 65

Education / Training

- Master's Degree (Accounting), Thammasat University
- Bachelor's Degree (Accounting), Chulalongkorn University
- Certified Auditor
- Fellow Member, Thai Institute of Directors (IOD)
- Directors Diploma Examination (Exam 5/2001), Thai Institute of Directors (IOD)
- Certificate, Director Certification Program (DCP 13/2001), Thai Institute of Directors (IOD)
- Certificate, Director Certification Program (DCP Refresher 2/2006), Thai Institute of Directors (IOD)
- Curriculum of Independent Observer Program (IOP 4/2016), Thai Institute of Directors (IOD)

Experience

- Executive Vice President, Finance and Accounting, Sahaviriya Steel Industries Public Company Limited
- Chief Financial Officer, GMM Grammy Entertainment Public Company Limited
- Executive Vice President, Finance and Accounting, Siam Integrated Cold Rolled Steel Public Company Limited
- Executive Vice President, Finance and Accounting, Nation Publishing Group Public Company Limited
- Finance and Administration Manager, Digital Equipment Co., Ltd.
- Controller, TMX (Thailand) Company Limited
- Finance Manager, Sweden Motors Company Limited

Senior Auditor, SGV Na Thalang Company Limited

Other directorship positions / Other positionss at the past

- Honorary Secretary, Federation of Accounting Professions Under the Patronage of His Majesty The King
- Director and Executive Committee, Thai Cold Rolled Steel Sheet Public Company Limited
- Financial and Accounting Consultant, Prachuap Port Company Limited
- Financial and Accounting Consultant, Westcoast Engineering Company Limited
- Audit Committee, Asian Seafood Cold Storage Public Company Limited
- Vice Chairman of Accounting Professions Committee in Accounting System
- Treasurer, Federation of Accounting Professions Under the Patronage of His Majesty The King
- Director of Federation Accounting Professions Committee in Managerial Accounting, Federation of Accounting Professions Under the Patronage of His Majesty The King
- Sub-Committee of Accounting Standard Screening, Federation of Accounting Professions Under the Patronage of H.M. the King
- Lecturer of Managerial Accounting Committee and Accounting System Committee, Federation of Accounting Professions Under the Patronage of His Majesty The King

Other directorship positions / Other positionss at present

- Other listed companies
  - Audit Committee, MK Restaurant Group Public Company Limited
  - Director and Chairman of the Audit Committee, Saha Thai Terminal Public Company Limited
- Non-listed companies
  - Audit Committee, King Mongkut's Institute of Technology Ladkrabang
  - Audit Committee, Saha Thai Steel Pipe Public Company Limited
  - Director, Horton International Co., Ltd
  - Sub-Committee Procurement and Administration Government Policy, Thai Government Procurement, The Comptroller General's Department
  - Accounting and Financial Specialist of Audit Committee of Metropolitan Waterworks Authority
  - Independent Observer of Integrity Pact, Anti-Corruption Organization of Thailand (ACT)

Shareholding in the Company : 227,500 shares (as at 31 December 2018)

## Mr. Narong Boonyasaquan

Independent Director and Authorized Signing Director (Date of Appointment: 1 January 2018) Age 69

Education / Training

- Bachelor of Engineering, Chulalongkorn University
- Certificate in Strategic Management of Technology, The University of Michigan, USA
- Certificate in the Executive Program in Business Strategy, Graduate School of Business, Columbia University, USA
- Certificate in International Program in Management, Institute for Management Development (IMD), Lausanne, Switzerland
- Curriculum of Independent Observer Program (IOP 2/2016), Thai Institute of Directors (IOD)
- Business concept for 21<sup>st</sup> century with cloud computing, CIO world & business (April 2014)
- Essentials in Contract Law for Non-Legal Matters, The Asia Business Forum (August 2007)
- Procurement, transport / transfer Systems of petroleum from the ocean., IQPC, Malaysia (June 2006)
- Certificate, Director Certification Program (DCP 32/2003), Thai Institute of Directors (IOD)
- The Creativity of the Modern Leaders, The Federation of Thai Industries and Chamlong Srimuang Foundation's Leadership School (November 2002)
- Workshop in International Management, Exxon Company International (December 2000)
- Financial Planning and Control, Exxon Corporation International (April 1996)
- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 12, Thailand Energy Academy

# Experience

- 2016 2017 : Member, Committee for Evaluating Performance of 2016 2017 Strategic Environment Research Center, National Research Council of Thailand (NRCT)
- 2010 2015 : Advisor, The Appealing Committee, Ministry of Energy
- 2011 2014 : Advisor, Standing Committee on Consumer Protection, House of Representatives

# Other directorship positions / Other positionss at present

Other listed companies

- None -

- Non-listed companies
  - Member, Board of Directors, Thailand Environment Institute
  - Chairman of Carbon Reduction Label Certificate Committee
  - Member, Strategic committee of the Anti-Corruption Organization of Thailand
  - Independent observer, The Cooperation between the Government of the Kingdom of Thailand and the Government of the People's Repulic of China on Bangkok – Nong Khai HRD Development for Regional Connetivity (Section 1 Bangkok – Nakhon Ratchasima) Department of Highways, Ministry of Transport and Communications
  - Member, Sub Standing committee on Commerce, The National Legislative Assembly
  - Advisor, Thailand Business Council for Sustainable Development (TBCSD)
  - Advisor, MiTA Services Pte Ltd (Singapore)

Shareholding in the Company : None (as at 31 December 2018)

# Mrs.Pankanitta Boonkrong

Independent Director and Authorized Signing Director (Date of Appointment: 2 January 2017) Director of Audit Committee

Age 62

# Education / Training

- Doctor of Philosophy Program in Good Governance Development, Chandrakasem Rajabhat University
- Master's Degree (Accounting), Thammasat University
- Bachelor's Degree, Business Administration (Accounting), Thammasat University
- Certificate, Director Certification Program (DCP 72/2006), Thai Institute of Directors (IOD)
- Certificate, Audit Committee Program (ACP 24/2008), Thai Institute of Directors (IOD)
- Curriculum of Monitoring the System of Internal Control and Risk Management (MIR 15/2013), Thai Institute of Directors (IOD)
- Certificate, Role of the Chairman Program (RCP 37/2015), Thai Institute of Directors (IOD)
- Certificate, Role of the Nomination and Governance Committee (RNG 8/2016) ,Thai Institute of Directors (IOD)
- Certificate, Board Matters and Trends (BMT 1/2016), Thai Institute of Directors (IOD)
- Certificate, Advance Audit Committee Program (AACP 29/2018), Thai Institute of Directors (IOD)
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives (PDI), King Prajadhipok's Institute
- Advanced Certificate Course in Public Administration and Public Law (Class 6)
- Diploma, National Defence College, The State, Private Sector and Political Sectors Course Class 5, Thailand National Defence College, National Defence Studies Institute
- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 5, Thailand Energy Academy
- Inspector general 2016, Office of the Permanent Secretary, Prime Minister Office and Office of the Civil Service
   Commission

## Experience

- 2014 2017 : Director and Chairman of Corporate Governance Committee,
- Dhipaya Insurance Public Company Limited
- 2014 2016 : Director and Chairman,
  - The Small and Medium Enterprise Development Bank of Thailand
- 2015 2016 : Inspector General, Ministry of Finance

Other directorship positions / Other positionss at present

- Other listed companies
  - None -
- Non-listed companies
  - Chairman, Islamic Bank Asset Management Company Limited
  - Council Member of University Counsil, Silapakorn University
  - Chairman of the Audit Committee , Silapakorn University
  - Sub-Committee on Monetary, Banking, Financial Institutions and Capital Market, The National Legislative Assembly
- Ethics Committee, Federation of Accounting Professions Under The Royal Patronage of His Majesty The King Shareholding in the Company : 225,000 shares (as at 31 December 2018)

# Mr. Thammayot Srichuai

Director and Authorized Signing Director Director of Invesment Committee (Date of Appointment: 1 November 2018) Age 60

Education / Training

- Bachelor's Degree (Engineering), Rajamangala University of Technology
- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 8, Thailand Energy Academy
- Diploma, National Defence Collage, The National Defence Course Class 52
- Certificate, The Civil Service Executive Development Program: Visionary and Moral Leadership Class 56, Civil Service
   Training Institute, Office of the Civil Service Commission
- Command and General Program (Class 47), Thailand National Defence College, National Defence Studies Institute
- Power Curriculum Program for Executives (Class 1), Ministry of Energy
- Certificate, Director Certification Program (DCP 239/2017), Thai Institute of Directors (IOD)
- Certificate, Corperate Governance for Executives (CGE 5/2015), Thai Institute of Directors (IOD)

# Experience

•	Present	:	Retire
•	$1^{\text{st}}$ October 2017 – $30^{\text{th}}$ September 2018	:	Permanent Secretary,
			Ministy of Energy
•	$1^{st}$ October 2016 – $30^{th}$ September 2017	:	Deputy Permanent Secretary,
			Ministy of Energy
•	2014 – 2016	:	Director-General, Department of AlternativeEnergy Development and
			Efficiency

Other directorship positions / Other positionss at present

- Other listed companies
  - Director and Member of the Enterprise Risk Management Committee, PTT PUBLIC COMPANY LIMITED
- Non-listed companies

- None -

Shareholding in the Company : 225,000 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# **Professor Dr. Suchatvee Suwansawat**

Independent Director and Authorized Signing Director

(Date of Appointment: 25 March 2016)

Chairman of the Enterprise-wide Risk Management Committee

Director of Nomination and Remuneration Committee

Age 46

Education / Training

- Ph.D. Engineering (Civil and Environment) Massachusetts Institute of Technology (MIT), USA
- Master Degree, Policy and Technology, Massachusetts Institute of Technology (MIT), USA
- Master Degree, Engineering (Civil and Environment) The University of Winconsin-Madison, USA
- Bachelor Degree, Engineering, King Mongkut's Institute of Technology Ladkrabang
- Certificate, Budget Management for Senior Executives, Bureau of Budget (Class 1)

- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 5, Thailand Energy Academy
- Curriculum of the fifth Metropolitan Development training course for top executive, Institute of Metropolitan Development, Navamindradhiraj University
- Curriculum of The Rule of Law & Sustainable Development (RoLD Program)
- Intermediate Certificate Course, Good Governance for Medical Executives Class 5 (2016) King Prajadhipok's Institute
- Certificate, Bhumipalung Phandin Program for Senior Executive, Chulalongkorn University (Class 3)
- Certificate, Governance for Faculty Development, Knowledge Network Institute of Thailand (Class 6)
- Certificate, Development of Thai Higher Education to the 21<sup>st</sup> Century, Office of the Higher Education Commission
- Certificate, Industrial Business Development and Investment Program for Top Executives, Institute of Business and Industry (Class 1)
- Certificate, Governance for Higher Education Development, Knowledge Network Institute of Thailand (Class 9)
- Certificate, Executive Development Program (EDP 11), Thai Listed Company Association
- Certificate, Leadership Program (Class 13), Capital Market Academy
- Certificate, New Democratic Leadership (Class 1), King Prajadhipok's Institute
- Curriculum of National Disaster Management, Training Center of Japan International Cooperation Agency (JICA), Japan.
- Leader Trainers Course, Nation Scout Organization of Thailand (NSOT)
- Certificate, Corporate Governance for Directors and Top Executives of State Enterprises and Public Organizations (Class 3)
- Certificate, Director Certification Program (DCP 105/2008), Thai Institute of Directors (IOD)
- Certificate, Audit Committee Program (ACP 27/2009), Thai Institute of Directors (IOD)
- Curriculum of Monitoring Fraud Risk Management (MFM 1/2009), Thai Institute of Directors (IOD)
- Certificate, Financial Statement for Directors (FSD 6/2009), Thai Institute of Directors (IOD)
- Certificate, Successful Formulation & Execution of Strategy (SFE 8/2010), Thai Institute of Directors (IOD)
- Curriculum of Monitoring the Internal Audit Function (MIA 8/2010), Thai Institute of Directors (IOD)
- Curriculum of Monitoring the System of Internal Control and Risk Management (MIR 8/2010), Thai Institute of Directors (IOD)
- Certificate, Development of University Senior Executive (Class 10), Office of the Higher Education Commission, Ministy of Education

## Experience

- 2017 Present : Chairmam, Council of University Presidents of Thailand (CUPT)
- 2015 Present : President, King Mongkut's Institute of Technology Ladkrabang
- 2014 2016 : President, The Engineering Institute of Thailand Under H.M. The King's Patronage

Other directorship positions / Other positionss at present

- Other listed companies
  - Chairman of Risk Management Committee / Independent Director, Property Perfect Public Company Limited
- Non-listed companies
  - President, King Mongkut's Institute of Technology Ladkrabang
  - Board of the Council of Engineers, Council of Engineers
  - Appointed member of University Counsil, Rajamangala University of Technology Srivijaya
  - Council Member of University Counsil, Rangsit University
  - Council Member of University Counsil, Nakhonratchasima Rajabhat University

Shareholding in the Company : 225,000 shares (as at 31 December 2018)

## Mr. Bundit Sapianchai

President and Authorized Signing Director (Date of Appointment: 25 March 2016) Enterprise-wide Risk Management Committee, Corporate Governance Committee, Investment Committee, Secretary to the Board of Directors

Age 54

## Education / Training

- Honorary Doctorate of Electrical Engineering, Rajamagala University of Technology Krungthep
- Master Degree, Engineering, Asian Institute of Technology (AIT)
- Bachelor Degree, Engineering, King Mongkut's Institute of Technology Ladkrabang
- Certificate, Director Accreditation Program (DAP 28/2004), Thai Institute of Directors (IOD)
- Certificate, Director Certification Program (DCP 53/2005), Thai Institute of Directors (IOD)
- Curriculum of Finance for Non-Finance Director (FND 15/2005), Thai Institute of Directors (IOD)
- Curriculum of The Board's Role in Mergers and Acquisitions (M&A 1/2011), Thai Institute of Directors (IOD)
- Certificate, Successful Formulation & Execution of Strategy (SFE 1/2008), Thai Institute of Directors (IOD)
- Advance Diploma Public Administration and Public Law (Class10), King Prajadhipok's Institute
- Diploma, The Joint State-Private Sector Course, National Defence College (Class 25)
- Certificate, Leadership Program (Class 20), Capital Market Academy
- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 11, Thailand Energy Academy
- Diploma, Executive Management with Business Development and Investment (IBID 5), Institute of Business and Industrial Development

## Experience

- 2013 2015 : Senior Executive Vice President, Renewable Energy Business, The Bangchak Corporation Public Company Limited
- 2012 2013 : Senior Executive Vice President, Business Development and Strategy, The Bangchak Corporation Public Company Limited

# Other directorship positions / Other positionss at present

- Other listed companies
  - Senior Executive Vice President, The Bangchak Corporation Public Company Limited
- Non-listed companies
  - Chairman, Bangchak Solar Energy Company Limited
  - Chairman, Bangchak Solar Energy (Prachinburi) Company Limited
  - Chairman, Bangchak Solar Energy (Chaiyaphum1) Company Limited
  - Chairman, Bangchak Solar Energy (Burirum) Company Limited
  - Chairman, Bangchak Solar Energy (Burirum1) Company Limited
  - Chairman, Bangchak Solar Energy (Nakorn Ratchasima) Company Limited
  - Director, Star Energy Geothermal (Salak Darajat) B.V.
  - Director, Star Energy Group Holdings Pte Ltd.
  - Director, Star Energy Geothermal Pte Ltd.
  - Director, Star Phoenix Geothermal JV B.V.
  - Director, Star Energy Geothermal Holdings (Salak Darajat) B.V.
  - Director, Huang Ming Japan Company Limited
  - Director, BCPG Wind Cooperatief U.A.
  - Director, PetroWind Energy Inc. (PWEI)

Shareholding in the Company : 439,096 shares (as at 31 December 2018)



1. Bundit Sapianchai	President
2. Ms. Revadee Pornpatkul	Senior Executive Vice President, Operation
3. Ms. Sattaya Mahattanaphanij	Senior Executive Vice President, Corporate Excellence, and Corporate Secretary
4. Ms. Phatpuree Chinkulkitnivat	Senior Executive Vice President, Finance and Accounting
5. Ms. Nintira Abhisinha	Acting Senior Executive Vice President, Corporate Strategy
6. Dr. Pavan Siamchai	Executive Vice President Operations, and Country Manager, BCPG Japan Corporation and Acting Senior Executive Vice President, Green Technology Center
7. Mr. Charnvit Trangadisaikul	Executive Vice President, Corporate Business Development

# Management's Profile

## Mr. Bundit Sapianchai

President and Authorized Signing Director (Date of Appointment: 25 March 2016) Enterprise-wide Risk Management Committee, Corporate Governance Committee, Investment Committee, Secretary to the Board of Directors Age 54

Education / Training

- Honorary Doctorate of Electrical Engineering, Rajamagala University of Technology Krungthep
- Master Degree, Engineering, Asian Institute of Technology (AIT)
- Bachelor Degree, Engineering, King Mongkut's Institute of Technology Ladkrabang
- Certificate, Director Accreditation Program (DAP 28/2004), Thai Institute of Directors (IOD)
- Certificate, Director Certification Program (DCP 53/2005), Thai Institute of Directors (IOD)
- Curriculum of Finance for Non-Finance Director (FND 15/2005), Thai Institute of Directors (IOD)
- Curriculum of The Board's Role in Mergers and Acquisitions (M&A 1/2011), Thai Institute of Directors (IOD)
- Certificate, Successful Formulation & Execution of Strategy (SFE 1/2008), Thai Institute of Directors (IOD)
- Advance Diploma Public Administration and Public Law (Class10), King Prajadhipok's Institute
- Diploma, The Joint State-Private Sector Course, National Defence College (Class 25)
- Certificate, Leadership Program (Class 20), Capital Market Academy
- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 11, Thailand Energy Academy
- Diploma, Executive Management with Business Development and Investment (IBID 5), Institute of Business and Industrial Development

## Experience

- 2013 2015 : Senior Executive Vice President, Renewable Energy Business, The Bangchak Corporation Public Company Limited
- 2012 2013 : Senior Executive Vice President, Business Development and Strategy, The Bangchak Corporation Public Company Limited

Other directorship positions / Other positionss at present

- Other listed companies
  - Senior Executive Vice President, The Bangchak Corporation Public Company Limited
- Non-listed companies
  - Chairman, Bangchak Solar Energy Company Limited
  - Chairman, Bangchak Solar Energy (Prachinburi) Company Limited
  - Chairman, Bangchak Solar Energy (Chaiyaphum1) Company Limited
  - Chairman, Bangchak Solar Energy (Burirum) Company Limited
  - Chairman, Bangchak Solar Energy (Burirum1) Company Limited
  - Chairman, Bangchak Solar Energy (Nakorn Ratchasima) Company Limited
  - Director, Star Energy Geothermal (Salak Darajat) B.V.
  - Director, Star Energy Group Holdings Pte Ltd.
  - Director, Star Energy Geothermal Pte Ltd.
  - Director, Star Phoenix Geothermal JV B.V.
  - Director, Star Energy Geothermal Holdings (Salak Darajat) B.V.
  - Director, Huang Ming Japan Company Limited
  - Director, BCPG Wind Cooperatief U.A.
  - Director, PetroWind Energy Inc. (PWEI)

Shareholding in the Company : 439,096 shares (as at 31 December 2018)

## Ms. Revadee Pornpatkul

Senior Executive Vice President, Operation

Age 58

Education

- Master's degree, Business Administration, Thammasat University
- Bachelor's degree, Accounting, Ramkhamhaeng University
- Bachelor's degree, Laws, Sukhothai Thammathirat University
- Bachelor's degree, Science, Chulalongkorn University

Training / Seminar

- Certificate, Director Accreditation Program (DAP 99/2012), Thai Institute of Directors (IOD)
- Certificate, Executive Development Program (EDP 12/2013), Thai Listed Companies Association (TLCA)
- Certificate, Company Secretary Program (CSP 71/2016), Thai Institute of Directors (IOD)
- Smart Disclosure Program (SDP/2016)
- Certificate, Executive Energy Management Program (EEM 2017)
- Power Curriculum Program for Executives (Class 1/2017), Ministry of Energy
- Development an Outward Mindset (December 2018)

Experience

- 2015 2017 : Senior Vice President, Corporate Administration and Information Technology, BCPG Public
   Company Limited
- 2015 2017 : Senior Vice President, Associated Business,
- The Bangchak Corporation Public Company Limited
- 2013 2015 : Vice President, Associated Business, The Bangchak Corporation Public Company Limited Managing Director, Bangchak Solar Energy Company Limited Managing Director, Bangchak Solar Energy (Prachinburi) Company Limited Managing Director, Bangchak Solar Energy (Chaiyaphum1) Company Limited Managing Director, Bangchak Solar Energy (Burirum) Company Limited Managing Director, Bangchak Solar Energy (Burirum1) Company Limited Managing Director, Bangchak Solar Energy (Burirum1) Company Limited Managing Director, Bangchak Solar Energy (Nakorn Ratchasima) Company Limited
- 2007 2013 : Vice President, Accounting and Acting Vice President, Accounting and Tax, The Bangchak
   Corporation Public Company Limited
- 2004 2007 : Senior Manager, Accounting and Acting Vice President, Accounting and Tax, The Bangchak
   Corporation Public Company Limited

Other directorship positions / Other positionss at present

- Other listed companies
  - Executive Vice President, Associated Business The Bangchak Corporation Public Company Limited
- Non-listed companies
  - Director, Bangchak Solar Energy Company Limited
  - Director, Bangchak Solar Energy (Prachinburi) Company Limited
  - Director, Bangchak Solar Energy (Chaiyaphum1) Company Limited
  - Director, Bangchak Solar Energy (Burirum) Company Limited
  - Director, Bangchak Solar Energy (Burirum1) Company Limited
  - Director, Bangchak Solar Energy (Nakorn Ratchasima) Company Limited
  - Director, BCPG Biopower 1 Company Limited
  - Director, BCPG Biopower 2 Company Limited
  - Director, BSE Energy Holding

- Director, BCPG Japan Corporation
- Director, BCPG Engineering Company
- Director, Lomligor Company Limited
- Shareholding in the Company : 220,650 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

## Ms. Sattaya Mahattanaphanij

Senior Executive Vice President, Corporate Excellence, and Corporate Secretary

Age 53

# Education

- Master's degree, Internation Business and Information Management System, Widener University, USA
- Bachelor's degree, Business Administration (Finance and Banking), Assumption University

## Training / Seminar

- Certificate, Board Nomination and Compensation Program (BNCP 5/2019), Thai Institute of Directors (IOD)
- Certificate, Company Secretary Program (CSP 82/2017), Thai Institute of Directors (IOD)
- Committee of Occupational Safety, Health and Work Environment (SEP/2017)
- Advance Senior Executive Program (ASEP-3) Sasin and Kellogg School of Management

## Experience

- 2016 2017 : Executive Vice President, Finance and Accounting,
  - BCPG Public Company Limited
- 2006 2016 : Executive Director, Advantgarde Capital Company Limited

# Other directorship positions / Other positionss at present

- Other listed companies
  - None -
- Non-listed companies
  - Director, BCPG Investment Holdings Pte. Ltd.
  - Director, Greenergy Holdings Pte. Ltd.
  - Director, Greenergy Power Pte. Ltd
  - Director, Advantgarde Capital Company Limited

Shareholding in the Company : 155,000 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# Ms. Phatpuree Chinkulkitnivat

Senior Executive Vice President, Finance and Accounting

# Age 44

# Education

- Master of Business Administration (High Distinction), School of Business Administration, University of Michigan, Ann Arbor, USA
- Bachelor of Economics (First Class Honors), Faculty of Economics Chulalongkorn University, Thailand

Training / Seminar

- Advanced Management Program, Harvard Business School (AMP 192/2017)
- Bain APAC Executive Digital Immersion, Beijing (2017)
- Bain Executive Digital Immersion, Silicon Valley, (2016)
- CEDI-BABSON Entrepreneurial Leadership Program, Babson College (2013)
- Pacific Rim Bankers Program, Foster School of Business, University of Washington (2011)

- Euro Money Training on Country Risk Analysis (2007)
- CFA ("Chartered Financial Analyst") Charter holder (2002)
- Lecturer in Corporate Finance for College of Management Mahidol University (2000)

## Experience

- 7/2018 Present : Senior Executive Vice President, Finance and Accounting, BCPG Public Company Limited
- 7/2014 7/2018 : Senior Vice President, Strategic Planning Head/ Office of President, Commercial Banking Group
- 2012 6/2014 : Senior Vice President and Regional Manager, Commercial Banking Group

Other directorship positions / Other positionss at present

- Other listed companies
  - None -
- Non-listed companies
  - None -

Shareholding in the Company : -None- shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# Ms. Nintira Abhisinha

Acting Senior Executive Vice President, Corporate Strategy

Age 52

# Education

- Master's degree, Business Administration (Marketing), Case Western Reserve University, USA
- · Bachelor's degree, Commerce (International Marketing) Chulalongkorn University, 2nd Class Honors

## Training / Seminar

- Certificate, Director Certification Program (DCP 213/2015) ,Thai Institute of Directors (IOD)
- The Executive Program in Energy Literacy for a Sustainable Future TEA Class 6, Thailand Energy Academy
- TLCA Executive Development Program (EDP11), Thai Listed Company Association
- Executive Development Program (EDP 8/2012), Thai Listed Company Association
- CFO Certification Program (Class 15/2011), Federation of Accounting Professions of Thailand
- Smart Branding & Marketing for Digital Economy (Class 5/2016), Institute of Research and Development for Public Enterprises (IRDP)
- Sufficiency Economy Leadership for Securities (Class 1, 2017), TNDC Association

## Experience

•	2016 - Present	:	Director, Risk and Internal Control Club, Thai Listed Company Association
•	2017	:	Senior Vice President, Associated Business,
			The Bangchak Corporation Public Company Limited
•	2015 - 2017	:	Senior Vice President, Corporate Strategy and Portfolio Management, The Bangchak
			Corporation Public Company Limited
•	2014 - 2015	:	Senior Vice President, Corporate Planning and Strategy,
			The Bangchak Corporation Public Company Limited
•	2008 - 2014	:	Vice President, Accounting and Finance, The Bangchak Corporation Public Company Limited
•	2005 - 2008	:	Sub-Committee of National Occupational Skill Standards: Skilled Worker in Telecom Mechanics
•	2004 - 2007	:	Vice President, Samart Comtech Co., Ltd
•	2001 - 2004	:	Director, Corporate Development, Samart Corporation Public Company Limited
•	1999 - 2001	:	Vice Managing Director, Capital Telecom Company Limited
•	1994 - 1999	:	Director, Investment, Capital Management Company Limited
•	1993	:	Manager, Business Development Department, Kasikorn Bank Plc

Other directorship positions / Other positionss at present

- Other listed companies
  - Senior Vice President, Associated Business, The Bangchak Corporation Public Company Limited
- Non-listed companies
  - None -

Shareholding in the Company : 157,800 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# Dr. Pavan Siamchai

Executive Vice President

Operations, and Country Manager, BCPG Japan Corporation and

Acting Senior Executive Vice President, Green Technology Center

Age 49

Education

- Ph.D., Engineering (Electric and Electronics) Technology Institute of Japan, Japan
- Master's degree, Engineering (Electronics), Chulalongkorn University
- Bachelor's degree, Engineering (Electronics), Chulalongkorn University

# Training / Seminar

Certificate, Director Accreditation Program (DAP 123/2016), Thai Institute of Directors (IOD)

# Experience

• 2005 – 2015 : Director and Chief Operation Officer, Solartron Public Company Limited Other directorship positions / Other positionss at present

- Other listed companies
  - None -
- Non-listed companies
  - Director, BCPG Japan Corporation
  - Director, BCPG Engineering Company

Shareholding in the Company : 188,500 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# Mr. Charnvit Trangadisaikul

Executive Vice President, Corporate Business Development

Age 38

# Education

- Master of Business Administration (Distinction), Sasin Graduate Institute of Business Administration of Chulalongkorn University, Thailand
- Bachelor of Engineering (Mechatronics), The University of Melbourne, Australia
- Bachelor of Computer Science, The University of Melbourne, Australia

## Training / Seminar

- Executive Development Program, Thai Listed Companies Association (EDP 17)
- Strategic Management in Real Estate Business, Chulalongkorn University (RECU 38)
- Financial Advisors Certification Course, Association of Securities Companies (2010)

#### Experience

- 2/2018 Present : Executive Vice President, Corporate Business Development, BCPG Public Company Limited
- 1/2016 1/2018 : Senior Vice President, Merger and Acquisition Department ,BCPG Public Company Limited
- 2013 2015 : Investment Director, Soleq Solar Management Co., Ltd
- 2012 2013 : Vice President, Avantgarde Capital Co., Ltd.
- 2011 2012 : Assistant Vice President, Siam Commerical Bank Plc.
- 2006 2008 : Assistant Vice President, Avantgarde Capital Co., Ltd.

Other directorship positions / Other positionss at present

- Other listed companies
  - None -
- Non-listed companies
  - Director, BSE Energy Holdings Pte. Ltd.
  - Director, Lomligor Company Limited
  - Adviser, Sub committee on special affair of committee on energy, National Legislative Assembly
  - Member, Biomass Pellet Sub-Committee, Committee on Energy, National Legislative Assembly
  - Director, Thai Investor Relations Club, Thai Listed Companies Association

Shareholding in the Company : 99 shares (as at 31 December 2018)

Familial relationship with other directors, executive, main shareholders or subsidiaries : None

# Corporate Governance

#### Good Corporate Governance Policy

It is the policy of the Board of Directors to comply with relevant laws, the objectives, the Articles of Association, and the resolutions of the shareholder's meetings; and to adhere to and comply with the 2017 Principles of Good Corporate Governance of Listed Companies as specified by the Stock Exchange of Thailand (SET) and the criteria under the Corporate Governance Report of Thai Listed Companies (CGR) of the Thai Institute of Directors (IOD), as well as internationally accepted criteria such as the ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard). The Corporate Governance Committee is mandated to monitor, consider, and give recommendations for the continuous improvement of the Corporate Governance Policy to ensure that it is up to date and consistent with any new regulation prescribed and notified by the regulatory authority, and propose the same to the Board for approval. Board Meeting no. 12/2018 dated December 18, 2018. reviewed the Good Corporate Governance policy as recommended by the Corporate Governance Committee. It was the third revision to ensure that the Company's Policy was consistent with the recommendations of IOD for the improvement of Good Corporate Governance based on the 2018 Corporate Governance Report of Thai Listed Companies (CGR Report 2018). The policy was also disseminated on the Company's website at http:// www.bcpggroup.com/storage/download/cg/policy/bcpgcg-policy-th.pdf







#### **Compliance with Good Corporate Governance policy**

It is the Company's policy to strictly adhere to and comply with the Principles of Good Corporate Governance. Accordingly in 2018, its efforts were rewarded with the following recognition:

- Rated "Excellence" by the 2018 Corporate Governance Report of Thai Listed Companies (CGR) by IOD. It was an upgrade from "Very Good" in 2017.

- Achieved a score of 98 for quality in convening the 2018 Annual General Meeting (AGM Checklist) by the Thai Investors Association.

- Maintained its membership of Thailand's Private Sector Collective Action Coalition against Corruption (CAC).

- Selected by Thaipat Institute among top 100 listed companies with outstanding Environmental, Social, and Governance (ESG100) performance in 2018. And received the Best Coperate Governance 2018, Thailand from World Finance Magazine, United Kingdom.

The Company and its subsidiaries in Thailand maintained its international standard certification as follows:

- ISO 9001:2015 International Standards for Quality Management System
- ISO 14001: 2015 International Standards for Environmental Management
- ISO/IEC 27001: 2013 International Standards for Information Technology Security

BCPG implements its Corporate Governance Policy by adhering to the following five principles:

#### **Principle 1: Rights of Shareholders**

The shareholders are entitled to participate in BCPG's ownership by exercising their rights to appoint directors to perform duties on their behalf and have the right to exercise their votes on significant changes. The Board recognizes and emphasizes such rights by encouraging them to exercise their rights, and refrains from violating or depriving them of their rights, for example:

- Every shareholder is to be granted and encouraged to exercise their basic rights, which include the right to purchase and transfer shares, the right to receive dividends, the right to access information, the right to attend shareholders' meetings, and other lawful rights.

- The shareholders may propose meeting agenda items, nominate a qualified director of the Company, or raise questions, request explanation, and express their opinions in advance to the Company. With respect to the 2018 AGM, the Company published a notice on the SET website and the Company's website on September 1, 2017. Upon the deadline of December 31, 2017, or four months in advance, no issues were proposed from the shareholders for agenda items.

- Invitations for meetings, agenda items, and information related to the matter to be discussed will be sent to shareholders in advance for them to review the information before the meetings. With respect to the 2018 AGM, BCPG sent the meeting notices and the 2017 annual report (in the form of CD ROM) to shareholders at least 21 days before the meeting and published them in a newspaper for three consecutive days and at least three days before the meeting, and the information was made available on the Company's website 33 days before the meeting.

- The resolutions of the shareholders' meeting are announced on SET's website and the Company's website immediately, or at the latest on the following business day, in order for shareholders to be promptly informed of the resolutions of such shareholders.

#### Principle 2: Equitable Treatment of Shareholders

The Board recognizes that all shareholders must be treated equally and therefore has established the following guidelines:

Shareholders are entitled to vote in accordance with the number of shares that they hold.

- Shareholders are to receive necessary and sufficient information in an equitable, fair, and timely manner. Information is also available in English for communication with foreign shareholders and investors.

- Shareholders are to treated in an equitable and fair manner in accordance with the rights provided by law or the 2017 Principles of Good Corporate Governance of Listed Companies prescribed and notified by the SEC Office.

- In entering into a connected transaction, the Company is to carefully review the reasons and necessity before doing so, in accordance with the approval process and in compliance with the criteria prescribed by the regulatory authority, the opinion of the Audit Committee, and as disclosed in the annual report and the annual registration statement (Form 56-1) to ensure that shareholders and stakeholders are fully informed.

- Shareholders may contact independent directors with respect to any matter concerning their rights, whistleblowing, and complaints as follows:

(1) Violation of law, fraud, violation of the Company's articles of association, or violation of ethics of directors, executives, and employees

- (2) Irregularities of financial reports and the internal control system
- (3) Issues impacting the Company's interest or reputation.

These can be done through the various channels determined by the Company and the criteria disseminated on the Company's website at:

Whistleblowers or complainants can put forward their cases via the Company's website under

http://www.bcpggroup.com/th/corporate-governance/whistleblowing-channel



#### Or the following channels :

- Sealed letter to the attention of the Chairman of the Audit Committee at: BCPG Public Company Limited 2098 M Tower Building, 12<sup>th</sup> Floor Sukhumvit Road, Phra Khanong Tai, Phra Khanong Bangkok 10260 Or e-mail: auditcommittee@bcpggroup.com
- 2. E-mail to:
  - The Audit Committee and Head of Internal Audit

e-mail: ico@bcpggroup.com (whistleblowing about personnel)

- Chairman of the Board, Chairman of the Corporate Governance Committee, and Company Secretary
   e-mail: cg@bcpggroup.com (whistleblowing or complaints of individuals or people to
   (1) President (2) Board members and/or (3) subcommittee members)
- 3. Telephone
  - Head of Internal Audit, Tel: +66(0) 2335-8906
  - Company Secretary, Tel: +66(0) 2335-8941.

#### **Principle 3: Roles of Stakeholders**

The Company is committed to ensuring legal rights under applicable laws and equitable and fair treatment in its operation for all stakeholders: shareholders, customers, business partners, competitors, employees, creditors, government agencies, as well as local communities and society as a whole. The Board has formulated policies and put in place guidelines for the treatment of each group of stakeholders as a basis for its operations, for example, recognizing human rights and fair labor treatment, overseeing and protecting against the infringement of intellectual properties and copyrights, fair treatment of business partners or competitors, cultivating awareness and consideration of any potential impact that may arise as a result of the operation on the local community, society, and the environment. The Board promotes cooperation between the Company and its stakeholders in forging prosperity, financial stability, and business sustainability, as well as establishing channels for communication with each group of stakeholders. The Board has established a procedure governing whistleblowing and the lodging of complaints in respect of any violation of the law, the code of conduct, or behavior bordering on corrupt practice of any person in the organization. Activities are organized to cultivate the policy and best practices in anti-corruption on an annual basis. The Company has also initiated a social enterprise business operation by partnering with agricultural co-operatives to operate solar farms (the Solar Cooperation Project).

BCPG is committed to operation based on international standards and quality, including regular development/ improvement of various work systems. It has requested the certification of quality system standard ISO9001 of all power plants in Thailand since the beginning of their operation. At present, its power plants in Thailand are certified under the new version of ISO 9001: 2015.

With respect to the preservation and protection of the environment, BCPG has engendered and emphasized a corporate culture for all employees to ensure that they are aware that, in taking any action, consideration must be given to prevent any adverse impact on the environment, the local community, and society as a whole, and to minimize any potential adverse impact by putting in place appropriate monitoring and supervision procedures to ensure confidence and reliability. In addition, BCPG is certified by ISO 14001:2008 for environmental management, with which its compliance must be regularly reviewed by an independent certification body. The Company and its subsidiaries are certified under the new version of ISO 14001: 2015

#### Principle 4: Disclosure and Transparency

BCPG will disclose key information, whether financial or non-financial, in an accurate, complete, timely, and transparent manner through equitable, reliable, and readily-accessible channels by adopting the following guidelines:

- BCPG is committed to the equitable disclosure of information to the shareholders, financial institutions, securities companies, investors, those who wish to use the information, and the public. Emphasis is placed on communication that is transparent, accurate, complete, timely, and regular. The policy on information disclosure covers every mode of communication that has been adopted by the Company, including annual reports, quarterly performance reports, news releases, press conference documents, letters to the shareholders, and its website.

- BCPG will not disclose any material information that has yet to be made public to unauthorized employees, any persons, or other parties (including investors, the media, and analysts) until such information has been disclosed to the public.

- BCPG will refrain from giving information relating to the operating results that affects the price of the shares or benefits any particular party during the period before the submission of the financial statements to SET.

- BCPG assigns the director supervising Investor Relations to be in charge with communicating and coordination with analysts, investors, and any other persons who wish to receive financial information, operating results, the financial position, and any transaction that affects the Company.

During 2018, BCPG participated in activities organized by SET in disseminating information to investors on "Opportunity Day", organized an event to give clarification on the quarterly operating results to analysts from various institutions on "Analyst's Meeting Day", prepared press releases, displayed a booth in "SET in the City", and held regular meetings with institutional investors on the "One-on-One Meeting" to provide information as requested.

Activities	Number of Activity
Analyst Meeting	4
Opportunity Day and SET Digital Roadshow	5
Company Visit and Conference call	41
Roadshow/Conference	4
Site Visit	1
SET in the City	1

#### Principle 5: Responsibilities of the Board of Directors

Directors are required to perform their duties with responsibility, integrity, honesty, and in compliance with the law, objectives, and articles of association, as well as the resolutions passed by the meetings of the Board and shareholder's meetings. The directors' role is the management and supervision of the business in the best interests of the Company, ultimately leading to sustainable growth. Directors are to be accountable to the other stakeholders for the performance of their duties and are to be independent from the management. In addition, the Board has appointed subcommittees to perform the duties of investigation and screening of specific assignments in support of the Board. Highlights of the activities of the Board in 2018 were as follows:

- The five subcommittees, namely (1) Audit Committee (2) Nomination and Remuneration Committee (3) Corporate Governance Committee (4) Enterprise-wide Risk Management Committee and (5) Investment Committee held meetings to screen various issues according to their scopes of duties and responsibilities as stipulated by the Board, as well as additional assignments in order to reach due conclusion of the issues and submit them to the Board for further approval or acknowledgment.

- The Board convened monthly meetings, in total 12 times, to consider and follow up on operational matters, investment, and for the management to report on the monthly operating performance which had been proposed by subcommittees and submitted to the Board for approval.

- A workshop was held between the Board, the top management, and international leading advisors to review the strategy and strategic plans for the next three to five years to establish the short-term and the long-term directions of BCPG.

- The Board arranged for the monthly operating results and financial statements to be prepared on a quarterly basis, as well as the report of the Audit Committee that is related to the financial statements.

- The Board arranged for the independent directors to convene meetings at least twice a year to make recommendations or proposals to the management for improving and enhancing the effectiveness of operations.

- The Board arranged for legal advisors, both the Company's own or outside, to regularly provide briefings on the laws or notifications applicable to listed companies.

- The Board put in place an internal control system and adopted risk management measures, as well as conducting a regular review and assessment of the system and measures, and had the annual report prepared for the Board and the management for acknowledgment to improve efficiency in the operation.

- The Board underwent regular self-development, including seminars and courses relevant to the Board's responsibilities, as well as educational trips to leading foreign companies to exchange knowledge on new technology and innovation.

#### Supervision of the Operation of Subsidiaries and Associated Companies

BCPG adopted a corporate governance policy for its subsidiaries and associated companies and arranged for the executives who had been delegated to represent itself as directors of the subsidiaries and associated companies ("representative directors") to sign for acknowledgment of the duties and responsibilities as specified under this policy. The representative directors who are responsible for overseeing the subsidiaries and associated companies for the Board must rgularly report the operating results of the subsidiaries and associated companies to the meetings of the Board.

The corporate governance policy on the subsidiaries and associated companies, as well as the companies in which BCPG holds shares (collectively the "joint ventures") can be summarized as follows:

1. BCPG will delegate the representative directors in accordance with its equity in a joint venture to supervise and ensure that the joint venture complies with the law, the good corporate governance policy, the corporate governance policy of joint ventures, as well as the other policies of the Company.

2. The representative directors in a joint venture must seek approval from the Board before casting votes at meetings of the board of the joint venture. (If a joint venture is not a subsidiary or associated company of the Company, the representative directors may cast votes after approval is granted by the President.)

3. If a joint venture which is a subsidiary plans to enter into any transaction which constitutes an acquisition or disposal of assets or a connected transaction and, as a result, approval must be sought from a meeting of the Board, or the company must undertake any act as required by the relevant notification of SET and/or SEC, it must enter into such transaction after approval is granted by the meetings of the Board and/or the shareholders meeting and/or the relevant regulatory authority, as applicable.

4. Those joint ventures that are also subsidiaries of BCPG must put in place an internal control system, risk management system, and anti-corruption system, as well as measures for monitoring their operating results.

5. Those joint ventures that are also subsidiaries of BCPG must disclose accurate, complete, and reliable information on their operating results and financial positions, as well as other information required, to the regulatory authority and relevant government agencies, investors in general, and the public.

#### Supervision of the Company's Directors, Executives, and Employees for the Use of Inside Information Resulting in Market Misconduct

• BCPG has established a policy and procedures to supervise its directors, executives, and employees on using inside information that has not been disclosed to the public for personal gains with the following guidelines:

1. Disclosure of information that may negatively affect investors and the capital market, such as statement, dissemination, or disclosure of false information, or leading to misunderstanding, including analysis/forecast using false information or distorted information.

2. Taking advantage of other investors by using the information acquired in advance for BCPG's securities trading.

3. Fabrication of securities prices in transactions, leading to the public's misunderstanding of the prices or the amount of trading, as well as securities trading that distorts the prices or amount of trading from the normal market situation.

4. Sending of orders for securities trading into SET's securities trading system causing delay/interruption to the system or the use/the permission for the use of a nominee's account as unfair treatment relating to securities trading.

• The directors and executives are notified to acknowledge their duties to disclose reports on securities holding and the advanced securities trading contracts under Article 59 of the Securities and Exchange Act B.E. 2535 of themselves, their cohabitation partners (1), children under legal age (2) and legal entity in which they, persons according to (1) and (2) hold over a combined share of 30% of the total voting rights of the entity and the combined shareholding has the highest volume in the entity as held in the Company and its subsidiaries at a Board meeting every time there is a change (purchase, sale, transfer, and acquisition). They are to notify BCPG without delay.

• The trading of BCPG securities is prohibited for at least one month before the public disclosure of any information relating to its financial statements or the financial position, as well as the disclosure of any other material internal information which may affect the price of the securities, to the public (blackout period). The restriction is also enforced at least three days after such disclosure, and the disclosure of such material information to any other person is also prohibited.

• Any violation of the above policy and procedures by using inside information to seek personal gains shall be subject to disciplinary action, ranging from written warning, wage deduction, temporary suspension from work without pay, or dismissal, to the extent permissible by law. The intention and the seriousness of the offense will be taken into consideration.

#### **Remuneration of the Auditor**

For the accounting period ended December 31, 2018, BCPG paid the auditor, namely KPMG Phoomchai Audit Co., Ltd. and its group, remuneration of THB 2.2 million, consisting of the audit fee of THB 1.10 million, and the non-audit fee of THB 1.10 million.

#### **Report of Audit Committee**

#### Dear Shareholders,

The Audit Committee of BCPG Public Company Limited was appointed by a resolution of the Board of Directors and comprises of three independent directors; namely, Mrs.Vilai Chattanrassamee as the Chairman of the Audit Committee, General Utis Sunthorn and Mrs.Pankanitta Boonkrong as members of the Audit Committee with Ms.Tiparat Zuikim, acting for the head of the Internal Audit Office, as secretary of the Audit Committee. In 2018, the Audit Committee convened a total of 13 meetings.

The Audit Committee performs its duties as assigned by the Board of Directors and in compliance with the Charter of the Audit Committee and good practice of Securities and Exchange Commission. Priorities had been given to auditing the financial statements, reviewing the internal control system and internal audit as well as ensuring good corporate governance. The Audit Committee is also accountable for reviewing the Company's conformity to laws governing securities and securities market, specifications of Stock Exchange of Thailand or laws pertinent to the Company's business, reviewing risk management system, anti-corruption measures as well as proposing a candidate to be nominated as an auditor. Performance overview of the Audit Committee in 2018 are listed below:

1. Review of the financial statements. The Audit Committee reviewed quarterly and annual financial statements as well as consolidated financial statements with the management, the Internal Audit Office and the auditor. The Audit Committee reviewed all matters with material significance, adjustments of important accounting items and the appropriateness of account recording approach to ensure that financial reports were prepared in accordance with Thai Financial Reporting Standards (TFRS) while disclosure of information shall be performed in an adequate manner. With respect to the opinion of the auditor, an emphasis was given to the presentation of additional information in the auditor's report. In addition, the Audit Committee organized meetings with the auditor, without the presence of the management to ensure that the auditor would be able to perform their respective duties independently and that the scope of opinion would not be limited. The audit plan was also reviewed to be in compliance with strategic plan and current situation of the entire organization.

2. Review of the internal control system and internal audit. This is to ensure that the Company's business operations were efficient, effective and that the goals established were ultimately achieved. Furthermore, the Audit Committee followed up and made necessary revision based on recommendation provided by the Internal Audit Office and the auditor after which the management properly implemented and improved accordingly. With respect to the internal audit, the Audit Committee also reviewed annual operation plan by stressing on the specification of appropriate audit plan while approving the review of the Charter, annual expenditure budget and manpower of the Internal Audit Office as well as identifying evaluation criteria of the performance of the Head of the Internal Audit Office to ensure that such office can perform its duties independently and in a straigthforward manner for the best interest of the Company.

3. Review of good corporate governance and compliance with relevant laws and regulations. The Audit Committee reviewed the compliance with corporate governance policy, regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand as well as laws applicable to business operations of the Company. In entering into related transactions and transactions which may lead to potential conflict of interest, the Audit Committee had considered a rationale in entering into such transaction to ensure the best interest of the Company and that any movement of transactions would be reported to the Audit Committee on a quarterly basis. Besides, the Company has provided channels for filing complaints and whistleblowings. Nonetheless, the Audit Committee assigned the Internal Control Office to handle complaints for proper consideration of the Audit Committee.

4. Review of risk management system. BCPG Public Company Limited appointed the Enterprise-Wide Risk Management Committee to oversee and consider policies for the management of its major risks. Moreover, the Company assigned the Internal Audit Office to include risk factors in its consideration in preparing a risk-based audit plan to evaluate the efficiency and effectiveness of operational procedures. The Audit Committee has monitored risks with potential impact on the Company's operation on a quarterly basis such as the matter regarding the Company's investments in foreign countries etc.

5. Review of anti-corruption practice. The Audit Committee encoraged the Company to implement the anti-corruption practice by working with the Corporate Governance Committee to ensure that the organization has put in place a good corporate governance system in respect of every function. In addition, the Audit Committee encourages the Company to cooperate with public and private sectors in participating Thailand's Private Sector Collective Action Coalition Against Corruption (CAC). The report on the Company's corruption risks as well as the whistleblowing procedure as referred to in clause 3 had been certified by the CAC Committee in the second quarter of 2017 under good corporate governance. 6. Proposal and appointment of the auditor and annual audit fees. The Audit Committee appointed the auditor and specified annual audit fees by evaluating past performance of such auditor, including his/her experience, knowledge, expertise and independence. The Audit Committee also considered proposed audit fees compared to the amount of work and the business of the Company which subsequently must propose such fees for the Board's approval.

7. To maintain the quality of the Audit Committee, the review of its Charter must be performed annually to be in line with good corporate governance policy of listed companies as stipulated by the Stock Exchange of Thailand. Besides, the Audit Committee evaluated the performance of each committee member for 2018 operation and the result of such review and evaluation will be incorporated in the development and improvement of the performance of the Audit Committee on a regular basis.

To summarize from the performances stated above, the Audit Committee considers that the Company's financial report is accurate, properly disclosed and complete in accordance with financial standards. The internal control system is sufficient and effective while the Company's operations are in line with laws relating to business operations.

> - Signed -Mrs.Vilai Chattanrassamee Chairman of Audit Committee

#### **Report of Nomination and Remuneration Committee**

#### Dear Shareholders,

The Nomination and Remuneration Committee was appointed by the Board of Directors to perform its respective duties in stipulating the criteria for the nomination of qualified candidates to take charge as directors and Managing Director as well as propose recommendations to the Board of Directors pursuant to the specifications prescribed in the Charter of the Nomination and Remuneration Committee. At present, such committee comprises of 3 independent directors; namely, Admiral Sithawat Wongsuwan as the Chairman, General Kanit Sapitaks as a member and Professor Dr.Suchatvee Suwansawat as a member and secretary.

In 2018, the Nomination and Remuneration Committee convened 4 meetings in total with details as follows:

1. Nomination of directors and specification of remuneration for directors

The Nomination and Remuneration Committee sought to nominate qualified candidates to replace the directors who were due to dismissal by rotation. In this occasion, three directors; namely, Mr.Chaiwat Kowawisarach, Mr.Narong Bunyasanguan and Dr.Punkanitta Boonkrong were due to be dismessed by rotation but were nominated to resume their previous position for another rotation. The Nomination and Remuneration Committee also nominate new directors to replace those who may resign during the year in which Mr.Thammayos Srichuak had been appointed as a new director to replace Mr.Chaiwat Kowawisarach (who resigned during the year). Such new directors shall be considered based primarily on their qualification, work experience as well as Board Skill Matrix to ensure the efficiency of the Board's operation and subsequently proposed the candidates' names to the Board of Directors and/ or at the meeting of the shareholders. In 2019, the Company shall provide an opportunity to minor shareholders to propose the candidates to be apppointed as the Company's directors during 2018 Annual General Meeting which was held between 1 September - 31 December 2018 via the system of the Stock Exchange of Thailand. Until present, there has been no notification from any shareholder.

With respect to the specification of remuneration of the Board of Directors and the Subcommittee, the Nomination and Remuneration Committee considered and reviewed an annual remuneration by taking into account appropriateness of duty and responsibility, criteria of responsibility, operating results as well as comparing the Company's remunerations with those of other listed companies in the same industry and proposed to the Board of Directors for further approval. 2. Nomination and remuneration of senior executives The Nomination and Remuneration Committee is accountable for appointing senior executives such as Deputy Managing Director of Financial and Accounting Division by taking into consideration his/her qualification, educational background, experience, past performance and vision, including his/her answers to inquiries and then such information shall be proposed to the Board of Directors for further approval. The Nomination and Remuneration Committee also rotated the roles of senior executives to promote learning of different work criteria within the organization. Furthermore, the Nomination and Remuneration Committee has acknowledged the significance of personnel development, particularly in the area of innovation and has prepared a succession plan to facilitate management continuity.

The specification of remuneration for senior executives shall take into account their education background, qualification, experience, past performance and remuneration of other companies in the same industry. Subsequently, such information will be proposed to the Board of Directors for further consideration, recommendations or insights relating to the management structure.

3. The specification of criteria and performance evaluation of the Managing Director for consideration of annual remuneration which shall be proposed to the Board of Directors for further approval.

4. The review of the Charter of Nomination and Remuneration Committee performed in 2018 to be in accordance with good corporate governance practice of 2017 which shall be proposed to the Board of Directors for further approval.

With awareness of the duties and responsibilities delegated by the Board of Directors, the Nomination and Remuneration Committee has performed its respective duties with due diligence and in a careful, trnasparent and equitable manner pursuant to good corporate governance practice. The Committee shall report its opinions on various matters relevant to the Board by taking into consideration the best interest of the Company and the shareholders.

> - Signed -Admiral Sithawat Wongsuwan Chairman of Nomination and Remuneration Committee

#### **Report of Corporate Governance Committee**

#### Dear Shareholders,

BCPG Public Company Limited ("BCPG") consistently adheres to good corporate governance policy, business code of conduct in all operating areas and procedures and to follow up changes, improvement of principles and policies of good corporate governance of the regulatory authority both domestically and internationally with a view to reviewing and updating good corporate governance on a regular basis.

In addition, the Board of Directors assigned the Corporate Governance Committee which comprises of General Kanit Sapitaks, the Chairman, Mrs.Vilai Chattanrassamee, independent director and Mr.Bundit Sapianchai, the Managing Director as directors of Corporate Governance Committee in supporting the Board of Directors and overseeing the compliance with good corporate governance policy and business ethics as stipulated in each level of the organization.

In 2018, the Corporate Governance Committee organized a total of 5 meetings of which significant details can be summarized as follows:

1. The Corporate Governance Committee considered the recommendations of Thai Institute of Directors (IOD) derived from an evaluation of the Company's monitoring activities in accordance with Corporate Governance Report of Thai Listed Companies in 2018 (CGR Report 2018) and then used such recommendations to consistently review and improve good corporate governance of the Company Group, enabling the Company to gain higher points in 2018 Corporate Governance Report of Thai Listed Companies (CGR) from IOD, rendering the Company to be granted with an "Excellence" level, compared to "Very Good" level in 2017. The Corporate Governance Committee proposed at the Board's meeting of 12/2018 on 18 December 2018 to approve on the review of good corporate governance No.3 which was the current version published on the Company's website. Subsequently, every director, executive and employee must sign and acknowledge such policy and then used it as an operational reference.

2. The Corporate Governance Committee proposed at the Board's meeting of 3/2018 on 27 on 27 March 2018 to

grant approval on sustainable business decelopment policy of the Company Group as well as consider 2018 operation plans and activities concerning with local community, society and environment as proposed by the management. Besides, the Corporate Governance Committee consistently oversees and monitors such operation plans to ensure the sustainable growth of the Company Group and reliability of every stakeholder group in all operational areas.

3. The Corporate Governance Committee promoted the business operation of the Company Group and the performance of the Board, executives and employees to be in line with good corporate governance policy and business code of conduct. The Corporate Governance Committee also encouraged and followed up activities in enhancing the knowledge and understanding of good corporate governance and business code of conduct on a regular basis.

4. The Corporate Governance Committee supervised the Company Group to establish risk assessment procedures and anti-corruption measures to prevent such risks and to enhance the efficiency of the suppression measures by means of setting up an appropriate internal control system and regularly reviewing the system to be consistent with current situation while simultaneously cultivating the corporate culture.

5. The Corporate Governance Committee jointly worked with the Audit Committee in reviewing and granting approval on whistleblowing and complaint policies of the Company to facilitate the system implementation. Complaints to be considered can be classified into 3 types; namely, (1) illegal act, fraud, violation against the Company's regulations or ethics of directors, executives and employees (2) irregularity of financial report, defective internal control system and (3) matters that may affect the Company's interest or reputation. However, in 2018, there have been no complaints/whistleblowing reported to the Company.

6. The Corporate Governance Committee coordinated with the Enterprise-Wide Risk Management Committee to follow up, monitor and evaluate any change in risk factors of fraud and corruption of the Company Group with respect to its likelihood as well as potential impact to specify appropriate preventive measures and treatment plans. 7. The Corporate Governance Committee encouraged business partners of the Company Group to operate their business transparently and strictly conform to anti-corruption policy. Besides, the Committee stipulated an additional specification indicating that every business partner must participate in Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)

8. The Corporate Governance Committee supervised the management in granting rights to shareholders to facilitate their involvement in the decision making of significant matters by providing them with an agency of Annual General Meeting in advance, coupled with the establishment of Investor Relations Unit and the Company's website to present current information as a channel of communication with shareholders and investors while facilitating them in searching for necessary information and making any inquiry with the Company. 9. The Corporate Governance Committee reviewed contents pertinent to the compliance with good corporate governance policy which will be published in the Company's annual report to ensure their completeness, accuracy and consistency with the criteria prescribed by the Stock Exchange of Thailand before disseminating such information to stakeholders.

The Corporate Governance Committee reported meeting results and its performance to the Board of Directors on a regular basis and for 2018 overview, it can be summarized that the Corporate Governance Committee fully performed its obligations and duties throuh the review process and provide independent opinion for the best interest of the Company Group, every group of shareholders as well as stakeholders.

- Signed -General Kanit Sapitaks Chairman of Corporate Governance Committee

#### Report from Enterprise-wide Risk Management Committee

#### Dear Shareholders,

The Enterprise-wide Risk Management Committee of BCPG Public Company Limited was established as a result of the Board of Directors' resolution, comprising experienced professionals in the area of organizational management namely Professor Dr.Suchatvee Suwansawat acting as the Chairman, General Utit Sunthorn as director and Mr.Bundit Sapianchai as director and secretary. The committee's major duty and responsibility are to determine policy, strategy, goals, risk management for the entire organization, to develop a risk management system including pushing for cooperation in risk management at all levels in the organization (Including subsidiaries) as well as to help supervise the Company to have appropriate risk management system in place, in accordance with the risk management plan as considered together with the management of the Company.

In 2018, the Enterprise-wide Risk Management Committee performed its duties as assigned by the Board of Directors in supervising the risk management of the organization to achieve the business goals that had been set. This has helped build confidence and credibility among investors and stakeholders. The Enterprise-wide Risk Management Committee organized a meeting with the Company's management for a total of six times, of which the results can be summarized in the essence of the annual performance in 2018 as follows.

1. Consider investment risks in various projects, such as solar rooftop projects and energy management service, the establishment of an infrastructure fund for solar power plants in Japan, and other investment projects. Factors taken into consideration include business risks, construction risks, environmental risks, legal risks, financial risks and other variables that may have implications in investment, including risk management plan to make appropriate proposals for the review by the Board of Directors of the Company accordingly.

2. Review the organization's risk management plan, including

2.1 Evaluate the performance of the management according to the risk management plan of the year 2018, in which the overall risk management was implemented at an acceptable level. This was prioritzed by considering the risk assessment guidelines and their potential impacts.

2.2 Review and improve the organization's risk management plan for the year 2019 that may affect the Company's strategy.

3. Review and approve the Enterprise-wide Risk Management Committee Charter

4. Supervise and provide suggestions on various issues which the management should study and prepare for future business changes as follows:

4.1 Regulations on electricity trading among private sectors

4.2 Policy, rules or regulations of smart energy management through digital platforms

4.3 Changes in laws related to electricity generation projects from renewable energy in Japan

he Enterprise-wide Risk Management Committee Is committed to ensure good corporate governance in the Company and to manage risks at an appropriate level, as well as to encourage functions to participate in the development of risk management systems from such operations. This is to ensure that the Company operates in accordance with the policies and can achieve the targets throughout the organization

> - Signed -(Professor Dr.Suchatvee Suwansawat) Chairman of the Enterprise-wide Risk Management Committee

#### **Report from Investment Committee**

#### Dear Shareholders,

BCPG Public Company Limited defines its goal to become the leader in green energy business through the expansions in both domestic and international platform. In 2018, BCPG has expanded the growth with focus in quality, in terms of high-quality assets, ability to generate return to investors as well as appropriate risk management.

In 2018, the Investment Committee consists of experts from both inside and outside of the Company, including Mr. Chaiwat Kovavisarach as the Chairman, Mr. Bundit Sapianchai and Mr. Suchad Chiaranussati as the committee members, and Mr. Thanwa Laohasiriwong as the advisor. The Board of Director's meeting 10/2018 on October 30, 2018, resolved to appoint Mr. Thammayot Srichuai as an additional member on the Investment Committee, to broaden the scope of expertise of the Committee.

The Investment Committee held a total of 10 meetings through out the year to consider various investment opportunities and related matters, proposed by the management. This includes the review and scrutinize of investment opportunities, in which 12 investment opportunities have been approved. The significant approval in 2018 includes:

- Investment in domestic wind power plant of the capacity 8.965 MW

• Establishment of private infrastructure fund in Japan to raise fund from institutional investors, in order to acquire two solar power plants from the Company, namely Nikaho Project and Nagi Project with a total capacity of 27.6 MW

• Other 9 investment projects

In addition, the Investment Committee has been closely monitoring the business development progress, as well as consider the opportunities and challenges poses by domestic and international electricity power market. The Investment Committee also provides recommendation to the Enterprise-wide Risk Management Committee and the Board of Directors in regard to the finding of reviewing and scrutinizing of investment proposals, and ensure the sustainability of the Company.

The Investment Committee has been observing the dynamics of the investment environment that may affect the implementation of the Company's corporate strategy as well as monitoring and providing recommendations in regard to the Company's organizational structure, financial structure, and appropriate budgets for the company to maintain its competitiveness.

In 2018, the Investment Committee has reviewed and approved the plan to develop prototype projects by the Centre of Digital Energy (CODE) to support new energy business opportunities, such as energy management, energy trading and energy platform business.

The Investment Committee has fully performed its duties in accordance to the Investment Committee Charter approved by the Board of Director. The Committee considers the matters with special attention to ensure the sustainability of the Company, as well as making sure all stakeholders are treated fairly.

> - Signed -(Mr. Chaiwat Kovavisarach) Chairman of the Investment Committee

# Sustainable Development

Nowadays when an indicator of economic development is primarily financial, other factors and impacts promoting and resulting from such economic development that do not appear in a form of financial indicator have mostly been ignored, in terms of natural diversity, wealth, transparency and social discrimination, among others.

These factors do not only have long-term negative effect on the society as a whole, but also have a reverse impact on social development, environmental management and operation of the business sector as well as domestic and international issues such as pollution and climate change etc.



The United Nations has realized the problem of adhering to the measurement of economic growth, and traditional development approaches Therefore, it had cooperated with member countries, business sectors and related sectors to establish and announce the UN Sustainable Development Goals (SDGs) in 2015. with the objective to enable its member countries to achieve all 17 SDGs and to specify a framework that every country can employ in determining their sustainable development. Such development framework takes into consideration every dimension of relevant developments and any impact resulting from the economic growth in which the Company has set its operation timing to be completed by 2030.

There is a clear measurement framework that defines 169 goals and targets for the collection of information that is the same standard from all countries to support performance measurement which reflects true sustainable growth. Both in the form of financial indicators and indicators that reflect social, environmental and governance operations

Recognizing its responsibility as a business sector to participate in promoting and enhancing sustainable development, the Company has linked the goals to its vision, mission, goals and business strategy to enable us to assess, uplift, and communicate our performance. There are 5 SDGs that directly relate to the Group's visions, missions, goals and strategies as follows.



### SDG 1



#### **Sustainable Cities and Communities**

The company is committed to using renewable energy and innovation to create a green society where members can produce electricity from clean energy for their use and can also trade the surplus among themselves. This can be a starting point of creating a smart community and develop infrastructure to accommodate clean energy as part of preparation for sustainable cities and communities which are ready for sustainable changes and development. **SDG** 13

**Climate Action** 



Life Below Water

# SDG 7

#### Affordable and Clean Energy

Major business of the Company is related to clean energy in which an investment for business development in accordance with the Company's mission shall directly increase clean energy consumption of the general public.



🚯 SDG 9

#### Industry, Innovation and Infrastructure

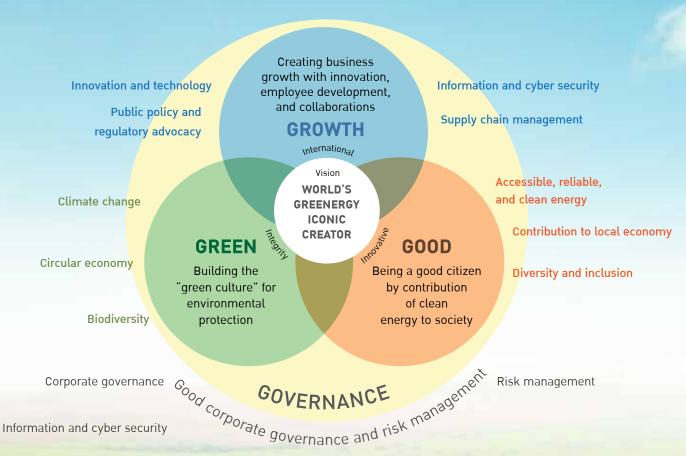
The identity of the Company reflects an innovative organization which utilizes technology and creativity in business development. The Company has, therefore, implemented many investment activities with respect to energy. Such energy projects are deemed major activities of the Company as well as a driving force in producing high quality research while emphasizing on the country's technological potential.

With respect to the Company's vision to become one of the organizations with sustainable business operation, the Company; thus, has put in place appropriate risk management policy regarding climate change, especially in the context of clean energy production which is directly affected by such climate change.

As stipulated in the Company's vision to become a decent organization in the society, we strongly intend to organize and support various social projects apart from normal business operation. Our research has indicated that marine conservation has been neglected by most business sectors. Even though such issue is considered less significant than other sustainable development goals (UNGSII, 2017), the Company has still emphasized on such issue which can be seen from our support of many social projects.

#### Sustainable Business Development Policy

To foster organizational culture in terms of sustainability and to create operational framework that every employee can put into practice, the Company has stipulated main objectives which emphasize on three value creations namely Growth, Good and Green. Such values primarily depend on the foundation of good corporate governance, Consequently, BCPG has set up a 4G framework of sustainable business development.



#### The Company announced BCPG's sustainable business development policy on 17 April 2018 as follows:

#### **Good Corporate Governance**

The Company maintains business operations with the utmost transparency and good governance practices through stringent anti-corruption policies and comprehensive risk management systems throughout the value chain.

### Collaborate with all sectors to promote sustainable development

The Company works with all sectors with regards to laws and regulations and raising public awareness. It cooperates with government agencies, businesses, communities, and civil society to promote sustainable development through actively promoting laws and regulations and raising awareness regarding the importance of environmental and energy conservation.

#### Enhance energy security for local communities

The Company contributes to the local economy, supports community development, and creates shared value through the backing of access by communities to sustainable and reliable sources of energy.

#### Minimize environmental footprint in all aspects

The Company minimizes environmental footprint from business activities and integrates the principles of the

waste generation. Respond to customer's needs, Data privacy and protection

"Circular Economy" in order to reduce resource usage and

The Company effectively responds to the needs of customers and protects personal data and online privacy with the most up-to-date technology and the best data security systems.

#### Promote business growth with eco-friendly innovations

The Company achieves business growth by continuously creating environmentally-friendly innovations and effectively adapting to utilization of value-added technologies.

### Develop organizational capacity throughout the value chain

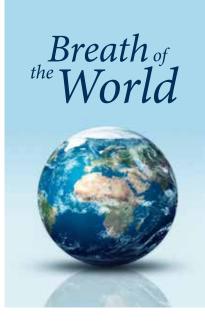
The Company increases organizational capacity and secures continuous business growth through employee readiness development, building better business partnerships, and engaging in capacity building for contractors and subcontractors throughout the value chain.

#### Protect Human Rights and Respect Diversity

The Company aims to be an inclusive organization that embraces diversity and operates with no form of discrimination.

#### **Sustainable Development Activities**

From its sustainable business development policy, BCPG has developed a plan for sustainable development activities under the concept of **"Breath of the World"** to help conserve, improve and restore natural resources and help raise the quality of life for people in operating areas and other areas using renewable energy and innovation in order to being able to hand over a beautiful world to future generations. There are three main themes for the activities:



#### **Breath of the Waters**

Related to water resources conservation. Among these activities are the installation of solar panels as a power source for rangers and tourists at marine national parks, and joint coastal conservation activities with the government and private sectors.

#### **Breath of the Wilds**

Serves to promote forest conservation through forest rehabilitation, reforestation, creating salt licks for wild animals, and wildlife educational activities.

#### **Breath of the Souls**

Aimed at social and community development activities to help raise the quality of life, and include installing solar panels to provide power for organisations or schools in remote areas such as schools under the ICU project of the Office of the Basic Education Commission, growing vegetable crops under government solar panels, low carbon society activities, community projects such as education or school environment and infrastructure improvement in BCPG's areas of operation, and the donation of solar panels and related equipment to various organisations for the purpose of education and other benefits. BCPG has also pledged to refrain from giving out New Year gifts, and instead donate the budget towards the welfare of forest and marine rangers.

#### **Examples of 2018 Sustainable Development Activities**

**Breath of the Ocean** 





The film documentary and a picture book under the title "**Breath of the Ocean**" is a joint effort between BCPG, the Department of Marine and Coastal Resources, and the Royal Thai Army Radio and Television Channel 5. It comprises a tribute segment to Her Majesty the Queen titled "Reefs of Life: Artificial Reef Project under the Royal Initiative of Her Majesty Queen Sirikit", and a 9-part series on artificial reefs. The documentary has been broadcast on various television channels, both domestic and abroad and online media; the Company's website and facebook page.



#### 11: Sustainable Cities

The fact that artificial reefs would provide a new habitat for marine life has helped restore the marine environment and enabled coastal fishermen who once suffered from the deterioration of the marine ecosystem to revert to their original lifestyle and occupations. Their livelihoods have been restored, resulting in a good quality of life, better economy, society and environment, and this has expanded further to cover a larger group of people in the communities.

### 13 ACTION

#### 13: Climate Action

Foster awareness of the importance of global warming that affects seas, oceans and coastal resources. Encourage the general public to support the protection of marine resources and coastal conservation in a concrete manner since water sources such as rivers, seas and oceans are considered an important source of oxygen through phytoplankton. They are integral to the ecosystem since they produce 70 percent of the oxygen in the earth's atmosphere, while the remaining 30 percent is produced by plants.

#### 14: Life Below Water

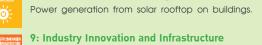
A documentary promoting an awareness of marine conservation in which oceans are deemed important food sources for human beings as well as a source of oxygen of the world. The documentary also incurs knowledge and awareness in maintaining seas and oceans for the general public to ensure their sustainable abundance. Provide knowledge regarding the benefits of artificial reefs with a direct impact on conservation and restoration of marine resources.

#### Blockchain-Based Peer to Peer (P2P) Energy Trading Project at T77 Community



BCPG's blockchain-based P2P energy trading project at T77 community is a partnership among BCPG Sansiri Plc. (through Habito Mall), Bangkok Prep International School, Dental Hospital, M.K.Real Estate Development Plc, Metropolitan Electricity Authority (MEA) and Power Ledger from Australia

#### 7: Affordable and clean energy



romote sustainable structure and local R&D through a trial of blockchain-based P2P energy trading project, ASEAN's first and World's largest of its kind.

11: Sustainable Cities and Communities Promote sustainable cities with infrastructure comprising

clean energy and sharing economy system.



#### 13: Climate Action

Total production of clean energy of approximately 920,000 KWH in 2018 which helped reduce the amount of carbon dioxide emission by 530 tons per year or equivalent to 400 rais of reforestation. It also resulted in energy cost saving of approximately 5-15 percent from using electricity from solar power.



Activities to encourage employees to live their daily lives in a low-carbon manner with "Reduce", "Reuse" and "Recycle" lifestyle; For example, refusing the use of plastic bags and use cloth bags whenever they can, brining their own containers to shops to buy drinks, making spelling word calendars from used BCPG 2018 calendars for students of Wat Dokmai School in Ayutthaya province, located nearby the company's solar farm in Bang Pa Han district, to use as learning materials, etc.



**12: Responsible Consumption and Production** Encourage employees to realize the significance of sufficient consumption and refrain from produce unnecessary waste.



#### 13: Climate Action

Promote awareness about global warming and encourage employees to minimize impact on the envrionment through emitting the least carbon dioxide possible in their daily lives.

#### **Energy for Everyone**



A project to install solar panels and provide electricity to schools in remote areas without electricity access in need of support or ICU schools, under the Office of the Basic Education Commission (OBEC) comprising Baan Mae Tala School, Chiang Rai province, Baan Huay Krai School, Prachuap Khiri Khan province, and Baan Klong Mod Daeng School, Kamphaeng Phet province



#### 7: Affordable and clean energy

Installation of ground mounted solar panels to provide electricity for communities in remote areas with access to electricity from clean energy.



#### **11: Sustainable Cities and Communities**

Benefit teachers and students in the schools and communities in which the school is located Including local authorities from access to clean energy.



#### 13: Climate Action

A total of 15,000 KWH of clean energy produced from the three schools, which can be translated into the reduction of approximately 8.6 tons of carbon dioxide emission per year or 6.5 acres of forest plantation. Educational activities for school personnel on the impact of climate change have helped raise their awareness and resulted in behavioral changes their daily life.

#### No Gifts. For Giving







The company has refrained from giving out New Year gifts, and instead donate the budget towards organizations or individuals who are committed and sacrifice their lives to help protect the environment and natural resources. For the year 2018/2019, the donation was made for the welfare of forest and marine rangers through the Minister of Natural Resources and Environment.



**12: Responsible Consumption and Production** Encourage employees to realize the significance of sufficient consumption and refrain from.



#### 14: Life Below Water 15. Life on Land

Support the livelihood, uplift the morale of personnel and volunteers who are dedicated and committed to help protect the environment and natural resources, both on land and in the sea.

#### "Rayong Sea View Run for Rangers 2018" Support



A charity run event organised to raise fund for the Welfare Fund under the Ministry of Natural Resources and Environment to help wildlife and marine rangers who are injured or dead from performing their duties in protecting the natural resources under the mission of the Department of Marine Coastal and Resources, the Royal Forest Department and the Department of National Parks, Wildlife and Plant Conservation



14: Life Below Water

**15. Life on Land** Support the livelihood, uplift the morale of personnel and volunteers who are dedicated and committed to help protect the environment and natural resources, both on land and in the sea.

#### Support of the Youth







Various activities to support the youth at local and national levels.



#### 3: Good Health and Well-Being

Organize sports and other activities for students, youth, as well as the the underprivileged to promote exercises in everyday life. The company also supports young athletes with potentials to become professional athletes through competition of international standard levels. **4. Quality Education** 



Provide support for education and sports for students and youth including the underprivileged, etc. at national and community levels through scholarships and various activities. Additionally, helping improve the condition of educational facilities to be pleasant and hygienic.



Encourage employees to participate and initiate activities to help improve the livelihood of the society and local communities in various forms.



- 3: Good Health and Well-Being
- 4. Quality Education6. Clean Water and Sanitation
- 7: Affordable and clean energy
- 7. Anorable and clean energy
- 8: Decent Work and Economic Growth

**13: Climate Action** 

Activities to raise awareness of teachers and students on the benefits of renewable energy, impact of climate change. Support and organize various activities from educational to cultural and religious activities. Help with natural disaster relief. Provide the local community with access to clean water through the use of solar power. Organize and support local sports event to promote good health among the local people. Provide clean water to natural disaster victims in various areas on several occasions.

#### Solar Government Project with the War Veterans Organization of Thailand



Solar Government Project with the War Veterans Organization of Thailand under royal patronage in Karnchanaburi and Saraburi provinces help generate additional income and increase employment in line with social enterprise concept.



#### 8: Decent Work and Economic Growth

Provide stable income and electricity stability for the surrounding area. Create employment for the members of the community. Funds are set up to for knowledge improvement and potential development of the local community.



#### 13: Climate Action

Promote awareness among the officers and local communities about global warming.

#### Solar Sharing Project in Japan



Solar sharing is a method of generating electricity on farmland using solar panels mounted to a raised framework, with crops growing underneath. With this concept, our Gotemba project does not only provide additional income for farmers, it also helps utilise abandoned farmland. The project contributes to local economy with land lease payment and local employment. The plants that are grown there are Sakaki, a flowering everygreen tree, used in Shinto ritual ceremonies, which grows well without direct sunlight.



#### 8: Decent Work and Economic Growth

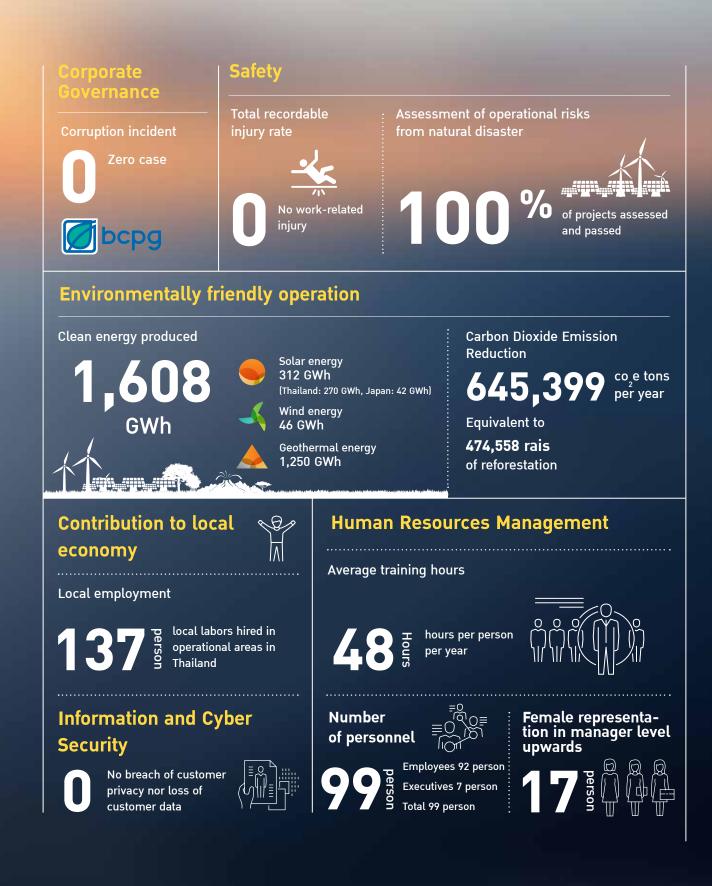
The plantation of sakaki helps create employment in the local area.



#### **11: Sustainable Cities and Communities**

The common use of land and the increase of the value of the land help enhance the efficient and sustainable use of resources.

2018 Highlights in Numbers





### Internal CONTROL

The Board of Directors constantly realizes and values the significance of an internal control system; therefore, the Board assigned the Management to evaluate the adequacy and appropriateness of the internal control system as prescribed by the Office of the Securities and Exchange Commission (SEC) based primarily on guidelines of COSO 2013 (COSO: the Committee of Sponsoring Organizations of the Treadway Commission). The Audit Committee reviewed and assessed the adequacy of the internal control system to ensure that every procedure of the Company's business operation is efficiently maintenance its core assets and the use of resources without a major error in the system.

Nevertheless, the Board has agreed with the opinion of the Audit Committee on the adequacy and efficiency of the internal control system of the Company Group, and create effectiveness to its business operations. The Company consistently emphasizes on an allocation of duty and authority while periodically conduct a cross evaluation in accordance with the evaluation of the auditor. Evaluation result of the internal control system based primarily on 5 major elements can be summarized as follows:

#### 1. Control Environment

The Board of Directors strongly adheres to the business ethics as well as the Code of Conduct as a part of its good corporate governance policy, specified in a written document and enforced on every director, executive and employee of the entire organization. Such principles and policies, like procurement ethics policy, are employed to prevent any conflict of interest and must be acknowledged and signed by everyone when being employed and must be reviewed annually or revised on a regular basis when information has been updated. Besides, the Company clearly specifies the duty and responsibility of the Board, including that of the Sub Committee. The Company also designs the management structure, approval authority and segregation of duty to achieve its objective under the oversight of the Board. With respect to personnel management, the Company defined the policy for the nomination and human resource development, including the succession plan, executive development plan, job rotation plan and job promotion plan to encourage employees and regularly conduct BCPG Satisfaction Survey to maintain employees' satisfaction.



#### 2. Risk Assessment

The Company operates its business by strongly adhering to risk management policy and procedure; therefore, the Enterprise-Wide Risk Management Committee (ERMC) was established to specify risk management policy, strategy and objective as well as to efficiently and continuously develop risk management system to encompass the Company Group, comprising of an operation level to achieve objective based on field of work and operation procedure. The Company also sets up an enterprise-wide risk management handbook which indicates procedures starting from specifying clear objectives, evaluating every type of risk and defining measures and operation plan to handle such risk. The Company specifies its risk management system to ensure sustainable profit and long-term business achievement.

#### **3. Control Activity**

The Company established risk control measures to minimize risk of not achieving its objective in an acceptable level. The Company; therefore, has set up control activities based on Key Performance Indicator (KPI) as a tool in planning and controlling procedures, as weel as to set a policy and guidelines regarding budgeting, finance, accounting, human resource management, material procurement, written operation procedures, and related transactions including the specification of authority and financial allowance of each level of executives are concisely and clearly identified to distribute authority and avoid potential corruption. Moreover, the Company constantly monitors the basic foundation of IT system by controlling accessibility and safety of information. The Company has been certified with ISO 27001:2013 in October 2017. Moreover, the Company also set up monitoring procedure on the related transaction, procedures of its subsidiaries or associated companies, and identifying the corporate governance for its joint venture to be employed as guideline for directors or executives of such subsidiaries or associated companies to conform to. Compliance department is responsible on monitoring all the procedures in order to ensure the Company complied with laws, relevant regulations as well as operation procedures within specified timing.

#### 4. Information and Communication

The Company assigned the IT Department to efficiently administer IT system and communication channels, both internally and externally, of the Group. Policies concerning information technology are announced to create employees' awareness and acknowledgement. Nonetheless, before implementing any new system, the Company has made a careful comparison between investment and expected benefits in procuring such system and incorporated it into the development plan and guidelines in applying the procured system. At present, the Company is applying information technology system in various operational procedures for efficient control and monitoring of the preparation of financial statements, IT report, human resource management, legal and operational activities. The Company assigned the Corporate Governance Division to coordinate and compile details of proposed issues according to the meeting agenda as well as to prepare relevant information via the BoardVantage System to submit to the Board of Directors for prior approval before the meeting date as well as preparing report of the Board's meetings to ensure that such report contains sufficient information required for retrospective inspection. The Corporate Governance Division is also responsible for maintaining significant documents of the Company in a systematic order.

Regarding information dissemination, the Communication Department acts as a major communication channel while supervising both internal and external communication by using intranet and email in order to communicate all information through the entire organization, and the employees are able to plan their work in the same direction. Investor Relations Unit, under direct supervision of Finance and Investor Relations Department shall be responsible for communicating with stakeholders and has set up a special channel for receiving complaints and whistleblowing in a safe manner.

#### 5. Monitoring Activity

The Company regularly monitors and assesses its internal control system to be in line with changing environment by defining its goals and objectives of business operaton as identified in the Company's strategic and business plan. Key Performance Indicators (KPIs) of each department are periodically monitored, analyze and communicate any drawback of the internal control system to promptly solve potential problem in a case where actual performance significantly differs from established goals. In addition, the Company stipulates improvement guidelines to be in accordance with current condition. The Internal Audit Office, under direct supervision of the Audit Committee, shall be responsible for evaluating the efficiency, effectiveness, operation and internal control system of the Company and its subsidiaries on a regular basis. When any defect or shortcoming of such system has been detected, the Internal Audit Office shall directly report the management and the Audit Committee to formulate corrective measures and procedures which subsequently shall be proposed to the Audit Committee for continual consideration.

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# Risk **FACTORS**

Risk factors of the Company Group are divided into operation risks, administration and management risks and financial risks. The Enterprise-Wide Risk Management Committee closely monitors and follows up risk management plans of the organization and risk evaluation shall be conducted annually with details as follows:

#### 1. Business Operation Risks

1.1 Risks from unpredictable factors affecting renewable energy power plant

Solar, wind and geothermal energies are uncontrollable and unpredictable since they mainly depend on solar intensity, wind speed or underground thermal pressure that constantly change. Nonetheless, the Company has hired technical experts to estimate the availability of such resources and general statistics before actual investment. The Company utilizes standardized equipment and closely monitors the production process by installing tools and equipment required for maintenance and/or setting up a warning system in case any problem arises to ensure an efficient management fo its power plant projects.

#### 1.2 Risks from new project development

The success of new project development (both domestic and overseas) depends on many key factors such as permit acquired for business operation, compliance with conditions indicated in power purchase agreement or various permits, fund and land acquisition etc. These factors may cause the operational delay of the project and may affect the rate of return on investment of the project or performance results of the Company Group. Besides, risks may arise owing to economic condition, changes in the government's energy policy as well as specifications pertinent to foreign investments.



#### 1.3 Risks from dependency on key customers

At present, key customers of the Company Group include EGAT, PEA, Kyushu Electric Power Company and Tokyo Electric Power Company Holdings, Inc. which entered into power purchase agreement with the Group. Consequently, in a case where one major customer mentioned above terminates such contract, this can incur a significant impact on the Group's performance. However, the Company Group rigorously controls the operation of its renewable energy power plants to be in a strict conformity to power purchase agreements as well as standards and relevant regulations to ensure that the Group is well qualified in accordance with the contract and relevant laws. In addition, the Company Group sets up a policy to diversify its renewable energy business abroad as well as expand its business into solar rooftop in a form of B2B or P2P solar energy trading to minimize risks arising from few customers.

#### 2. Risks from Administration and Management

As of 31 December 2018, BCP holds 70.1 percent of the Company's paid-up capital, so BCP is considered the major shareholder of the Company and has indirect control in management through Board representatives and also has the authority to vote in the shareholders' meetings for significant issues (such as increase/decrease of investments, acquisition and sales of assets etc.) However, the Board structure consists of 7 independent directors who supervise the administration of the Company for its best interest as well as highest benefits of minor investors and other stakeholders. The Company also makes available channels to facilitate shareholders in proposing meeting agendas and nominate candidates for the Board members.

#### 3. Financial Risks

#### 3.1 Risks from volatility of interest rates

At the end of 2018, the Company Group has an outstanding loan of THB 15,567.2 million, comprising of fixed interest rate and floating interest rates at the proportion of 10:90 respectively. Consequently, the Company is still subjected to risks from fluctuation of floating interest rate, whether increasing or decreasing, that may impact financial performance of the Group. Nonetheless, the Group constantly monitors interest rate movement and may enter into interest rate swap at appropriate market timing.

#### 3.2 Risks from fluctuation of exchange rates

At present, the Company expands its investment in foreign countries such as Japan, Indonesia and the Philippines; therefore, the Group is required to provide investment capital and borrowing in different currencies; for example, baht, yen and US dollars. Such variety of currency exposes the Company to the fluctuation of foreign exchange rate that may ultimately affect financial performance of the Group. In 2018, the Group experienced a FX loss at approximately THB 27.6 million. However, the Company successfully devised a solution to cope with such fluctuation by implementing partial "Natural Hedge", meaning some portions of money borrowed from the bank to be employed as investment capital in foreign countries shall be the same currency to match with its foreign income derived from a particular project. The Company acquired yen loans for investment in Japan and US dollar loans for investment project in Indonesia. In addition, the Company consistently monitors exchange rate movement to resort to appropriate financial tools to minimize such risks.

#### 3.4 Risks from loan repayment

Since the nature of power generation business requires high investment capital; therefore, the Company needs to borrow money from external financial institutions in the form of project financing. Nonetheless, the Company has a stable income based on conditions specified in the power purchase agreement, with a maturity of 20-25 years and at the end of 2018, the Company Group reported net interest - bearing debt equity of 0.8 times, meaning that risks from such loans are relatively low.

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# Connected **TRANSACTIONS**

Connected transactions between the Company and the entities with potential conflit of interest in the fiscal year ending on 31 December 2018 can be summarized below:

### Bangchak Corporation Public Company Limited ("BCP")

BCP is considered an entity that may have conflicts of interest since BCP is a majority shareholder of the Company with 70.1 percent of total paid-up shares (data from SET as of 7 September 2018 which is the latest book closing date) and has two directors in common; namely, (1) Mr. Pichai Chunhavajira and (2) Mr. Bundit Sapianchai, acting as the Chairman and executive of BCP.



Transaction value				
Details of transaction	Fiscal year ending on 31 December 2017	Fiscal year ending on 31 December 2018	Necessity and rationale of transaction	
Land leasing			The Company has leased a land from BCP in Bang Pa In	
<ul> <li>Expenditures for the period</li> <li>Accrued expense</li> </ul>	6.38 5.78	6.38 5.78	district, Ayutthaya province for the total area of 457-2-53 rai to be used as a location for phase 1 project. The leasing agreement has rental fees appraised by an independent appraiser approved by SEC Office with 22-year term of contract. The Company has no further plan to use such land for other business purposes when phase 1 project terminates. Then, on 1 October 2016, the Company leased additional land of 32-3-7- rai from BCP for the duration of 21 years and 2 months of which the leasing contract will end on the same period as the contract mentioned earlier whereby payment condition and other related conditions are also the same.	
Rental expenditures of office space, control room and electric system control room			The Company has leased a space to be used as the office's control room and electricity system control room from PCP for the total of 377 square matern with a 2 year term.	
• Expenditures for the period	0.92	0.92	BCP for the total of 377 square meters with a 3-year term leasing agreement. The leasing rate has been appraised	
<ul> <li>Accrued expense</li> </ul>	-	0.08	by an independent appraiser approved by SEC Office.	
<ul> <li>Deposit</li> </ul>	0.23	0.23		
Expenditures relating to a hiring contract <ul> <li>Expenditures for the period</li> <li>Accrued expense</li> </ul> Revenues from sale of electricity	35.19 -	27.60 2.46	The Company made a hiring con-tract with BCP which will expire on 31 December 2019. According to such contract, BCP is obliged to as-sign its employees to perform their respective duties at the Company within a scope of operation speci-fied by the Company. Most em-ployees assigned by BCP comprised of senior executives and personnel in an operation field who have par-ticipated in the management and operation of renewable energy since the beginning of such renew-able energy business. Nonetheless, BCP will charge service fees based on an estimation of such employ-ee's salary, bonus and other remu-nerations as identified in the condi-tions of the hiring contract.	
of the Learning Center			The Company charged electricity fees for the Learning	
Revenues for the period	0.30	0.25	Center of renewable energy at phase 1 project area in	
• Account receivable	0.02	0.04	Bang Pa In district, Ayutthaya province from BCP since the Company owns electricity power meter employed by the Learning Center, located in the same building with its office, control room and electricity system control room. The Company will charge electricity fees according to actual electricity consumption and in compliance with the terms under 3-year leasing contract of building and control room.	
Rental fees for meeting rooms	0.15	-	Rental fees for meeting rooms for AGM in which the rental rate is almost the same and lower than that of other service providers of the same business type and BCP shall charge rental fees according to actual usage.	

	Transaction value		
Details of transaction	Fiscal year ending on 31 December 2017	Fiscal year ending on 31 December 2018	Necessity and rationale of transaction
Expenditures relating to hiring contract of IT system • Expenditures for the period	2.10	5.11	Service fees for IT system in which the contract will expire on 31 December 2018. Such transaction is deemed a
Accrued expense	2.10	0.52	normal business support and service fees shall be charged in accordance with general trade conditions and the Company shall compare such fees with other service providers.
Expenditures relating to area usage • Expenditures for the period • Accrued expense	-	0.38 0.05	BCP has charged service fees relating to area usage in which the contract starts from 1 April 2018 and ending on 31 December 2010.
Other expenditures			BCP has charged service fees relating to personnel
<ul><li>Expenditures for the period</li><li>Accrued expense</li></ul>	0.23 0.22	0.05 0.01	procurement, driver of the Managing Director and charity lotteries based on actual payment.

#### Other Parties with Potential Conflicts of Interest

	Transaction value			
Details of transaction	Fiscal year ending on 31 December 2017	Fiscal year ending on 31 December 2018	Necessity and rationale of transaction	
Rental fees for Phaholyothin Place • Expenditures for the period	0.25	-	On 15 September 2016, the Company signed a rental contract for office space with RTA Entertainment Public Company Limited, on the 28th floor of Phaholyothin Place for the total area of 245 square meters for 7-month period, starting from 1 August 2016 to 28 February 2017. The rental fees shall be specified pursuant to the market price with the total of 649,250 baht. In August 2016, RTA charged the rental fees for the office space for August and September in accordance with preliminary agreement. This is considered as connected transaction since directors of RTA Entertainment Public Company Limited are also independent directors of the Company.	
Other expenditures of Bangchak Retail Company Limited			Expenditures for drinks and cash coupons for shareholders' meetings of the Company, SET in the City, seminars	
<ul><li>Expenditures for the period</li><li>Advance payment</li></ul>	0.42 0.11	0.26	charged by Bangchak Retail Company Limited (BCP Company Group) in which the Company has charged the same amount as other service providers.	
Other expenditures of Bangchak Green Net Company Limited • Expenditures for the period	0.04	-	Expenditures for survival kit for flood victims.	

#### Measures and Procedures for Approving Connected Transactions

At the Board meeting of 4/2015 on 24 November 2015, the Board of Directors approved policies concerning connected transactions and principles of connected transactions with trade agreement and general trade conditions which can be summarized below.

The Company specified measures regarding connected transactions between the Company and/or its subsidiaries with all related persons as notified by the Capital Market Advisory Board and the Securities and Exchange Commission. The Audit Committee was responsible for providing opinions on the rationale of the transaction, including the appropriateness of price of such transaction by considering various conditions in compliance with normal business practice in the industry and/or comparing with the market price and/or having the same price or similar condition of such transaction in the same level of the third party and/or being able to illustrate that such transaction has a reasonable and fair price. In case the Audit Committee does not possess the skill or expertise pertaining to connected transactions, the Company shall assign an independent expert to provide opinions on such matter and then submit to the Audit Committee, the Board of Directors and/or shareholders (depending on each case) for further consideration.

#### **Policies Concerning Connected Transactions**

• Directors and executives must inform the Company of a relationship or connected transactions of the business that may incur conflicts of interest.

• Directors and executives must avoid performing any connected transactions that may incur conflicts of interest with the Company or its subsidiaries. In case it deems necessary to perform a transaction that is not considered a normal business operation or has different trade conditions from those performed with other customers or third parties, the Company must follow regulations set forth by the Stock Exchange of Thailand, the Capital Market Advisory Board and the Securities and Exchange Commission.

• The Company shall disclose any connected transactions with potential conflicts of interest or any related transaction with the criteria specified by the Stock Exchange of Thailand, the Capital Market Advisory Board and the Securities and Exchange Commission.

• The Company shall assign the Internal Audit Division to conduct a review of connected transactions on a quarterly basis as well as identifying measures to control, inspect and monitor such connected transactions as well as randomly review actual transaction to ensure its compliance with the contract or specified conditions.

#### **Tendencies of Future Connected Transactions**

Even though the Company and its subsidiaries established a policy to avoid connected transactions with potential conflicts of interest, the Company and its subsidiaries still have to perform connected transactions between each other and with other related persons in the future. Examples of connected transactions arising from necessity and for the purpose of contract continuity are as follows:

- Lease of land, office space, control room and electricity system control room from BCP.
- Agreement on providing administrative service with BCP.
- Agreement on providing IT system service with BCP.

In the future, if the Company shall make any other connected transactions apart from those listed above, the Company shall comply with laws regarding securities and the stock market, including regulation, notification, order or specification prescribed by the Securities and Exchange Commission, the Capital Market Advisory Board and the Stock Exchange of Thailand. In a case where connected transactions are considered normal business transactions or transactions to support the Company's overall business or transaction which may be continued in the future, the Company shall define a policy to determine a scope of such transaction to ensure its similarity with normal transactions under similar circumstance and shall be in line with good corporate governance policy.

Besides, the Internal Audit Division shall review such transactions to verify whether the price can be referred to the market price and having general trade conditions similar to other business operations while being comparable to other business partners who are an outsider to maintain the highest benefit of the Company. The Internal Audit Committee shall submit audit results to the Audit Committee for further consideration on a quarterly basis. If the Audit Committee finds out any operation deviation which is contradictory to the established policy, the Audit Committee shall promptly notify the Board of Directors or the Managing Director to find out the best solution.

### Management Discussion and Analysis For 2018 Results

#### **Business overview**

FY2018: BCPG PCL. (the Company) booked record-breaking net profit of THB 2,219.2 million, significantly increased by THB 445 million or 25.1% from FY2017.

In 2018, business continues to grow, mainly thanks to two solar assets monetization in Japan to Infrastructure Fund as well as CODs of solar projects both in Thailand (8.9 MW) and Japan (4.0 MW).

#### Key development during 2018

**February:** Signed Memorandum of Understanding (MOU) with 6 business partners and Estate Authority of Thailand to develop Eastern Economic Corridor to develop clean energy system and utilize blockchain technology to develop Smart Energy community.

March: Singed MOU with Provincial Electricity Authority (PEA) to promote and develop power generation from renewable energy by utilizing energy storage system and energy management system for household use. The systems are targeted to be deployed in 5 provinces e.g. Chiangmai, Rayong, Phuket, Nakhon Ratchasima and Ubon Ratchathani.

In addition, the company signed MOU with Bangchak Corporation or BCP, its mother company to develop rooftop solar installation projects at BCP's service stations. The initial target is set to be at 30 – 50 service stations.

**April:** Gotemba project located in Shizuoka prefecture, Japan has been in commercialized stage. The project is entitled to contracted capacity of 4.0 MW with 20-year contract and FiT rate of JPY 32 per unit. Tokyo Electric Power Company Holdings, Inc. will be off-taker. June: Won bidding from Chiang Mai University to be its rooftop solar developer of 12.0 MW. The project is aimed to drive Chiang Mai University's smart city and clean energy project. The project is entitled to 20-year contract with expected investment cost of THB 400 – 500 million. It is expected to be commercialized within 2020.

In addition, the company has acquired ordinary shares in Lomligor company limited to expand business portfolio in wind power plant project in Thailand. The wind project of 9.0 MW is located at Pak Panang district, Nakhon Sri Thammarat province. The company expects the project to start its commercial phase within Q2/2019. The project is entitled to adder of THB 3.50 per unit (in addition to base tariff) with 25-year contract which PEA will be the off-taker.

July: COD of two solar power plant projects, a co-project with War Veterans Organization of Thailand: (1) Saraburi province with contracted capacity of 5 MW and (2) Kanchanaburi province with contracted capacity of 3.94 MW (so-called solar projects with WVO). These two projects are entitled to 25-year contract with FiT of THB 4.12 per unit which PEA will be off-taker.

In addition, the company has been selected to be listed in ESG100 index by ThaiPat Institute. The inclusion emphasizes the company's outstanding performance in terms of environment, social and corporate governance.

August: Inaugurated Peer-to-Peer electricity trading from rooftop solar at Town Sukhumvit (T77) in a collaboration with Sansiri PCL. The company believes that this pilot project will be a starting point for other retail projects going forward.

**September:** Completed two solar assets monetization in Japan to Infrastructure Fund or IFF - Nagi and Nikaho projects with total contracted capacity of 19.3 MW – on 28 September 2018. The company received income from assets monetization of JPY 10,388 million equal to THB 3,046 million.

**October:** Rated CG score at 5 stars by Thai Institute of Directors (Thai IOD) which presented excellent results in Corporate Governance. The CG score has been improved from 4 star equal to "very good" in CG award last year. **Operating results for year ended December 31, 2018** Contracted capacity breakdown by countries and types of energy at the end of 2018:

## units: Equity MW

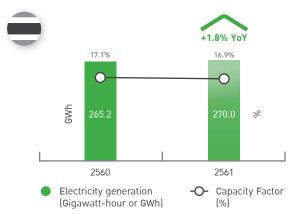
Country	2017	2018	۵%
Thailand			
•	130.0	138.9	6.8
Japan			
•	30.0	14.7	-51.0
Indonesia			
<b>A</b>	157.5	157.5	0.0
the Philippines			
4	14.4	14.4	0.0
Total	331.9	325.5	-1.9

At the end of 2018, total contracted capacity was at 325.5 MW, decreased by 1.9% YoY mainly due to assets monetization of two solar power plants (Nikaho and Nagi) in Japan to IFF with a total contracted capacity of 19.3 MW. However, there were CODs of three solar farm projects during the year including Gotemba in Japan (contracted capacity of 4.0 MW) in Q2/2018 and two cooperative solar phase (WVO) projects in Thailand (contracted capacity of 8.9 MW) in Q3/2018.

## Operating performance breakdown by geography

Revenue from sales of electricity and other income

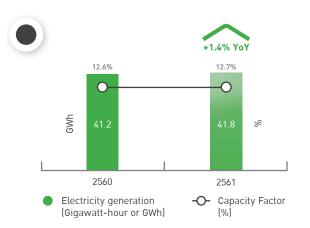
Unit: THB mn	2017	2018	۵%
Thailand	2,841.0	2,857.5	0.6
Japan	481.5	444.6	-7.7
Other income (TH)	-	11.7	NA
Other income (JP)	-	6.5	NA
Total	3,322.5	3,320.3	-0.1



## The company and subsidiaries: Thailand Sellable output & Capacity factor

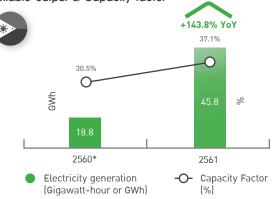
For year 2018, solar farms in Thailand have recorded operating revenue of THB 2,857.5 million, grew by 0.6% YoY mainly due to an increase of electricity generation that increased by 1.8% YoY to 270.0 GWh. The increase in electricity generation was supported by newly COD of two cooperative solar phase 2 (WVO) projects (total contracted capacity of 8.9 MW). However, as the WVO projects are entitled to FiT of THB 4.12 per unit which have lower tariff compared to the prior COD projects which entitled to Adder scheme of THB 8.0 per unit and FiT scheme of THB 5.66 per unit, the lower FiT rate resulted to lower revenue growth than electricity generation growth. The average capacity factor of each project remained constant at 16.9% from last year at 17.1%

## Subsidiaries: Japan Sellable output & Capacity factor



For year 2018, operating revenue from solar farms in Japan was at THB 444.6 million, decreased by 7.7% YoY from THB 481.5 million in 2017. Even though the electricity generation increased slightly by 1.4% YoY to 41.8 GWh, the decline in revenue was mainly due to (1) two solar assets monetization as aforementioned (2) lower revenue recognition from electricity sales of Gotemba project between Q1/2018 until 15 April 2018 (pre-COD period) as the project is entitled to FiT rate of JPY 6.3 per unit and the FiT rate has been recognized as the deductible item in investment cost (according to accounting standard). However, after official COD (from 16 April 2018 onwards), Gotemba project is entitled to FiT scheme of JPY 32 per unit which is lower than the prior projects that are entitled to FiT scheme of JPY 36 – 40 per unit and (3) negative foreign currency translation of financial statement due to the appreciation of THB against JPY currency during the period resulted in the declined of operating revenue in THB terms. Average capacity factor of solar farms in 2018 remained stable YoY at 12.7%.

## Investment in associates: the Philippines Sellable output & Capacity factor



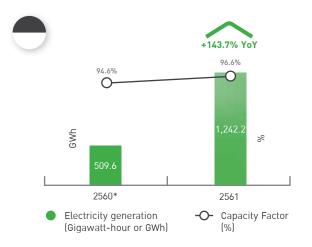
#### \* Remark:

2017 recorded share of profit from operation for 7 months / electricity generation calculation according to % of holding

For year 2018, share of profit from operation (before amortization) from wind power plant in the Philippines increased to THB 72.6 million from THB 1.1 million in 2017 mainly supported by first full-year recognition of share of profit during 2018 vs. 7-month recognition during 2017 as well as an increase in electricity generation from full-period recognition by 143.8% YoY to 45.8 GWh (based on holding percentage). In addition, the increase in electricity generation was driven by higher capacity factor to 37.1% from 30.5% in 2017 mainly thanks to improving average wind speed with regards to monsoon, depression and typhoon that hit the area where project is located.

#### Investment in associates: Indonesia

Sellable output & Capacity factor



For year 2018, the Group of Companies recorded share of profit from operation (before amortization) from geothermal power plants in Indonesia of THB 761.3 million, increased by 128.9% from prior year particularly due to a first full-period recognition of share of profit, compared to 5-month recognition in 2017 as well as an increase in electricity generation by 143.7% YoY from full-period record to 1,242.2 GWh (based on holding percentage). However, capacity factor remained at 96.6%, remained constant vs. 2017 given to the characteristic of geothermal power plant which has stable operation and limited impact from seasonality factor.

#### \* Remark:

2017 recorded share of profit from operation for 7 months / electricity generation calculation according to % of holding

## **Overall business performance**

Overall business performance

Unit: THB million	2017	2018	Change (%)
Revenue from sale and redering of service	3,322.5	3,320.3	-0.1%
Cost of sale and rendering of services	(968.5)	(969.1)	0.1%
Gross profit	2,354.0	2,351.2	-0.1%
Administrative expenses	(658.9)	(591.4)	-10.2%
Administrative expenses	(658.9)	(548.2)	-16.8%
Tax income/expense related to IFF	-	(43.2)	NA
Operating profit	1,695.1	1,759.8	3.8%
EBITDA (excl. expenses related to IFF)	2,397.3	2,496.0	4.1%
Share of profit of investment in associates	507.5	203.7	-59.9%
Other income/(expense)	245.0	909.5	271.2%
(Loss) from foreign currency forward contracts	(304.2)	-	NA
Gain/(loss) on foreign exchange	72.4	(27.6)	-138.1%
EBIT	1,708.4	2,641.7	54.6%
Finance costs	(436.1)	(520.6)	19.4%
EBT	1,779.8	2,324.8	30.6%

Unit: THB million	2017	2018	Change (%)
Income tax expense (benefit)	(5.6)	(105.6)	1782.0%
Income tax expense (benefit)	(5.6)	(18.3)	225.5%
Tax expense related to IFF	-	(87.3)	NA
Net profit	1,774.2	2,219.2	25.1%
Recurring profit*	1,461.5	1,690.0	15.6%
Basic Earnings per Share (THB)	0.89	1.11	24.7%

#### Remark:

\* Excluding gain/(loss) on FX and one-time items

# Financial position of the Group of Companies as at 31 December 2018

#### Revenue

For 2018, total revenue from sales and rendering of services stood at THB 3,320.3 million, remained stable from prior year. Even though overall revenue contribution from solar farms in Thailand has been improved slightly by 1.0% YoY to THB 2,869.2 million (equivalent to 86.4%), the overall revenue growth was offset by lower revenue contribution from Japan which declined by 6.3% to THB 451.1 million (equal to 13.6%) primarily attributable to solar assets monetization to IFF which led to an absence in revenue recognition in Q4/2018. Nonetheless, the revenue growth was partly supported by COD of Gotemba project during Q2/2018.

#### Gross profit

For 2018, the company recorded gross profit of THB 2,351.2 million or gross profit margin at 70.8%, stable from 2017.

#### Administrative expense

For 2018, administrative expense was at THB 548.2 million (excluding tax income/(expense)) related to IFF booked in second half of 2018), decreased by THB 110.7 million or 16.8% mainly driven by lower acquisition related fee.

#### **EBITDA** from operation

For 2018, the company recorded EBITDA from operation at THB 2,496.0 million, increased by THB 98.7 million or 48.1% YoY. The increase was mainly driven by a decrease in administrative expense (amounted to THB 110.7 million) resulted from a decline in acquisition related fees (consultant fees) during 2017 as well as lower personnel expense. In terms of %SG&A to sales in 2018 stayed at 16.5%, decreased from 19.8% in 2017.

# Share of profit of investment in associates Share of profit of investment in associates breakdown:

Share of profit from operation (before one-time items)

Unit: THB million	2017 Restated	2018
Wind power plant in the Philipp	pines	
Share of profit from operation	1.1	72.6
Amortization	-21.6	-33.3
Net share of profit	-20.5	39.3
Geothermal power plant in Inde	onesia	
Share of profit from operation	332.6	761.3
Amortization	-166.4	-390.4
Net share of profit	166.2	370.9
Total net share of profit	145.7	410.2

For 2018, share of profit of investment in associates (before amortization) was at THB 833.9 million, increased from THB 333.7 million or 149.9% YoY mainly due to an increase in share of profit of investment in associates particularly from contribution of geothermal power plants given to full-year recognition (vs. 5-month recognition in 2017) as well as stable and resilient operations of geothermal power plants.

## One-time items

Unit: THB million	2017 Restated	2018		
Total net share of profit	145.7	410.2		
Wind power plant in the Philippines				
Gain on purchase	361.8	-		
Geothermal power plants in In	donesia			
Tax provision*	-	-83.8		
Refinancing related expense	-	-122.7		
Total one-time items	361.8	-206.5		
Total share of profit of investment in associates	507.5	203.7		

#### Remark:

\*Tax provision has been recorded according to conservative accounting policy

For 2018, the company recorded share of profit of THB 203.7 million decreased by 59.9% or THB 303.8 million from THB 507.5 million in 2017. The decline was mainly owing to an absence of THB 308.7 million one-time gain on purchase of wind power plant booked in Q4/2017, one-time full amortization of deferred issuance cost resulted from financing activity to allow financing conditions to be more flexible amounted to THB 122.7 million and a record of tax provision.

### Other income

For 2018, the company recorded other income of THB 909.5 million, increased significantly by THB 664.5 million or 271.2% from THB 245.0 million in 2017 primarily caused by gain from assets monetization to IFF amounted to THB 793.0 million in Q3/2018 as well as a record of insurance claim from damaged solar panels caused by typhoon in Japan amounted to THB 100.9 million during Q2/2018.

#### Gain/(Loss) from foreign exchange

For 2018, the company recorded net loss in FX of THB 27.6 million mainly due to an increase in debts value in THB terms given to net liability balance sheet exposure after THB weakening again JPY during the period. Moreover, the company booked net loss in FX of THB 231.7 million mainly caused by loss in forward contract made to hedge foreign currency movement during the acquisition transaction of geothermal power plant in 2017.

#### Finance costs

For 2018, finance costs were at THB 520.6 million, increased by THB 84.5 million or 19.4%. An increase was largely due to an increase in average interest-bearing debt during the year to THB 16,297.8 million from THB 13,589.3 million in 2017 in tandem with loan drawdown for solar farm construction in Japan and Lomligor project as well as full-year recognition of finance costs funded for investments in geothermal power plants in Indonesia and wind power plant in the Philippines during 2017. However, average cost of debt in 2018 was at 3.19%, compared to 3.21% in 2017.

#### Corporate income tax

For 2018, corporate income tax increased significantly by THB 100.0 million to THB 105.6 million from THB 5.6 million in 2017. The increase was mainly due to a rise in tax expense related to solar assets monetization to IFF in Japan during Q3/2018. Effective tax rate was at 4.5%, compared to 0.3% in 2017.

#### Net profit

For 2018, net profit was at THB 2,219.2 million, increased by THB 445.0 million or 25.1% from THB 1,774.2 million mainly driven by solar assets monetization in Japan as well as resilient operation of solar farms in Thailand. Net profit margin stood at 66.8% and EPS of THB 1.11 per share, compared to 2017 net profit margin of 53.4% and EPS of THB 0.89 per share.

#### Recurring net profit (excluding one-time items)

For 2018, recurring net profit was THB 1,690.0 million, increased significantly by THB 228.5 million or 15.6%. Recurring net profit margin stayed at 50.9%, increased from 44.0% in 2017.

## Financial position as at 31 December 2018 Assets

Total assets were at THB 31,557.9 million, remained constant from 2017. Key components of assets are as follow:

Investment in associates stood at THB 13,500.7 million increased by 1.6% from prior year. The increase was mainly due to positive share of profit contribution from investments in associates record during the year.

Property Plant and Equipment were at THB 12,945.3 million decreased by 6.8% mainly due to two solar assets monetization in Japan (Nagi and Nikaho project) to Infrastructure Fund in Japan.

#### Liability and Shareholders' equity

Total liabilities decreased by 7.4% to THB 16,415.6 million mainly owing to a decrease in interest-bearing debt. At the end of 2018, interest-bearing debt declined by 8.6% to THB 15,567.2 million from 2017 mainly attributable to repayment of long-term loan, totaling THB 2,028 million, from financial institutions post solar assets monetization completion at the end of Q3/2018.

Interest-bearing debt breakdown by maturity as details follow:

Maturity	2017	%	2018	%	∆%
< 1 year	1,415.2	8.3	1,520.6	9.8	+7.4
1 – 5 year	5,522.0	32.4	11,430.1	73.4	+107.0
> 5 year	10,091.1	59.3	2,616.5	16.8	-74.1
Total	17,028.4	100.0	15,567.2	100.0	-8.6

However, interest-bearing debt breakdown by currency shows that the largest proportion of debts is in THB terms, followed by interest-bearing debts in JPY and USD terms. The afore-mentioned currency mix of debt is in line with the use of debts. Detailed breakdown is in the table below:

Currency (%)	2017	2018	∆%
ТНВ	45.3	51.1	+5.8
JPY	52.8	43.0	-9.8
USD	1.9	5.9	+4.0
Total	100.0	100.0	

Equity attributable to owners of the company worth THB 15,142.1 million, increased by 7.2% from 2017. The increase was mainly owing to a growing net profit from operation during the period. In addition, the company has paid dividend to shareholders totaling THB 1,277.5 million during 2018.

# Cash flow of the Company and subsidiaries as at 31 December 2018

At the end of 2018, net cash flow received from operating activities was THB 2,473.8 million, increased by 5.2% or THB 122.4 million from prior period. The increase was supported by higher net profit from profitable operation during the year.

Net cash flow received from investing activities during 2018 was at THB 1,341.9 million mainly thanks to cash receipt from solar assets monetization to IFF amounted to THB 3,039.6 million and a use of cash for solar project construction of THB 1,702.8 million, compared to net cash outflow of THB 13,026.4 million in 2017 mainly owing to key investments in associates made in geothermal power plants in Indonesia and wind power plant in the Philippines.

Net cash outflow for financial activities during 2018 was at THB 3,400.0 million mainly due to loan repayment to financial institutions amounted to THB 3,339.4 million as well as dividend payment to shareholders totaling THB 1,277.5 million. Nonetheless, the company has net cash inflow from financial activities during 2017 amounted to THB 5,362.2 million mainly due to financing activity secured for investment in geothermal power plants.

Cash and cash equivalents at end of 2018 were at THB 2,425.3 million increased by 21.0% or THB 421.3 million from end of 2017.

### Analysis of key ratios as at 31 December 2018

Return to Equity (ROE) at end of 2018 increased to 15.16x from 12.84x at end of 2017. An increase was due to rising net profit margin to 66.8% from 53.4%.

Net interest-bearing debt to equity decreased significantly to 0.87x from 1.06x at end of 2017. The decrease was mainly caused by long-term loan repayment as well as an increase of cash during the period.

	2017	2018	Δ%
Profitability ratio			
Gross profit margin (%)	70.85	70.81	-0.04
EBITDA margin (%)	72.15	73.87	+1.7
Net profit margin (%)	53.40	66.84	+13.4
ROE (%)	12.84	15.16	+2.3
ROA (%)	6.19	7.00	+0.8
Liquidity ratio			
Current ratio (times)	1.63	1.62	-1.0
DSCR (times)	1.63	1.97	-0.7
Leverage			
Interest-bearing debt / equity (times)	1.21	1.03	-14.9
Net interest-bearing debt/ equity (times)	1.06	0.87	-18.6
Total liability/equity (times)	1.26	1.08	-13.6

Key factors which could affect to company's performance The company estimates key factors which could affect its short-term operations as follow:

- Changes in policy of government and other related parties' in conducting businesses in Thailand and Japan. The change might affect the company's under construction projects and prospect of business in the future.
- (2) An increase in Ft. rate will positively support revenue of solar farms in Thailand.
- (3) The appreciation of THB against JPY and USD will allow the company to book gain in FX translation due to net liability balance sheet exposure (mainly in JPY currency). In contrast, the weakening THB against JPY and USD will allow the company to book loss in FX translation while revenue in THB terms (translated from JPY currency) tends to increase.
- (4) A rise in interest rate is expected to allow financial cost of the company to rise slightly since approx. 90% of the company's interest-bearing debt bear with floating rates. However, the company believes that the financial cost will be managed at optimal level.
- (5) COD of Lomligor wind power plant located in Nakhon Sri Thammarat. The project has contracted capacity of 8.965 MW and expected to be commercialized within 2Q19. The COD of this project will support the company's growth going forward.

## **Report from Board of Directors' Responsibilities for the Financial Statements**

The Board of Directors is responsible for the consolidated financial statements and the company financial statements of BCPG Public Company Limited, including financial information as shown in the Annual Report

In 2018, the financial statements were stated in accordance with generally accepted accounting principles under the Accounting Professions Act, applying the appropriate accounting policies and consistently adhering with careful discretion and best efforts in the preparation. In addition, sufficient information on significant topics was transparently disclosed in the notes accompanying the financial statements, for the benefit of shareholders and investors.

The Board of Directors has provided and maintained efficient management practice, namely Good Corporate Governance, risk management as well as appropriate internal control system, to reasonably ensure that the accounting data are accurate, complete, and sufficient, which can maintain assets of the Company and prevent fraud and materially irregular operations. In this regard, the Board of Directors has appointed Audit Committee, who are qualified independent committee members aligned with the regulations of the Stock Exchange of Thailand (SET), to ensure that accounting policies, the quality of the financial reports, internal controls, and internal audit systems are accurate, adequate and effective, as well as reviewing connected transactions either with enterprise or people and activities complied with relevant rules and regulations. The opinions of Audit Committee concerning the matters are shown the Report of Audit Committee within this annual report.

The Board of Directors believes that with the application of internal control system of the Company, it can be assured with reasonable confidence that the consolidated financial statements and the financial statements of the Company for the year ending 31 December 2018, are reliable and prepared in conformity with generally accepted accounting principles, and carried out accurately in accordance with law and all relevant rules and regulations.

- signed -Mr. Pichai Chunhavajira Chairman - signed -Mr. Bundit Sapianchai **Presiden** 

## **Independent Auditor's Report**

#### To the Shareholders of BCPG Public Company Limited

#### Opinion

I have audited the consolidated and separate financial statements of BCPG Public Company Limited and its subsidiaries (the "Group") and of BCPG Public Company Limited (the "Company"), respectively, which comprise the consolidated and separate statements of financial position as at 31 December 2018, the consolidated and separate statements of income and comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of the Group and the Company, respectively, as at 31 December 2018 and their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

#### **Basis for Opinion**

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of my report. I am independent of the Group and the Company in accordance with the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### **Key Audit Matters**

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Refer to Notes 3 (a) and 4 to the financial statements.			
The key audit matter	How the matter was addressed in the audit		
During 2018, the Company has completed the fair value assessment of net assets acquired from an acquisition of investment in associate in Indonesia which operates geothermal power plant during 2017. Due to the materiality of the transactions and the significant	- Inquired management and understood on the procedures		
judgment and complexities involved in determining the fair value, I considered as the key audit matter.	<ul> <li>acquired at the date of acquisition.</li> <li>Evaluated the independence and competency of independent appraiser.</li> <li>Involved KPMG valuation specialist to evaluate valuation methodology and financial parameters applied to the discount rate of intangible assets.</li> <li>Evaluated significant assumptions underpinning the valuations reference to internal and external information and mathematical accuracy.</li> <li>Considered the adequacy of disclosures in accordance with Thai Financial Reporting Standard.</li> </ul>		

## Fair value assessment of net assets acquired from an acquisition of investment in associate in Indonesia

#### Impairment testing of an investment in associate

Refer to Notes 3 (i) and 10 to the financial statements.				
The key audit matter	How the matter was addressed in the audit			
The Company has an investment in associate in Indonesia and	My audit procedures included the following:			
there are risks from various external factors such as the fluctuation	- Understand the management's operation plan, process of the			
in economies, politics and laws. There is a risk that the operating	indicators identification and impairment testing process and			
results and the investments might be significantly less than the	tested the calculation of recoverable amount prepared by			
initial forecast and budget and might result in the assets' carrying	the management.			
value being higher than the recoverable amounts, which might	- Assessed the key assumptions estimated by the management			
represent losses from impairment.	with reference to internally and externally derived sources			
	after taking into account the historical forecasting accuracy.			
Due to the materiality of the transactions, the management's	- Evaluated the appropriateness of valuation methodology and			
significant judgment and complexities involved in estimating a	financial parameters applied to the discount rate.			
recoverable amount of investment in associate from discounted	- Considered the adequacy of disclosures in accordance with			
cash flow method, I considered as the key audit matter.	Thai Financial Reporting Standard.			

### Emphasis of Matter

I draw attention to note 4 to the financial statements. The finalization of the valuation of net assets of an entity in Indonesia which the Company acquired on 26 July 2017 was completed in July 2018. The corresponding figures presented are based on the audited financial statements as at and for the year ended

31 December 2017 after making the adjustments described in notes 4. My opinion is not modified in respect of this matter.

#### **Other Information**

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and request that the correction be made.

# Responsibilities of Management and Those Charged with Governance for the Consolidated and Separate Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's and the Company's financial reporting process.

### Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

 Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

- signed -(Waiyawat Kosamarnchaiyakij) Certified Public Accountant Registration No. 6333

KPMG Phoomchai Audit Ltd. Bangkok 20 February 2019

# **BCPG Public Company Limited and its Subsidiaries** Statement of financial position

		financial statements		financial statements		
		31 Decer	mber	31 Decer	nber	
Assets	Note	2018	2017	2018	2017	
			(Restated)			
			(in Bah	nt)		
Current assets						
Cash and cash equivalents	6	2,425,311,808	2,003,983,515	194,467,866	205,697,788	
Trade accounts receivable	7	523,816,182	507,242,620	130,478,381	117,217,387	
Dividend receivable	5	-	-		92,400,000	
Other receivables	5, 8	222,935,898	182,714,516	110,784,069	183,837,465	
Short-term loan to related party	5	-	-	255,000,000	-	
Current portion of long-term loan						
to related parties	5	-	-	1,240,138,310	-	
Current tax assets		3,177,760	2,977,199	3,075,799	2,840,208	
Total current assets		3,175,241,648	2,696,917,850	1,933,944,425	601,992,848	
Non-current assets						
Investments in subsidiaries	5, 9	-	-	6,589,795,478	6,353,336,375	
Investments in associates	4, 10	13,500,703,702	13,287,784,919	11,956,425,502	11,956,425,502	
Other receivables	5, 8	103,032,263	-	231,318,955	-	
Longt-term loan to related party	5	-	-	3,883,174,097	4,463,764,713	
Property, plant and equipment	11	12,945,349,357	13,890,324,481	3,194,989,216	2,983,038,304	
Intangible assets	12	1,765,576,832	1,892,266,769	72,790,767	56,824,554	
Deferred tax assets		148,123	9,861,766	-	9,737,577	
Other non-current assets		67,824,478	80,140,466	2,863,197	1,714,500	
Total non-current assets		28,382,634,755	29,160,378,401	25,931,357,212	25,824,841,525	
Total assets		31,557,876,403	31,857,296,251	27,865,301,637	26,426,834,373	

The accompanying notes are an integral part of these financial statements.

# **BCPG Public Company Limited and its Subsidiaries** Statement of financial position

		Consolid financial sta		Separa financial sta	
		31 Decer		31 Decer	
Liabilities and equity	Note	2018	2017	2018	2017
			(Restated)		
			(in Bah	nt)	
Current liabilities					
Other payables	5, 13	337,853,393	233,219,468	89,414,455	92,632,026
Short-term borrowings from					
financial institutions	14	250,000,000	88,883,931	250,000,000	-
Current portion of long-term borrowings					
from financial institutions	14	1,270,576,044	1,326,354,784	1,063,514,728	1,017,430,714
Income tax payable		96,009,024	5,899,509	<u> </u>	
Total current liabilities		1,954,438,461	1,654,357,692	1,402,929,183	1,110,062,740
Non-current liabilities					
Long-term borrowings from					
related party	5	-	-	500,000,000	-
Long-term borrowings from					
financial institutions	14	14,046,590,896	15,613,152,350	12,464,553,892	11,960,977,806
Deferred tax liabilities		362,224,308	412,594,378	3,352,443	-
Non-current provisions for					
employee benefit		13,803,566	13,227,736	9,129,812	4,203,912
Provision for the decommissioning cost		32,702,441	32,827,078	-	-
Other non-current liabilities		5,873,076	4,135,304	5,873,075	4,135,304
Total non-current liabilities		14,461,194,287	16,075,936,846	12,982,909,222	11,969,317,022
Total liabilities		16,415,632,748	17,730,294,538	14,385,838,405	13,079,379,762

# **BCPG Public Company Limited and its Subsidiaries** Statement of financial position

		Consolida financial stat	tements	Separa financial stat	tements
		31 Decen	nber	31 Decen	nber
Liabilities and equity	Note	2018	2017	2018	2017
			(Restated)		
			(in Bah	<i>t</i> )	
Equity					
Share capital:	15				
Authorized share capital		10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000
Issued and paid-up share capital		9,984,137,300	9,961,521,535	9,984,137,300	9,961,521,535
Share premium					
Share premium on ordinary shares	16	2,902,544,754	2,849,332,559	2,902,544,754	2,849,332,559
Surplus on business restructuring under					
common control	16	41,025,877	41,025,877	-	-
Warrants	16	11,890,726	27,224,284	11,890,726	27,224,284
Retained earnings					
Appropriated					
Legal reserve	16	226,935,419	159,463,298	226,935,419	159,463,298
Unappropriated		1,959,092,292	1,075,615,025	353,955,033	349,912,935
Other components of equity		16,470,333	12,672,181	-	-
Equity attributable to owners					
of the parent		15,142,096,701	14,126,854,759	13,479,463,232	13,347,454,611
Non-controlling interests		146,954	146,954	-	-
Total equity	_	15,142,243,655	14,127,001,713	13,479,463,232	13,347,454,611
Total liabilities and equity	_	31,557,876,403	31,857,296,251	27,865,301,637	26,426,834,373

Pichai C

(Pichai Chunhavajira) Chairman

B. Corrent

(Bundit Sapianchai) President

# **BCPG Public Company Limited and its Subsidiaries** Statement of income

		Consolidated final For the year ender		Separate financi For the year ended	
	Note	2018	2017	2018	2017
	11010	2010	(Restated)	2010	2017
			(in Ba	ht)	
Income			·	,	
Revenue from sale and rendering of services	5, 18, 25	3,320,322,723	3,322,481,229	755,112,708	733,761,049
Interest income and dividend income	5, 19	4,768,722	40,940,605	1,678,563,404	1,741,481,270
Net gain on foreign exchange		-	72,440,984	-	69,430,433
Gain on disposal of assets		-	42,729,195	6,043	8,392
Gain on disposal of assets to infrastructure fund	11	792,959,362	-	-	-
Other income	5	111,763,466	161,328,524	570,897	1,710,128
Total income	-	4,229,814,273	3,639,920,537	2,434,253,052	2,546,391,272
Expenses					
Cost of sale and rendering of services	5	969,076,264	968,472,025	251,652,258	247,116,454
Administrative expenses	5, 20	591,443,110	658,882,465	353,696,650	416,697,061
Loss from foreign currency forward contracts	,	-	304,188,178	-	304,188,178
Net loss on foreign exchange		27,618,908	-	53,011,258	-
Finance costs	5, 23	520,569,740	436,052,229	413,252,892	300,452,808
Total expenses	· ·	2,108,708,022	2,367,594,897	1,071,613,058	1,268,454,501
Share of profit of investment in associates	10	203,693,398	507,502,911	_	-
Profit before income tax expense	10 .	2,324,799,649	1,779,828,551	1,362,639,994	1,277,936,771
Income tax expense (benefit)	24	105,571,385	5,609,460	13,197,569	(505,881)
Profit for the year		2,219,228,264	1,774,219,091	1,349,442,425	1,278,442,652
Profit attributable to:					
		2 210 229 264	1 774 310 001	1 240 442 425	1 279 442 652
Owners of parent		2,219,228,264	1,774,219,091	1,349,442,425	1,278,442,652
Non-controlling interests					
Profit for the year		2,219,228,264	1,774,219,091	1,349,442,425	1,278,442,652
Earnings per share	. 26				
Basic earnings per share (Baht)		1.11	0.89	0.68	0.64
Diluted earnings per share (Baht)		1.11	0.89	0.67	0.64

The accompanying notes are an integral part of these financial statements.

# **BCPG Public Company Limited and its Subsidiaries** Statement of comprehensive income

	Consolidated finan	cial statements	Separate financia	al statements
	For the year ended	31 December	For the year ended	31 December
	2018	2017	2018	2017
		(Restated)		
		(in Bal	nt)	
Profit for the year	2,219,228,264	1,774,219,091	1,349,442,425	1,278,442,652
Other comprehensive income				
Item that will be reclassified subsequently to profit or loss				
Exchange differences on translating foreign operations	(24,222,134)	(16,236,049)	-	-
Total item that will be reclassified subsequently to				
profit or loss	(24,222,134)	(16,236,049)	-	-
Item that will not be reclassified to profit or loss				
Gains (losses) on remeasurements of defined benefit plans	9,219,134	-	(430,196)	-
Share of other comprehensive income (loss) of associates	28,020,286	(20,005,900)		-
Total item that will not be reclassified to profit or loss	37,239,420	(20,005,900)	(430,196)	-
Other comprehensive income (loss) for the year,				
net of income tax	13,017,286	(36,241,949)	(430,196)	-
Total comprehensive income for the year	2,232,245,550	1,737,977,142	1,349,012,229	1,278,442,652
Total comprehensive income attributation to				
Owners of the parent	2,232,245,550	1,737,977,142	1,349,012,229	1,278,442,652
Non-controlling interests		-	-	-
Total comprehensive income for the year	2,232,245,550	1,737,977,142	1,349,012,229	1,278,442,652

Pichai C

(Pichai Chunhavajira) Chairman

B. Coponent (Bundit Sapianchai)

President

<b>BCPG Public Company Limited and its Subsidiaries</b>	Statement of changes in equity	

							Consolidated fin:	Consolidated financial statements					
				Surplus on business		Retained	Retained carnings	Other compor	Other components of shareholders' equity	ers' equity			
	Note	Issued and paid- up share capital	Share premium on ordinary shares	restructuring under common control	Warrants	Legal reserve	Unappropriated	Translating foreign operations	Share of other comprehensive income (loss) of associate	Total other components of shareholders' equity	Equity attributable to owners of parent	Non- controlling interests	Total equity
		1					(m b	(in Baht)					
Year ended 31 December 2017 Balance at 1 January 2017		9,950,000,000	2,820,904,051	41,025,877	ı	95,537,415	560,183,035	48,914,130	I	48,914,130	13,516,564,508	146,954	13,516,711,462
Transactions with owners,													
recorded directly in equity													
Contributions by and atstributions to owners of the parent													
Shares options exercised	15, 16	11,521,535	28,428,508	,	(12,593,430)	,		j		ı	27,356,613	ı	27,356,613
Share-based payment transactions	15		•	•	39,817,714	J			ĩ	,	39,817,714	ı	39,817,714
Dividends to owners of the Company	27	ı		'	-		(1,194,861,218)		1	1	(1,194,861,218)		(1,194,861,218)
Total transactions with owners,													
recorded directly in equity		11,521,535	28,428,508	•	27,224,284	-	(1,194,861,218)	-	-		(1,127,686,891)	,	(1,127,686,891)
Comprehensive income for the year													
Profit - Restated			•	,		•	1,774,219,091	t	,	٠	1,774,219,091	'	1,774,219,091
Other comprehensive income (loss)			1	•	-	1		(16,236,049)	(20,005,900)	(36,241,949)	(36,241,949)	-	(36,241,949)
Total comprehensive income													
for the year - Restated		-	-		,	-	1,774,219,091	(16,236,049)	(20,005,900)	(36,241,949)	1,737,977,142		1,737,977,142
Transfer to legal reserve	16	•		ı	,	63,925,883	(63,925,883)	ŧ	,	•			ı
Balance at 31 December 2017		9,961,521,535	2,849,332,559	41,025,877	27,224,284	159,463,298	1,075,615,025	32,678,081	(20,005,900)	12,672,181	14,126,854,759	146,954	14,127,001,713

**BCPG Public Company Limited and its Subsidiaries** Statement of changes in equity

							Consolidated f	Consolidated financial statements					
				Surplus on business		Retained	Retained earnings	Other compor	Other components of shareholders' equity	equity			
				restructuring under	I				Share of other comprehensive c	Total other components of			
	Note	Issued and paid- up share capital	Share premium on ordinary shares	common control	Warrants	Legal reserve	T Unappropriated	Translating foreign operations	income (loss) of associate	shareholders' equity	Equity attributable to Non-controlling owners of parent interests	Non-controlling interests	Total equity
							ų)	(in Baht)					
Ycar ended 31 December 2018													
Balance at 1 January 2018 - As previously reported		9,961,521,535	2,849,332,559	41,025,877	27,224,284	159,463,298	1,317,546,653	32,678,081	(20,005,900)	12,672,181	14,368,786,387	146,954	14,368,933,341
Effect of the fair value assessment of											(809 1EG 1867	,	(869 150 196)
acquisition of investment	4	1			-		(241,931,628)	,	•	•	(070'102'117)		10-061-261-21
Balance at 1 January 2018 - As restated	'	9,961,521,535	2,849,332,559	41,025,877	27,224,284	159,463,298	1,075,615,025	32,678,081	(20,005,900)	12,672,181	14,126,854,759	146,954	14,127,001,713
Transactions with owners,													
recorded directly in equity													
Contributions by and distributions													
to owners of the parent													
Shares options exercised	15, 16	22,615,765	53,212,195		(22,230,466)	t		I	,	·	53,597,494		53,597,494
Share-based payment transactions	75	•		•	6,896,908	r		•	1	•	6,896,908	,	6,896,908
Dividends to owners of the Company	27		-	,	_	•	(1,277,498,010)	1	-	-	(1,277,498,010)	-	(1,277,498,010)
Total transactions with owners,			• •										
recorded directly in equity	'	22,615,765	53,212,195		(15,333,558)	,	(1,277,498,010)	-		-	(1,217,003,608)		(1,217,003,608)
Comorehensive income for the year													
Profit		ı		ŧ	ı		2,219,228,264	ı	ı	•	2,219,228,264	•	2,219,228,264
Other comprehensive income (loss)		'		ı		,	9,219,134	(24,222,134)	28,020,286	3,798,152	13,017,286	-	13,017,286
Total comprehensive income for the year				1	•		2,228,447,398	(24,222,134)	28,020,286	3,798,152	2,232,245,550	1	2,232,245,550

15,142,243,655

146,954

15,142,096,701

-16,470,333

8,014,386

-8,455,947

(67,472,121) 1,959,092,292

67,472,121 226,935,419

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91

41,025,877 11,890,726

2,902,544,754

9,984,137,300

Transfer to legal reserve Balance at 31 December 2018

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The accompanying notes are an integral part of these financial statements.

Statement of changes in equity							
				Separate financial statements			
					Retained earnings	mings	
	Note	Issued and paid-up share capital	Share premium on ordinary shares	Warrants (in Baht)	Legal reserve	Unappropriated	Total shareholders' equity
Year ended 31 December 2017 Balance at 1 January 2017		9,950,000,000	2,820,904,051	• •	95,537,415	330,257,384	13,196,698,850
Transactions with owners, recorded directly in equity Contributions by and distributions to owners of the parent Shares options exercised	15, 16	11,521,535	28,428,508	(12,593,430)			27,356,613
Share-based payment transactions	15		I	39,817,714	•	- - - -	39,817,714 (1 104 861 218)
Dividends to owners of the Company Total transactions with owners, recorded directly in equity	17	11,521,535	28,428,508	27,224,284		(1,194,861,218)	(1,127,686,891)
Comprehensive income for the year Profit		·			ſ	1,278,442,652	1,278,442,652
Other comprehensive income Total comprehensive income for the year			• t		6 1	1,278,442,652	1,278,442,652
Transfer to legal reserve	16	•	•		63,925,883	(63,925,883)	·
Balance at 31 December 2017		9,961,521,535	2,849,332,559	27,224,284	159,463,298	349,912,935	13,347,454,611
Year ended 31 December 2018 Balance at 1 January 2018		9,961,521,535	2,849,332,559	27,224,284	159,463,298	349,912,935	13,347,454,611
Transactions with owners, recorded directly in equity Contributions by and distributions to owners of the parent							
Shares options exercised	15, 16	22,615,765	53,212,195	(22,230,466)	ł		53,597,494
Share-based payment transactions Dividende to owners of the Connany	15 27			0,890,908 -		- (1,277,498,010)	(1,277,498,010)
Total transactions with owners, recorded directly in equity	i	22,615,765	53,212,195	(15,333,558)	8	(1,277,498,010)	(1,217,003,608)
Comprehensive income for the year Profit		·	,	·		1,349,442,425	1,349,442,425
Other comprehensive income (loss)		1	,	6		(430,196)	(430,196)
l otal comprehensive income for the year Transfer to legal reserve	16				67,472,121	(67,472,121)	T

**BCPG Public Company Limited and its Subsidiaries** 

Transfer to legal reserve

Balance at 31 December 2018

The accompanying notes are an integral part of these financial statements.

13,479,463,232

353,955,033

226,935,419

11,890,726

2,902,544,754 .

9,984,137,300 ,

# BCPG Public Company Limited and its Subsidiaries Statement of cash flows

	Consolidated final	ncial statements	Separate financ	ial statements
	For the year ende	d 31 December	For the year ende	d 31 December
	2018	2017	2018	2017
		(Restated)		
		(in Bah	nt)	
Cash flows from operating activities				
Profit for the year	2,219,228,264	1,774,219,091	1,349,442,425	1,278,442,652
Adjustments for				
Income tax expense (income)	105,571,385	5,609,460	13,197,569	(505,881)
Finance costs	520,569,740	436,052,229	413,252,892	300,452,808
Depreciation and amortisation	693,151,101	702,196,644	179,026,527	164,918,801
Unrealised loss on foreign exchange	62,370,281	55,184,657	85,926,500	60,266,420
Provision for employee benefit	9,556,238	9,101,296	4,388,155	2,529,403
Share-based payment transactions	6,896,908	39,817,714	6,896,908	39,817,714
Interest income and dividend income	(4,768,722)	(40,940,605)	(1,678,563,404)	(1,741,481,270)
Share of profit of investment in associates, net of tax	(203,693,398)	(507,502,911)	-	-
Reversal of provisions	<b>-</b> '	(137,121,038)	-	
(Gain) loss on disposal of assets	(789,936,719)	(42,729,195)	(6,043)	(8,392)
	2,618,945,078	2,293,887,342	373,561,529	104,432,255
Changes in operating assets and liabilities				
Trade accounts receivable	(16,258,248)	(22,481,737)	(13,260,994)	(479,673)
Other receivables	(37,063,589)	75,274,241	(9,318,573)	(9,459,299)
Other non-current assets	14,262,994	4,248,964	-	-
Other payables	(97,246,609)	6,865,195	(5,853,358)	47,574,568
Other non-current liabilities	1,737,771	2,879,501	1,737,771	2,879,501
Cash generated from operating activities	2,484,377,397	2,360,673,506	346,866,375	144,947,352
Income tax paid	(10,588,230)	(9,244,073)	(1,384,288)	(1,691,511)
Net cash from operating activities	2,473,789,167	2,351,429,433	345,482,087	143,255,841
Cash flows from investing activities				
Interest received	4,997,148	47,895,472	12,428,933	52,550,255
Decrease in current investment	•	700,000,000	-	700,000,000
Dividends received	-	-	1,609,412,500	1,492,550,000
Acquisition of property, plant and equipment	(1,391,074,383)	(836,475,543)	(384,119,016)	(44,584,208)
Proceeds from disposal of assets	137,850	484,278,041	137,850	10,841
Proceeds from disposal of assets to				
infrastructure fund	3,039,577,520	-	-	-
Acquisition of intangible assets	(107,640,593)	(62,636,681)	(22,956,443)	(42,009,086)
Short-term loans to related parties	-	-	(255,000,000)	(126,216,924)
Long-term loans to related parties	-	-	(643,381,421)	(1,420,073,319)
Net cash outflow on acquisition of				
subsidiaries and associates	(204,086,137)	(13,359,443,202)	(236,459,103)	(11,956,425,502)
Net cash from (used in) investing activities	1,341,911,405	(13,026,381,913)	80,063,300	(11,344,197,943)

The accompanying notes are an integral part of these financial statements.

# BCPG Public Company Limited and its Subsidiaries Statement of cash flows

For the year ended 31 December       For the year ended 31 December         2018       2017       2018       2017         Cash flows from financing activities       Image: Cash flows from financing activities       Image: Cash flows from financing activities       Image: Cash flows from financing activities         Finance costs paid       (500,662,943)       (455,739,690)       (395,992,692)       (310,233,492)         Dividends paid to owners of the Company       (1,277,498,010)       (1,493,350,838)       (1,277,498,010)       (1,493,350,838)         Repayment of short-term loans from financial institutions       (89,741,775)       (88,214,444)       -       -		Consolidated finar	icial statements	Separate financi	al statements
(Restated)         ( <i>in Baht</i> )         Cash flows from financing activities         Finance costs paid       (500,662,943)       (455,739,690)       (395,992,692)       (310,233,492)         Dividends paid to owners of the Company       (1,277,498,010)       (1,493,350,838)       (1,277,498,010)       (1,493,350,838)		For the year ender	d 31 December	For the year ended	131 December
Cash flows from financing activities       (in Baht)         Finance costs paid       (500,662,943)       (455,739,690)       (395,992,692)       (310,233,492)         Dividends paid to owners of the Company       (1,277,498,010)       (1,493,350,838)       (1,277,498,010)       (1,493,350,838)		2018	2017	2018	2017
Cash flows from financing activities         (500,662,943)         (455,739,690)         (395,992,692)         (310,233,492)           Dividends paid to owners of the Company         (1,277,498,010)         (1,493,350,838)         (1,277,498,010)         (1,493,350,838)			(Restated)		
Finance costs paid(500,662,943)(455,739,690)(395,992,692)(310,233,492)Dividends paid to owners of the Company(1,277,498,010)(1,493,350,838)(1,277,498,010)(1,493,350,838)			(in Ba	ht)	
Dividends paid to owners of the Company (1,277,498,010) (1,493,350,838) (1,277,498,010) (1,493,350,838)	Cash flows from financing activities				
	Finance costs paid	(500,662,943)	(455,739,690)	(395,992,692)	(310,233,492)
Repayment of short-term loans from financial institutions (89,741,775) (88,214,444) -	Dividends paid to owners of the Company	(1,277,498,010)	(1,493,350,838)	(1,277,498,010)	(1,493,350,838)
	Repayment of short-term loans from financial institutions	(89,741,775)	(88,214,444)	-	-
Proceeds from short-term loans from financial institution 250,000,000 - 250,000,000 -	Proceeds from short-term loans from financial institution	250,000,000	-	250,000,000	-
Proceeds from long-term loans from financial institutions 1,503,974,460 8,847,773,966 1,503,974,460 8,530,999,400	Proceeds from long-term loans from financial institutions	1,503,974,460	8,847,773,966	1,503,974,460	8,530,999,400
Proceeds from long-term loans from related party 500,000,000 -	Proceeds from long-term loans from related party	-	-	500,000,000	*
Repayment of long-term loans from financial institutions (3,339,447,204) (1,475,581,480) (1,072,298,460) (1,104,988,105)	Repayment of long-term loans from financial institutions	(3,339,447,204)	(1,475,581,480)	(1,072,298,460)	(1,104,988,105)
Payment for reduction of the outstanding liability	Payment for reduction of the outstanding liability				
relating to a finance lease (190,802)	relating to a finance lease	(190,802)	-	-	-
Proceeds from exercise of shares options 53,597,494 27,356,613 53,597,494 27,356,613	Proceeds from exercise of shares options	53,597,494	27,356,613	53,597,494	27,356,613
Net cash from (used in) financing activities (3,399,968,780) 5,362,244,127 (438,217,208) 5,649,783,578	Net cash from (used in) financing activities	(3,399,968,780)	5,362,244,127	(438,217,208)	5,649,783,578
Net increase (decrease) in cash and cash equivalents,         before effect of exchange rates       415,731,792       (5,312,708,353)       (12,671,821)       (5,551,158,524)		415,731,792	(5,312,708,353)	(12,671,821)	(5,551,158,524)
Effect of exchange rate changes on cash and	Effect of exchange rate changes on cash and				
cash equivalents 5,596,501 (44,467,773) 1,441,899 2,159,455	e e	5,596,501	(44,467,773)	1,441,899	2,159,455
Net increase (decrease) in cash and cash equivalents 421,328,293 (5,357,176,126) (11,229,922) (5,548,999,069)	Net increase (decrease) in cash and cash equivalents	421,328,293	(5,357,176,126)	(11,229,922)	(5,548,999,069)
Cash and cash equivalents at 1 January 2,003,983,515 7,361,159,641 205,697,788 5,754,696,857	Cash and cash equivalents at 1 January	2,003,983,515	7,361,159,641	205,697,788	5,754,696,857
Cash and cash equivalents at 31 December         2,425,311,808         2,003,983,515         194,467,866         205,697,788	Cash and cash equivalents at 31 December	2,425,311,808	2,003,983,515	194,467,866	205,697,788

Note	Contents
1	General information
2	Basis of preparation of the financial statements
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These notes form an integral part of the financial statements.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from Thai language financial statements, and were approved and authorized for issue by the Board of Directors of the Company, on 20 February 2019.

## **1** General information

BCPG Public Company Limited, the "Company", is incorporated in Thailand on 17 July 2015 and has its registered office at 2098 M Tower Building, 12th Floor, Sukhumvit Road, Phra Khanong Tai, Phrakanong, Bangkok, Thailand.

The Company was listed on the Stock Exchange of Thailand ("SET") on 28 September 2016.

The parent company during the financial year was Bangchak Corporation Public Company Limited which is incorporated in Thailand.

The principal business of the Group are production and distribution of electricity from solar cell and investment in alternative energy business.

Details of the Company's subsidiaries were disclosed in note 5 and 9 to the financial statements.

## 2 Basis of preparation of the financial statements

#### (a) Statement of compliance

The financial statements are prepared in accordance with Thai Financial Reporting Standards (TFRS); guidelines promulgated by the Federation of Accounting Professions ("FAP"); and applicable rules and regulations of the Thai Securities and Exchange Commission.

The FAP has issued new and revised TFRS effective for annual accounting periods beginning on or after 1 January 2018. The initial application of these new and revised TFRS has resulted in changes in certain of the Group's accounting policies. These changes have no material effect on the financial statements.

In addition to the above new and revised TFRS, the FAP has issued a number of new and revised TFRS which are not yet effective for current periods. The Group has not early adopted these standards in preparing these financial statements. Those new and revised TFRS that are relevant to the Group's operations are disclosed in note 30.

#### (b) Basis of measurement

The financial statements have been prepared on the historical cost basis except stated in accounting policies.

#### (c) Functional and presentation currency

The financial statements are prepared and presented in Thai Baht, which is the Company's functional currency.

#### (d) Use of judgements and estimates

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

Information about assumption and estimation uncertainties that have a significant risk of resulting in a material adjustments to the carrying amounts of assets and liabilities within the year ending 31 December 2019 is included in the following notes:

Note 10 Impairment test1: key assumptions underlying recoverable amounts;

Note 3 (1) Measurement of defined benefit obligations: key actuarial assumptions;

### Measurement of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Further information about the assumptions made in measuring fair values is disclosed in note 28.

#### 3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

### (a) Basis of consolidation

The consolidated financial statements relate to the Company and its subsidiaries (together referred to as the "Group") and the Group's interest in associates.

#### **Business** combinations

The Group applies the acquisition method for all business combinations when control is transferred to the Group, as describe in subsidiaries section, other than those with entities under common control.

The acquisition date is the date on which control is transferred to the acquirer. Judgment is applied in determining the acquisition date and determining whether control is transferred from one party to another.

Goodwill is measured as the fair value of the consideration transferred including the recognised amount of any non-controlling interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. Any gain on bargain purchase is recognised in profit or loss immediately.

Consideration transferred includes the fair values of the assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, and equity interests issued by the Group. Consideration transferred also includes the fair value of any contingent consideration and share-based payment awards of the acquiree that are replaced mandatorily in the business combination. If a business combination results in the termination of pre-existing relationships between the Group and the acquiree, then the lower of the termination amount, as contained in the agreement, and the value of the off-market element is deducted from the consideration transferred and recognised in other expenses.

When share-based payment awards exchanged (replacement awards) for awards held by the acquiree's employees (acquiree's awards) relate to past services, then a part of the market-based measure of the awards replaced is included in the consideration transferred. If they require future services, then the difference between the amount included in consideration transferred and the market-based measure of the replacement awards is treated as post-combination compensation cost.

A contingent liability of the acquiree is assumed in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

Transaction costs that the Group incurs in connection with a business combination, such as legal fees, and other professional and consulting fees are expensed as incurred.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

#### Acquisitions from entities under common control

Business combination under common control are accounted for using a method similar to the pooling of interest method. Under that method the acquirer recognizes assets and liabilities of the acquired businesses at their carrying amounts in the consolidated financial statements of the ultimate parent company at the moment of the transaction. The difference between the carrying amount of the acquired net assets and the consideration transferred is recognized as surplus or discount from business combinations under common control in shareholder's equity. The surplus or discount will be transferred to retained earnings upon divestment of the businesses acquired.

The results from operations of the acquired businesses will be included in the consolidated financial statements of the acquirer from the beginning of the comparative period or the moment the businesses came under common control, whichever date is later, until control ceases.

#### **Subsidiaries**

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

#### Non-controlling interests

At the acquisition date, the Group measures any non-controlling interest at its proportionate interest in the identifiable net assets of the acquiree.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

#### Loss of control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

#### Interest in equity-accounted investees

The Group's interests in equity-accounted investees comprise interests in associates and a joint venture.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and joint ventures are accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and other comprehensive income of equity–accounted investees, until the date on which significant influence or joint control ceases.

#### Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income or expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

#### (b) Foreign currencies

#### Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate at the reporting date.

Non-monetary assets and liabilities measured at cost in foreign currencies are translated to the functional currency at the exchange rates at the dates of the transactions.

Foreign currency differences are generally recognized in profit or loss.

#### Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to Thai Baht at the exchange rates at the reporting date.

Goodwill and fair value adjustments arising on the acquisition of foreign operations are stated at exchange rates at the reporting date.

The revenues and expenses of foreign operations are translated to Thai Baht at rates approximating the exchange rates at the dates of the transactions.

Foreign exchange differences are recognised in other comprehensive income and accumulated in the translation reserve, except to extent that the translation difference is allocated to non-controlling interest.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Group disposes of part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount is reattributed to non-controlling interests. When the Group disposes of only part of an associate or joint venture while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, exchange gains and losses arising from such a monetary item are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income, and presented in the foreign currency translation reserve in equity until disposal of the investment.

### (c) Derivatives

Derivatives are used to manage exposure to foreign exchange, interest rate arising from operational, financing and investment activities. Derivatives are not used for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

### (d) Cash and cash equivalents

Cash and cash equivalents in the statements of cash flows comprise cash balances, call deposits and highly liquid short-term investments.

## (e) Trade and other accounts receivable

Trade and other accounts receivable are stated at their invoice value less allowance for doubtful accounts.

The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments. Bad debts are written off when incurred.

#### (f) Investments

#### Investments in associates and subsidiaries

Investments in associates and subsidiaries in the separate financial statements of the Company are accounted for using the cost method. Investments in associates in the consolidated financial statements are accounted for using the equity method.

#### (g) Property, plant and equipment

#### Recognition and measurement

#### **Owned** assets

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of selfconstructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Cost also may include transfers from other comprehensive income of any gain or loss on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised net within other income in profit or loss. When revalued assets are sold, the amounts included in the revaluation reserve are transferred to retained earnings.

#### Leased assets

Leases in terms of which the Group substantially assumes all the risk and rewards of ownership are classified as finance leases. Property, plant and equipment acquired by way of finance leases is capitalised at the lower of its fair value and the present value of the minimum lease payments at the inception of the lease, less accumulated depreciation and impairment losses. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the profit or loss.

#### Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

#### Depreciation

Depreciation is calculated based on the depreciable amount, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment. The estimated useful lives are as follows:

10 - 25	years
5 - 25	years
5 - 25	years
5 - 10	years
5 - 10	years
	5 - 25 5 - 25 5 - 10

No depreciation is provided on freehold land or assets under construction.

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

## (h) Intangible assets

#### Other intangible assets

Other intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

#### Amortisation

Amortisation is based on the cost of the asset, or other amount substituted for cost, less its residual value.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset.

The estimated useful lives for the current and comparative periods are as follows:

Right to use and cost of development of computer software	3 - 25	years
Right to use electrical transmission line	20 - 25	years
Feed-in Tariff power purchase agreement	20	years
Land right	25	years

Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

### (i) Impairment

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. The impairment loss is recognised in profit.

#### Calculation of recoverable amount

The recoverable amount of a non-financial asset is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

#### Reversals of impairment

An impairment loss in respect of a financial asset is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised in profit or loss.

An impairment loss in respect of goodwill is not reversed. Impairment losses recognised in prior periods in respect of other non-financial assets are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

#### (j) Interest-bearing liabilities

Interest-bearing liabilities are recognised initially at fair value less attributable transaction charges. Subsequent to initial recognition, interest-bearing liabilities are stated at amortised cost with any difference between cost and redemption value being recognised in profit or loss over the period of the borrowings on an effective interest basis.

### (k) Other accounts payable

Other accounts payable are stated at cost.

### (l) Employee benefits

#### Defined contribution plans

Obligations for contributions to defined contribution plans are expensed as the related service is provided.

### Defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount.

The calculation of defined benefit obligations is performed every 3 years by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognized immediately in OCI. The Group determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

#### Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

#### (m) Share-based payments

The grant-date fair value of equity-settled share-based payment awards granted to employees is generally recognised as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognised as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognised is based on the number of awards that meet the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognised is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

#### (n) Provisions

A provision is recognised if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as a finance cost.

#### (o) Share Capital

#### Ordinary share

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares and share options are recognised as a deduction from equity.

#### (p) Revenue

Revenue excludes value added taxes and other sales taxes and is arrived at after deduction of trade discounts.

#### Sale of electricity

Income from the sale of electricity is recognised in profit or loss in accordance with delivery units supplied as stipulated in the contract. Income from the sale of electricity for some entities within Thailand is entitled to receive ADDER for a period of 10 years from the commencement of commercial sales. Thereafter, subsequent to this initial period income from sale of electricity is recognised at normal rates.

#### Services rendered

Service income is recognised as services are provided.

#### Investments

Revenue from investments comprises dividend and interest income from investments and bank deposits.

#### Dividend income

Dividend income is recognised in profit or loss on the date the Group's right to receive payments is established.

#### Interest income

Interest income is recognised in profit or loss as it accrues.

#### (q) Finance costs

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions and contingent consideration.

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

#### (r) Lease payments

Payments made under operating leases are recognised in profit or loss on a straight line basis over the term of the lease. Lease incentives received are recognised in profit or loss as an integral part of the total lease expense, over the term of the lease.

Contingent lease payments are accounted for by revising the minimum lease payments over the remaining term of the lease when the lease adjustment is confirmed.

#### (s) Income tax

Income tax expense for the year comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries and jointly-controlled entities to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Future taxable profits are determined based on the reversal of relevant taxable temporary differences. If the amount of taxable temporary differences is insufficient to recognise a deferred tax asset in full, then future taxable profits, adjusted for reversals of existing temporary differences, are considered, based on the business

plans for individual subsidiaries in the Group. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

## (t) Earnings per share

The Group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which comprise convertible notes and share options granted to employees.

### (u) Segment reporting

Segment results that are reported to the Group's CEO (the chief operating decision maker) include items directly attributable to a segment.

## 4 Acquisition of investment in associate and restatement

Acquisition of investment in associate

## Star Energy Group Holdings Pte. Ltd.

On 26 April 2017, the Company signed the Share Purchase Agreement with Star Energy Investments Ltd. ("Seller") to acquire 280,000 shares of Star Energy Group Holdings Pte. Ltd. or approximately 33.33% of the total issued and paid-up shares to invest in geothermal power plant projects which owns operating 158 MW power plant projects and a development of 24 MW, located in Indonesia. On 26 July 2017, the Company and the Seller completed the conditions precedent in accordance with Share Purchase Agreement, the Company settled the payment of USD 355.69 million (approximately Baht 11,956.43 million) for the shares and received the share transfer of Star Energy Group Holdings Pte. Ltd. Management believes that by acquired this investment will enable the group to expand their investment in other renewable energy business in South-East Asia.

TFRS required Management to make preliminary assessment of the fair values of the assets, liabilities and contingent liabilities specified at the acquisition date. The Group hired an independent appraiser to determine the fair value of assets and liabilities acquired during the measurement period, which must not exceed one year from the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date. Finalisation of the valuation of net assets of investment was completed in July 2018.

## **BCPG Public Company Limited and its Subsidiaries**

### Notes to the financial statements

## For the year ended 31 December 2018

The following summarises the major classes of consideration transferred, and the fair value of net assets acquired (liabilities) assumed at the acquisition date:

	Recognised		
	value	Adjustments	Fair value
		(in million Baht)	
Power purchase agreements and concession right	117,577	(36,596)	80,981
Property, plant and equipment	33,033	3,721	36,754
Finance lease liabilities	21,486	(4,780)	16,706
Deferred tax liabilities	(56,186)	12,259	(43,927)
Other net assets (liabilities) acquired	(49,884)	-	(49,884)
Total identifiable assets (liabilities)	66,026	(25,396)	40,630
Less other shareholders' interests	(53,774)	20,727	(33,047)
Net identifiable assets (liabilities)	12,252	(4,669)	7,583
Gain on bargain purchase (recognised in share of profit			
of associates in 2017)	(296)	296	-
Goodwill	-	4,373	4,373
Consideration transferred – cash paid	11,956	-	11,956

The valuation techniques used for measuring the fair value of material assets acquired are as follows.

• The fair value of power purchase agreements and concession right was determined based on income approach using Multi-period Excess Earning Method (MEEM) with operating period under power purchase agreement and related conditions. Key assumptions included forecast revenue and discount rate.

• The fair value of property plant and equipments was determined based on market approach.

The changes in fair value adjustment of net assets (liabilities) acquired at the acquisition date is mainly from the change in fair value of power purchase agreements and concession right. At the acquisition date in Star Energy Group Holding Pte. Ltd. (SEGHPL), certain SEGHPL's subsidiary has already been granted an approval on electricity price increase since 2016 and others subsidiaries are in process of getting an approval. The management estimated the fair value based on the information received at the time. However, at the end of second quarter of 2018, the company has received additional information that the increase in electricity price process was delayed. Furthermore, TFRS allow not later than one year period of remeasurement the fair value from the acquisition date. Therefore, it was resulted to recognise the difference between the considerations paid and fair value of net identified assets and liabilities determined by an independent appraiser as the goodwill of Baht 4,373 million, included in investment in associates in the consolidated statement of financial position.

The consolidated financial statements as at 31 December 2017 included in these financial statements have been restated to reflect new information obtained about facts and circumstances that existed as of the acquisition date and the subsequently recognised adjustments as follows;

## The impacts to the consolidated statement of financial position as at 31 December 2017:

(in thousand Baht)

Asset Investment in associate decrease Total	(241,932) (241,932)
<i>Equity</i> Retained earnings decrease <b>Total equity decrease</b>	(241,932) (241,932)

The impacts to the consolidated statement of income for the year ended 31 December 2017:

	(in thousand Baht)	
Decrease in share of profit of associates	(241,932)	
Decrease in profit for the year	(241,932)	
Earnings per share		
Decrease in basic earnings per share (in Baht)	0.12	
Decrease in diluted earnings per share (in Baht)	0.12	

The impacts to the consolidated statement of cash flows for the year ended 31 December 2017:

	(in thousand Baht)
Cash flows from operating activities	
Decrease in profit for the year	(241,932)
Adjustments for	
Decrease in share of profit of associates, net of tax	241,932
Net change in cash flows	

# 5 Related parties

For the purposes of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control or joint control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are subject to common control or common significant influence. Related parties may be individuals or other entities.

Relationships with subsidiaries and associates are described in notes 9 and 10 Relationship with key management and other related parties were as follows:

Name of entities	Country of incorporation/ nationality	Nature of relationships
Parent Bangchak Corporation Public Company Limited Subsidiaries	Thailand	Some common directors
Bangchak Solar Energy Co., Ltd.	Thailand	Some common directors
Bangchak Solar Energy (Prachinburi) Co., Ltd.	Thailand	Some common directors
Bangchak Solar Energy (Chaiyaphum1) Co., Ltd.	Thailand	Some common directors
Bangchak Solar Energy (Buriram) Co., Ltd.	Thailand	Some common directors
Bangchak Solar Energy (Buriram1) Co., Ltd.	Thailand	Some common directors
Bangchak Solar Energy (Nakhon Ratchasima) Co., Ltd.	Thailand	Some common directors
BCPG Biopower 1 Co., Ltd.	Thailand	Some common directors
BCPG Biopower 2 Co., Ltd.	Thailand	Some common directors
Lomligor Co., Ltd.	Thailand	Some common directors
BCPG Investment Holdings Pte. Ltd.	Singapore	Representative from the Company as director
Indirect Subsidiaries		
BSE Energy Holdings Pte. Ltd.	Singapore	Representative from the Company as director
BCPG Japan Corporation	Japan	Representative from the Company as director
Greenergy Holdings Pte. Ltd.	Singapore	Representative from the Company as director
Greenergy Power Pte. Ltd.	Singapore	Representative from the Company as director
Tarumizu Solar Solutions Godo Kaisha	Japan	Representative from the Subsidiary as director
Nakatsugawa PV Godo Kaisha	Japan	Affiliate in TK investment
Godo Kaisha Inti	Japan	Representative from the Subsidiary as director
Takamori PV Godo Kaisha	Japan	Affiliate in TK investment
Nojiri PV Godo Kaisha	Japan	Affiliate in TK investment
Godo Kaisha Aten	Japan	Representative from the Subsidiary as director
Nikaho PV Godo Kaisha	Japan	Representative from the Subsidiary as director
Gotenba 2 PV Godo Kaisha	Japan	Representative from the Subsidiary as director
Godo Kaisha Horus	Japan	Representative from the Subsidiary as director
Yabuki PV Godo Kaisha	Japan	Representative from the Subsidiary as director
Komagane PV Godo Kaisha	Japan	Representative from the Subsidiary as director
Godo Kaisha Helios	Japan	Representative from the Subsidiary as director Representative from the Subsidiary as director
Godo Kaisha Lugh Godo Kaisha Phoenix	Japan Japan	Representative from the Subsidiary as director
	Japan	Representative from the Subsidiary as unceror

Name of entities	Country of incorporation/ nationality	Nature of relationships		
Indirect Subsidiaries				
Gotenba 1 PV Godo Kaisha	Japan	Representative from the Subsidiary as director		
Komagane Land Lease Godo Kaisha	Japan	Representative from the Subsidiary as director		
Nagi PV Godo Kaisha	Japan	Representative from the Subsidiary as director		
Godo Kaisha Natosi	Japan	Representative from the Subsidiary as director		
Godo Kaisha Amaterasu	Japan	Representative from the Subsidiary as director		
Godo Kaisha Mithra	Japan	Representative from the Subsidiary as director		
Godo Kaisha Sol	Japan	Representative from the Subsidiary as director		
Godo Kaisha Saule	Japan	Representative from the Subsidiary as director		
Godo Kaisha Shamash	Japan	Representative from the Subsidiary as director		
Godo Kaisha Pusan	Japan	Representative from the Subsidiary as director		
Godo Kaisha Apolo	Japan	Representative from the Subsidiary as director		
Godo Kaisha Surya	Japan	Representative from the Subsidiary as director		
Nagi Land Lease Godo Kaisha	Japan	Representative from the Subsidiary as director		
Godo Kaisha Rangi	Japan	Representative from the Subsidiary as director		
Godo Kaisha Dazbog	Japan	Representative from the Subsidiary as director		
Godo Kaisha Narang	Japan	Representative from the Subsidiary as director		
Godo Kaisha Malina	Japan	Representative from the Subsidiary as director		
Godo Kaisha Legba	Japan	Representative from the Subsidiary as director		
J2 Investor Godo Kaisha	Japan	Representative from the Subsidiary as director		
J1 Investor Godo Kaisha	Japan	Representative from the Subsidiary as director		
BCPG Engineering Company	Japan	Representative from the Company as director		
Godo Kaisha Tarumi Takatoge	Japan	Affiliate in TK investment		
Huang Ming Japan Company Limited	Japan Netherland	Representative from the Company as director		
BCPG Wind Cooperatief U.A.	Netherland	Representative from the Company as director		
Associate				
Star Energy Group Holdings Pte. Ltd.	Singapore	Representative from the Company as director		
Indirect Associate				
PetroWind Energy Inc.	Philippines	Representative from the Company as director		
Others related parties				
Bangchak Retail Co., Ltd.	Thailand	Subsidiary of the Parent		
The RTA Entertainment Plc.	Thailand	Some common directors		
Key management personnel	Thailand/Japan	Persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of the Group.		

The pricing policies for transactions with related parties are explained further below:

<b>Transactions</b>	Pricing policies
Revenue from rendering of services	Contractual price
Management service expenses	Contractual price
Rental expense	Contractual price
Interest expense	Contractual price Contractually agreed rate with reference to market rate and fix deposit interest rate

Significant transactions for the year ended 31 December with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2018			2017
	2010	(in thousa	2018 nd Baht)	2017
Parent		(		
Other income	246	292	246	292
Management service expenses	27,600	35,190	27,600	35,190
Rental expense	7,673	7,516	7,673	7,516
Dividend paid	896,000	840,000	896,000	840,000
Other expenses	5,151	2,258	5,151	2,258
Subsidiaries	,	ŗ		-
Revenue from rendering of services	-	-	42,000	42,000
Management service expenses	-	-	3,311	2,376
Dividends income	-	-	1,517,012	1,584,950
Interest income	-	-	57,687	40,576
Interest expense	-	-	634	-
Indirect Subsidiaries				
Interest income	-	-	102,556	79,853
Other related party				
Rental expense	-	248	-	248
Others expenses	253	462	253	462
Key management personnel				
compensation				
Short-term employee benefit	70,352	93,592	59,035	58,690
Post-employment benefits	3,287	2,128	2,401	833
Share-based payments	1,332	21,818	1,332	21,818
Total key management personnel				
compensation	74,971	117,538	62,768	81,341

Balances as at 31 December with related parties were as follows:

	Consolidated financial statements 2018 2017		Separate financial statements 2018 2017	
		(in thou	sand Baht)	
Other receivables - related parties				
Current				
Parent	6,043	6,029	6,043	6,029
Subsidiaries	-	-	343	39,323
Indirect subsidiaries	-	-	87,334	12 <b>8,</b> 157
Total	6,043	6,029	93,720	173,509
Non-Current				
Subsidiaries	-	-	85,464	-
Indirect subsidiaries	-	-	145,855	-
Total			231,319	
Dividend receivable				
Subsidiary	-	-	_	92,400
Total		-	-	92,400
Showt town loans to related name				
<i>Short-term loans to related party</i> Subsidiary	-	-	255,000	-
Total		-	255,000	-
Long-term loans to related parties				
Subsidiaries	-	-	1,369,765	1,373,072
Indirect subsidiaries	_	-	3,753,547	3,090,693
			5,123,312	4,463,765
Less current portion due within			- , ,	-,,
one year	-	-	(1,240,138)	-
Total	-	-	3,883,174	4,463,765

Movements during the year ended 31 December of loans to related parties were as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	2018	2017	2018	2017
		(in thousa	nd Baht)	
Short-term loans to related parties				
At 1 January	-	-	-	2,932,760
Increase	-	-	255,000	126,217
Decrease	-	-	-	(3,058,977)
At 31 December		-	255,000	<b>1</b>
Long-term loans to related parties				
At 1 January	-	-	4,463,765	260,000
Increase	-	-	643,381	4,479,050
Effect of movements in exchange rate	-	-	16,166	(275,285)
Less Current portion due within		-		
one year	-	-	(1,240,138)	-
At 31 December		-	3,883,174	4,463,765
Other payables - related parties				
Parent	3,501	2,738	3,108	2,345
Indirect subsidiaries	-	-	-	71
Other related party	-	113	634	113
Total	3,501	2,851	3,742	2,529
Long-term loans from related parties				
Subsidiaries	-	-	500,000	
Total	-		500,000	

Movements during the years ended 31 December of loans from related parties were as follows:

Consol	idated	Separ	ate
financial s	tatements	financial sta	tements
2018	2017	2018	2017
	(in thousa	nd Baht)	
-	-	-	-
-	-	500,000	-
-	-	-	-
		500,000	-
	financial s		financial statements financial state 2018 2017 2018 (in thousand Baht) 500,000

# Significant agreements with related parties

# Land rental agreements

The Company has entered into land rental agreement with Bangchak Corporation Public Company Limited, parent company for the purpose of 38 MW solar farm project at Bang Pa-In establishment and related objectives. The agreement term is for a period of 22 years effective from 1 December 2015 to 30 November 2037. The rental fee is stipulated in the agreement.

The Company has entered into additional land rental agreement with Bangchak Corporation Public Company Limited, parent company for the purpose of related objectives of solar farm project. The agreement term is for a period of 21 years and 2 months effective from 1 October 2016 to 30 November 2037. The rental fee is stipulated in the agreement.

#### Building space and control room rental agreements

The Company has entered into building space, control room and electricity system room rental agreement related to 38 MW solar farm project at Bang Pa-In with Bangchak Corporation Public Company Limited, parent company. The agreement term is for a period of 3 years effective from 1 December 2015 to 30 November 2018. The rental fee is stipulated in the agreement. Subsequently, the Company has entered into the new building space, control room and electricity system room rental agreement to extend the agreement term is effective from 1 December 2018 to 31 January 2019. The rental fee is stipulated in the agreement.

#### Management service and solar farm operation agreements

The Company has entered into management service and operation for the solar farm project agreement with the subsidiary. The subsidiary is responsible for employee recruitment and provides the equipment for solar electricity production. The agreement term is for a period of 3 years and one month effective from 1 December 2015 to 31 December 2018. The service fee is stipulated in the agreement. Subsequently, in April 2018, the Company amended the contract with certain subsidiary to expand the scope of work to include monitoring the construction of solar power plant project with The War Veterans Organization of Thailand under Royal Patronage of His Majesty the King and maintenance service of machinery and equipment on solar electricity production. The agreement term is for a period of 11 months effective from 1 February 2018 to 31 December 2018. The service fee is stipulated in the agreement.

#### Management service agreements

The Company has entered into management service agreement with Bangchak Corporation Public Company Limited, parent company. The parent company is responsible for employee recruiting for general administration to the Company. The agreement term is for a period of 3 years effective from 1 January 2017 to 31 December 2019. The service fee is stipulated in the agreement.

The Company has entered into management service agreements with subsidiaries in Thailand. The company is responsible for employee recruiting for general administration to the subsidiaries. The agreement term is for a period of 1 year effective from 1 January 2018 to 31 December 2018. The service fee is stipulated in the agreement.

The Company has entered into information technology service agreement with Bangchak Corporation Public Company Limited, parent company. The parent company is responsible for management information system and service to the Company. The agreement term is for a period of 1 year and 4 months effective from 1 August 2017 to 31 December 2018. The service fee is stipulated in the agreement.

#### Power purchase agreement

The Company has entered into power purchase agreement with Bangchak Biofuel Company, related company. The Company is responsible for sale electricity which produce from solar rooftop to the related party. The agreement term is for a period of 5 years effective from 8 November 2018 to 7 November 2023 and the agreement shall be automatically renew at the end of each term totally duration not over 25 years from the commercial operation date. The electricity tariff is stipulated in the agreement.

#### Loan from agreements

The Company has an unsecured loan agreements with subsidiaries of the Company for the purpose of as working capital of with a repayment schedule, interest and conditions as stipulated in the agreements. The outstanding balance of loans are Baht 500 million.

#### Loan to agreements

The Company has an unsecured loan agreements with BCPG Investment Holdings Pte. Ltd., a subsidiary of the Company for the purpose of group's business acquisition with a repayment schedule, interest and conditions as stipulated in the agreements. The outstanding balance of loans are JPY 868 million (approximately Baht 251 million) and USD 27 million (approximately Baht 859 million).

The Company has an unsecured loan agreements with BSE Energy Holdings Pte. Ltd., an indirect subsidiary of the Company for the purpose of group's business acquisition with a repayment schedule, interest and conditions as stipulated in the agreements. The outstanding balance of loan is JPY 4,548 million (approximately Baht 1,315 million).

The Company has an unsecured loan agreements with BCPG Japan Corporation, an indirect subsidiary of the Company with a repayment schedule, interest and conditions as stipulated in the agreement. The outstanding balance of loan is JPY 6,407 million (approximately Baht 1,853 million).

The Company has an unsecured loan agreements with Huang Ming Japan Company Limited, an indirect subsidiary of the Company with a repayment schedule, interest and conditions as stipulated in the agreements. The outstanding balance of loan is JPY 2,024 million (approximately Baht 585 million).

The Company has an unsecured loan agreement with Bangchak Solar Energy (Prachinburi) Co., Ltd., subsidiary of the Company with a repayment schedule, interest and conditions as stipulated in the agreement. The outstanding balance of loan is Baht 260 million.

The Company has an unsecured loan agreement with Lomligor Co., Ltd., subsidiary of the Company with a repayment schedule, interest and conditions as stipulated in the agreement. The outstanding balance of loan is Baht 255 million.

#### Guarantee agreements

The Company entered into guarantee agreement with BCPG Engineering Company in accordance with solar power system operation and maintenance contract which BCPG Engineering Company has with Tarumizu Solar Solutions Godo Kaisha in the event that BCPG Engineering Company causes damage to the assets within the power plant of Tarumizu Solar Solutions Godo Kaisha and is not able to compensate. The guarantee agreement is JPY 28.02 million per annum repectively, with a guarantee facility totaling JPY 280.20 million, covering the period of operation and maintenance of power system from solar energy contract. Under the conditions within the loan agreement between Tarumizu

Solar Solutions Godo Kaisha and certain financial institution, it is specified that the parent company is responsible for the guarantee of possible damage loss.

The Company signed the Amendment and Restatement and Novation Agreement (Sponsor Support Agreement) for the purpose of changing the sponsor for Bangchak Solar Energy Company Limited under Sponsor Support Agreement from Bangchak Corporation Public Company Limited to the Company, with a facility of Baht 700 million. Through the Sponsor Support Agreement, the Company guarantees the facility.

#### Cash and cash equivalents

	Consolidated		Separate	
	financial s	tatements	financial st	atements
	2018	2017	2018	2017
		(in thousa	nd Baht)	
Cash on hand	6	188	-	-
Cash at banks - current accounts	218,305	276,545	14,092	14,837
Cash at banks - savings accounts	2,207,001	1,727,250	180,376	190,861
Total	2,425,312	2,003,983	194,468	205,698

As at 31 December 2018, certain subsidiaries and indirect subsidiaries has a restricted deposits at financial institution totaling Baht 230.38 million (31 December 2017: Baht 236.41 million) under the long-term loan agreement with several financial institutions which required such subsidiary and indirect subsidiaries to obtain a permission on withdrawal of restricted deposits with the financial institutions.

#### Trade accounts receivable

	Consolidated		Separate	
	financial s	tatements	financial statements	
	2018	2017	2018	2017
		(in thouse	und Baht)	
Other parties	523,816	507,243	130,478	117,217
Less: allowance for doubtful accounts	_	-	-	-
Net	523,816	507,243	130,478	117,217
Bad and doubtful debts expense for the year ended			<u> </u>	_

Aging analyses for trade accounts receivable were as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
		(in thousa	nd Baht)	
Other parties				
Within credit terms	523,816	507,243	130,478	117,217
Less: allowance for doubtful accounts	-	-	-	
Net	523,816	507,243	130,478	117,217

The normal credit term granted by the Group ranges from 20 days to 30 days.

# 8 Other receivables

		Consolie financial st		Separ financial st	
	Note	2018	2017	2018	2017
			(in thousa	nd Baht)	
Current					
<b>Related</b> parties	5	6,043	6,029	93,720	173,509
Other parties					
Interest receivable		53	280	30	75
Prepaid insurance expenses		5,403	5,421	-	-
Receivable from revenue					
department		145,421	145,331	-	-
Others		66,016	25,654	17,034	10,253
Total		222,936	182,715	110,784	183,837
Non-current					
Related parties	5	-	-	231,319	-
Other parties					
Deposits for machinery		103,032	-	-	
Total		103,032		231,319	

# 9 Investments in subsidiaries

	Separate financial statements		
	2018	2017	
	(in thousa	nd Baht)	
Subsidiaries			
At 1 January	6,353,336	6,353,336	
Acquisitions	236,459	-	
At 31 December	6,589,795	6,353,336	

Investments in subsidiaries as at 31 December 2018 and 2017, and dividend income from those investments for the year ended ended 31 December were as follows:

				•1	Separate fina	Separate financial statement						
	Ownership interest	interest	Paid-up capital	capital	Cost	st	Impairment	ent	At cost - net	- net	Dividend income	income
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	(%)						(in thous	(in thousand Baht)				
Subsidiaries												
Bangchak Solar Energy Co., Ltd.	100	100	100 1,800,000	1,800,000	1,930,500	1,930,500	ı		1,930,500	1,930,500	583,200	555,300
Bangchak Solar Energy (Prachinburi)												
Co., Ltd.	100	100	100 1,400,000	1,400,000 1,429,785	1,429,785	1,429,785	ı	ı	1,429,785	1,429,785	327,600	411,600
Bangchak Solar Energy												
(Chaiyaphum1) Co., Ltd.	100	100	705,000	705,000	720,545	720,545	r		720,545	720,545	154,440	157,170
Bangchak Solar Energy (Buriram)												
Co., Ltd.	100	100	755,000	755,000	771,063	771,063	ı	ı	771,063	771,063	153,265	157,040
Bangchak Solar Energy (Buriram1)												
Co., Ltd.	100	100	765,000	765,000	781,275	781,275	ı		781,275	781,275	148,027	149,940
Bangchak Solar Energy (Nakhon												
Ratchasima) Co., Ltd.	100	100	684,100	684,100	700,169	700,169	ŀ	•	700,169	700,169	150,480	153,900
BCPG Investment Holdings Pte. Ltd.	100	100	ı	,	8	ı	ı	ı	•	•	,	1
BCPG Biopower 1 Co., Ltd.	100	100	15,000	15,000	14,999	14,999	ı	•	14,999	14,999	ı	ŀ
BCPG Biopower 2 Co., Ltd.	100	100	5,000	5,000	5,000	5,000		,	5,000	5,000	ı	ı
Lomligor Co., Ltd.	100		250,000		236,459		1		236,459	•	I	E
Total					6,589,795	6,353,336	1	1	6,589,795	6,353,336	1,517,012	1,584,950
				I								

All subsidiaries were incorporated in Thailand except BCPG Investment Holdings Pte. Ltd. was incorporated in Singapore.

On 15 June 2018, the Group has invested in the wind power plant in Pakpanang district of Nakhon Si Thammarat province with total capacity of 10 Megawatts which they are in the development and construction process through the purchase of 100% equity interest of Lomligor Co., Ltd. The Company has already paid Baht 236.46 million and received shares in Lomligor Co., Ltd.

Management believes this acquisition will enable the Group to expand their investment, development and operation in other renewable energy business in Thailand in order to generate a favourable return to the Company in the future.

#### 10 Investments in associates

		Consoli	dated	Sepa	rate
		financial st	atements	financial s	tatements
Ĩ	Note	2018	2017	2018	2017
			(Restated)		•
			(in thousa	and Baht)	·
Direct and Indirect associates					
At 1 January - As previously reported		13,529,716		11,956,425	-
Adjustment	4	(241,932)	-	-	-
At 1 January - As restated	-	13,287,784	· •	11,956,425	-
Increase		-	12,877,998	-	11,956,425
Share of net profit of associates		203,693	507,503	-	-
Share of other comprehensive income					
(loss) of associates		28,021	(20,007)	-	<b>-</b> . *
Effect of movements in exchange rate		(18,794)	(77,710)	-	· _
At 31 December	-	13,500,704	13,287,784	11,956,425	11,956,425

d its Subsidiaries		018
<b>BCPG Public Company Limited and its Subsidiaries</b>	lotes to the financial statements	For the year ended 31 December 2018

Investments in associates as at 31 December 2018 and 2017, and dividend income for the year ended 31 December were as follows:

						Cons	<b>Consolidated financial statements</b>	cial statements						
	Ownership interest	interest	Paid-up capital	capital	Cost method	ethod	Equity method	nethod	Impairment	ment	At equity - net	ty - net	Dividen	Dividend income
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
								(Restated)				(Restated)		
	(%)							(in thousand Baht)	aht)					
Direct associate Star Energy Group Holdings Pte. Ltd.	33.33	33.33	28,236,600	28,236,600	11,956,425	11,956,425	12,295,044	12,102,654	ı	ı	12,295,044	12,102,654	•	
Indirect associate PetroWind Energy Inc.	40.00	40.00	894,790	894,790	921,573 <b>12,877,998</b>	921,573 <b>12,877,998</b>	1,205,660 13,500,704	1,185,130 13,287,784		6 1	1,205,660 <b>13,500,704</b>	1,185,130 13,287,784		
None of the Group's associates are publicly listed and consequently do not have published price quotations.	ıp's associ	lates are p	ublicly listed	l and conseq	luently do no	ot have publ	ished price	quotations.						
							Separate	Separate financial statements	ents					
		Owner	Ownership interest	Paid-u	Paid-up capital	Cos	Cost method		Impairment		At cost - net	net	Dividend income	ncome
		2018	2017	2018	2017	2018	2017	2018		2017	2018	2017	2018	2017
			(%)					(in tho	(in thousand Baht)					·

None of the Company's associates are publicly listed and consequently do not have published price quotations.

11,956,425 11,956,425

11,956,425 11,956,425

· | ·

 11,956,425
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28,236,600

28,236,600

33.33

33.33

Direct associate Star Energy Group Holdings Pte. Ltd.

1 1

# Impairment testing for cash generating unit containing goodwill in investment in associate, Star Energy Group Holdings Pte. Ltd.

The recoverable amount of investment in associate, Star Energy Group Holdings Pte. Ltd., which contained goodwill, was value-in-use by discounted future cash flow from the continuing operation of power plants in Indonesia.

The key assumptions used in the estimation of the future cash flows were based on the concession agreements, power purchase agreements, estimated selling price and production unit of electricity and steam, with reference to historical data and external source such as exchange rate and inflation.

The key assumption used in the estimation of value in use are as set out below.

	Consolidated fina	ncial statements
	2018	2017
	()	%)
Discount rate – Geothermal power plants	7.2-7.6	-

The discount rate was weighted average after-tax cost of capital by using Capital Asset Pricing Model (CAPM). Risk free rate was derived from long-term U.S. treasury bond yield. The adjustment for market risk premium to reflect risk of equity investment and country risk premium is also taking into consideration.

#### Revenue projection

The total revenue projections for the power plant assets was determined in accordance with the power purchase agreements, concession agreements and related announcements. The assumptions included electricity and steam selling price from thermal power plants, production unit, electricity unit, exchange rate, inflation and other related factors.

The impairment testing has been prepared by the Company's management. The estimate revenue and expenses were based on historical data, external source and other related factors which included management's estimate and long term business plan. The management have also conducted sensitivity test by increasing discount rate 0.5% - 0.6% and found no impairment for investment in associate, Star Energy Group Holdings Pte. Ltd.

The following table summarises the financial information of the associates as included in their own financial statements, adjusted for fair value adjustments at acquisition and differences in accounting policies. The table also reconciles the summarized financial information to the carrying amount of the Group's interest in these companies

	Detre Biller d I		0.	roup Holdings Pte. Ltd.
	PetroWind E		-	2017
	2018	2017	2018	2017
		(in inoi	isand Baht)	
For the year ended 31 December				
Statement of income	500 440	401 057	1 ( 020 402	12 079 294
Revenue	520,442	481,257	16,939,423	13,978,284
Net profit	181,648	129,992	3,632,594	3,142,816
Other comprehensive income (expense)	-		484,053	(243,334)
Total comprehensive income for the				
year	181,648	129,992	4,116,647	2,899,482
Fair value adjustment and				
accounting policies difference	(83,336)	(54,017)	(1,780,891)	(366,035)
Total comprehensive income (100%)	98,312	75,975	2,335,756	2,533,447
Group's share of total comprehensive				
income	39,324	(20,548)	192,390	146,230
		<u></u>		
As at 31 December				
Statement of financial position				
Current assets	496,964	509,872	10,960,536	9,784,563
Non-current assets	4,272,418	4,631,379	110,385,060	95,796,084
Current liabilities	(282,666)	(410,044)	(6,421,329)	(7,121,135)
Non-current liabilities	(1,591,797)	(1,400,620)	(78,839,975)	(76,993,226)
Net assets (100%)	2,894,919	3,330,587	36,084,292	21,466,286
Group's share of net assets	1,205,660	1,185,130	7,921,736	7,729,346
Goodwill	_	-	4,373,308	4,373,308
Carrying amount of interest in				
associates	1,205,660	1,185,130	12,295,044	12,102,654

# 11 Property, plant and equipment

**Consolidated financial statements** 

Total		15,477,497	654,399	36,158	(84,567)	(256,919)		15,826,568	1,593,134	(326)	(2, 134, 484)	45,389	15,330,281
Assets under construction		1,676,765	596,025	(1, 450, 353)	(2,613)	(59, 491)		760,333	1,481,460	(630,909)	ı	9,313	1,620,197
Vehicle		16,132	2,520	ı	ı	(72)		18,580	3,275	619	ı	14	22,488
Office equipment <i>i</i> Baht)		155,364	1,171	26,186	(170)	(787)		181,764	169	6,596	(138)	142	188,533
Machinery and Off equipment equip <i>(in thousand Baht)</i>		11,577,632	5,843	1,364,022	(18, 160)	(171, 330)		12,758,007	635	578,049	(2,098,955)	31,393	11,269,129
Land improvement and infrastructure		1,102,329	866	94,207	ı	(4,257)		1,193,277	2,722	28,094	(32,022)	757	1,192,828
Buildings		207,471	ı	17,910	·	(264)		225,117	1	17,225	(3, 369)		239,025
Land		741,804	47,842	(15, 814)	(63, 624)	(20, 718)		689,490	104,873	ı	ı	3,718	798,081
	Cost	At 1 January 2017	Additions	Transfers	Disposals	Effect of movements in exchange rate	At 31 December 2017 and	1 January 2018	Additions	Transfers	Disposals	Effect of movements in exchange rate	At 31 December 2018

CPG Public Company Limited and its otes to the financial statements or the year ended 31 December 2018
BCPG Public Notes to the For the year

						~						1	I
	1-1- L	l otal		1,282,865	666,407	(468)	(12,260)		1,936,244	652,664	(206,602)	2,626	2,384,932
	Assets under	construction		ï	1	1	3		•	i	ı	E	3
nts		Venicle		8,263	3,242	ı	(23)		11,482	3,195	I	5	14,682
incial stateme	Office	equipment md Baht)		79,744	29,302	(163)	(454)		108,429	20,101	(9)	95	128,619
Consolidated financial statements	Machinery and	equipment equipm (in thousand Baht)		1,052,728	571,548	(605)	(11, 126)		1,612,545	563,225	(200,008)	2,384	1,978,146
Co. Land	improvement and	intrastructure		120,191	53,275	ı	(640)		172,826	56,217	(6,296)	139	222,886
	:	Buildings		21,939	9,040	·	(17)		30,962	9,926	(292)	ε	40,599
	•	Land		I	ı	,	1		8	ı	ı	ı	E
			Depreciation	At 1 January 2017	Depreciation charge for the year	Disposals	Effect of movements in exchange rate	At 31 December 2017 and	1 January 2018	Depreciation charge for the year	Disposals	Effect of movements in exchange rate	At 31 December 2018

<b>BCPG Public Company Limited and its Subsidiaries</b>	to the financial statements	or the year ended 31 December 2018
<b>BCPG Public</b>	Notes to the	For the year

	Assets under construction	7,869 1,676,765	
20	Vehicle	7,869	- 7 869
ncial statement	Office equipment <i>id Baht</i> )	75,620	- 75,670
Consolidated financial statements	Machinery and Office equipment equipment <i>(in thousand Baht)</i>	10,524,904	- 10 524 004
	Land improvement and infrastructure	982,138	- 087 138
	Buildings	185,532	- 105 537
	Land	741,804	
		<i>Net book value</i> At 1 January 2017 Owned assets	Assets under finance leases

Owned assets Assets under finance leases	741,804 - 741,804	185,532 - <b>185,532</b>	982,138 - 982,138	10,524,904 - <b>10,524,904</b>	75,620 - <b>75,620</b>	7,869 - 7,869	1,676,765 _ <b>1,676,765</b>	14,194,632 - <b>14,194,632</b>
At 31 December 2017 and 1 January 2018 Owned assets Assets under finance leases	689,490 689,490	194,155 - <b>194,155</b>	1,020,451 - <b>1,020,451</b>	11,145,462 - <b>11,145,462</b>	73,335 - <b>73,335</b>	7,098 - 7,098	760,333 	13,890,324 - <b>13,890,324</b>
At 31 December 2018 Owned assets Assets under finance leases	798,081 -	198,426 -	969,942 -	9,290,983 -	59,914 -	6,188 1,618	1,620,197	12,943,731 1,1618

As at 31 December 2018, the Group has entered into the agreement to mortgage its land, buildings and machinery and equipment as collateral with financial institutions for credit facilities totaling Baht 10,457.15 million (2016: Baht 12,639.71 million). (see note 14)

12,945,349

1,620,197

7,806

59,914

9,290,983

969,942

198,426

798,081

Total

# Disposal of asset to infrastructure fund

On 28 September 2018, indirect subsidiaries of the Company, Nikaho PV Godo Kaisha and Nagi PV Godo Kaisha have already disposed two solar power plant projects in Japan, Nikaho Project and Nagi Project respectively with totaling capacity of 27.6 MW into infrastructure fund in Japan named Bangchak Solar Yield-co Godo Kaisha for the amount of JPY 10,388 million (approximately THB 3,046 million). In any way, the fund is not related to the Company both in terms of investment or management. The Company recognized gain from disposal of solar power plant projects in Japan amount to JPY 2,710 million (approximately THB 793 million) in consolidated statement of income and recorded related tax expense.

Related to the transaction, the Company signed a Sponsor Support Letter in favor of the newly established fund, agreed to the contractual obligations of Nikaho PV Godo Kaisha and Nagi PV Godo under Representation & Warranties in the asset purchase agreement which certified contract fulfillment. The limit of compensation is not more than 15% of assets value or approximately of JPY 1,725 million (approximately THB 505 million) with term of commitment not exceeding 12 months from the effective date of the contract. As of 31 December 2018, the company has assessed that there were no breach in any conditions.

Both indirect subsidiaries used a portion of proceeds from the sale to repay debt from financial institutions in Japan totalling JPY 6,932 million (approximately THB 2,028 million).

In addition, BCPG Engineering, an indirect subsidiary of the Company has signed Operation & Maintenance Agreement with the infrastructure fund to provide operation and maintenance services for both solar power plants with 5-year contract term. Service fee is in accordance with the contract.

ompany Limited and its Subsidiaries	the financial statements	year ended 31 December 2018
<b>BCPG Public Company Lim</b>	Notes to the financial sta	For the year ended 31 De

December 2018
31
ended
year
the
P

	Total	3,275,862 66,306 (21,721) (140)	3,320,307 384,121 (138) 3,704,290	174,988 162,418 (137) 337,269 172,038 (6) 509,301	3,100,874 2,983,038 3,194,989
	Assets under construction	4,716 42,134 (35,196) -	11,654 382,898 (373,633) - 20,918		4,716 11,654 20,918
	Vehicle	3,482 305 -	3,787 818 - 4,605	718 715 1,433 802 2,235	2,764 2,354 2,370
ial statements	and ant Office equipment (in thousand Baht)	24,808 903 12,485 (140)	38,056 - 6,547 (138) 44,465	4,283 4,309 (137) 8,455 5,939 (6) 14,388	20,525 29,601 30,077
Separate financial statements	Machinety and equipment (in thous	3,003,357 417 900	3,004,674 405 325,884 - 3,330,963	157,858 145,569 - 303,427 151,049 - 454,476	2,845,499 2,701,247 2,876,487
Land	improvement and infrastructure	222,350 998 21,195	244,543 - 26,734 - 271,278	11,266 11,000 - - 13,138 - - - 35,404	211,084 222,277 235,874
	Buildings	17,149 - 444 -	17,593 - 14,468 - 32,061	863 825 - 1,688 1,110 - 2,797	16,286 15,905 29,263
	Land	- 21,549 (21,549) -		•••	
		<i>Cost</i> At 1 January 2017 Additions Transfers Disposals	At 31 December 2017 and 1 January 2018 Additions Transfers Disposals At 31 December 2018	Depreciation At 1 January 2017 Depreciation charge for the year Disposals At 31 December 2017 and 1 January 2018 Depreciation charge for the year Disposals At 31 December 2018	<i>Net book value</i> At 1 January 2017 At 31 December 2017 and 1 January 2018 At 31 December 2018

#### **Security**

As at 31 December 2018, the Company has entered into the agreement to mortgage its buildings, machinery and equipment as collateral with financial institutions for credit facilities totaling Baht 2,823.15 million (2017: Baht 2,939.43 million). (see note 14)

# 12 Intangible assets

	Consolidated financial statements						
		Right to use	The right to	Feed-in			
		and cost of	connect	Tariff			
		development	power	power		Intangible	
		of computer	distribution	purchase		assets under	
	Note	software	system	agreement	Land right	development	Total
				(in thouse	and Baht)		
Cost							
At 1 January 2017		2,091	121,968	1,727,540	-	191,114	2,042,713
Additions		237	-	<del>-</del> .	-	104,061	104,298
Disposals		-	(17,634)	(19,432)	-	-	(37,066)
Transfers		23,182	(7,321)	-	22,082	(76,920)	(38,977)
Effect of movements in							
exchange rate		(186)	(5,092)	(101,222)		(12,386)	(118,886)
At 31 December 2017							
and 1 January 2018		25,324	91,921	1,606,886	22,082	205,869	1,952,082
Additions		-	2,353	-	-	105,307	107,660
Disposals	11	-	(43,198)	(190,308)	-	(6)	(233,512)
Transfers		18,254	5,637	-	-	(23,891)	-
Effect of movements in							
exchange rate		47	772	17,887	-	2,459	21,165
At 31 December 2017		43,625	57,485	1,434,465	22,082	289,738	1,847,395
Amortisation							
At 1 January 2017		1,344	4,274	21,265	-	-	26,883
Amortisation for the year		2,832	3,697	29,260	-	-	35,789
Effect of movements in			-	-			
exchange rate		(36)	(322)	(2,499)	-	-	(2,857)
At 31 December 2017		<u>`</u>				<u> </u>	
and 1 January 2018		4,140	7,649	48,026	-	-	59,815
Amortisation for the year		6,687	4,252	29,323	225	-	40,487
Disposals	11	-	(4,375)	(14,754)	-	-	(19,129)
Effect of movements in							
exchange rate		12	65	568	-	-	645
At 31 December 2018		10,839	7,591	63,163	225	· _	81,818
Net book value							
At 1 January 2017		747	117,694	1,706,275	-	191,114	2,015,830
At 31 December 2017							
and 1 January 2018		21,184	84,272	1,558,860	22,082	205,869	1,892,267
At 31 December 2018		32,786	49,894	1,371,303	21,857	289,738	1,765,577

	Separate financial statements					
	Right to use and cost of development of computer software	The right to connect power distribution system	Land right (in thousand Baht)	Intangible assets under development	Total	
Cost						
At 1 January 2017	400	17,823	-	1,330	19,553	
Additions	237	-	-	18,360	18,597	
Transfer	18,875	-	22,082	(18,875)	22,082	
At 31 December 2017 and						
1 January 2018	19,512	17,823	22,082	815	60,232	
Additions	-	-	-	22,956	22,956	
Transfer	18,134	5,637	-	(23,771)		
At 31 December 2018	37,646	23,460	22,082		83,188	
Amortisation						
At 1 January 2017	11	896	-	-	907	
Amortisation for the year	1,677	824	-		2,501	
At 31 December 2017 and						
1 January 2018	1,688	1,720	-	-	3,408	
Amortisation for the year	5,839	925	225	-	6,989	
At 31 December 2018	7,527	2,645	225		10,397	
Net book value						
At 1 January 2017	389	16,927		1,330	18,646	
At 31 December 2017 and						
1 January 2018	17,824	16,103	22,082	815	56,824	
At 31 December 2018	30,119	20,815	21,857		72,791	

# 13 Other payables

		Consolidated		Separate	
		financial st	atements	financial statements	
	Note	2018	2017	2018	2017
			(in thousa	nd Baht)	
<b>Related parties</b>	5	3,501	2,851	3,742	2,529
Other parties					
Other account payable		137,927	71,566	22,802	48,959
Interest payable		23,156	28,522	4,676	2,784
Accrued expenses		100,989	100,804	48,541	30,468
Payable to revenue department		69,144	25,917	9,153	6,844
Retention payable		3,136	3,559	500	1,048
Total		337,853	233,219	89,414	92,632

# 14 Interest-bearing liabilities

	Consol financial st	tatements	Separate financial statements	
	2018	2017	2018	2017
_		(in thousa	ind Baht)	
Current				
Short-term loans from financial institutions				
Secured	-	88,884	-	-
Unsecured	250,000	-	250,000	
	250,000	88,884	250,000	-
	,	,	ŗ	
Current portion of long-term loan from financial institutions				
Secured	1,270,576	1,326,355	1,063,515	1,017,431
Total current interest-bearing				
liabilities	1,520,576	1,415,239	1,313,515	1,017,431
			······	
Non-current				
Long-term loan from financial institutions				
Secured	14,046,591	15,613,152	12,464,554	11,960,978
Long-term loans from related parties				
Unsecured		-	500,000	-
Total non-current interest-bearing				
liabilities	14,046,591	15,613,152	12,964,554	11,960,978
Total	15,567,167	17,028,391	14,278,069	12,978,409

The periods to maturity of interest-bearing liabilities as at 31 December were as follows:

	Consol financial s		Separate financial statements	
	2018 2017		2018	2017
		(in thouse	and Baht)	
Within one year	1,520,576	1,415,239	1,313,515	1,017,431
After one year but within five years	11,430,064	5,522,028	10,610,629	4,223,811
After five years	2,616,527	10,091,124	1,853,925	7,737,167
Total	15,567,167	17,028,391	13,778,069	12,978,409

As at 31 December 2018, the Group entered into loan agreements with financial institutions, the details are as follows:

	Facilities (million)	Currency	Interest Interest Rates (%) p.a.	Repayment Terms
The Company	450	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually in 1 instalments starting in December 2016
The Company	270	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually in 1 instalments starting in December 2016
The Company	750	Baht	FDR 6M plus a margin	Interest is payable semi-annually in 2 instalments starting in December 2016
The Company	1,050	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually in 1 instalments starting in December 2017
The Company	630	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually in 2 instalments starting in December 2017
The Company	1,750	Baht	FDR 6M plus a margin	Interest is payable semi-annually in 2 instalments starting in December 2017
The Company	2,400	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually principal repayment at year 6 from agreement signing date
The Company	2,740	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually, principal repayment at year 6 from agreement signing date
The Company	4,200	JPY	JPYTIBOR 6M plus a margin	Interest is payable semi-annually in instalments starting in December 2016
The Company	570	ЈРҮ	JPYTIBOR 6M plus a margin	Interest is payable semi-annually in instalments starting in December 2016
The Company	9,800	ЛҮ	JPYTIBOR 6M plus a margin	Interest is payable semi-annually in instalments starting in December 2017
The Company	1,330	JPY	JPYTIBOR 6M plus a margin	Interest is payable semi-annually in instalments starting in December 2017

	Facilities (million)	Currency	Interest Interest Rates (%) p.a.	Repayment Terms
	, ,	·		
The Company	7,896	ЛРҮ	JPYTIBOR 6M plus a margin	Interest is payable semi- principal repayment at year 6 from agreement signing date
The Company	1,128	JPY	JPYTIBOR 6M plus a margin	Interest is payable semi-annually, principal repayment at year 6 from agreement signing date
The Company	10	USD	USDLIBOR 6M plus a margin	Interest is payable semi-annually principal repayment at year 6 from agreement signing date
The Company	40	USD	USDLIBOR 6M plus a margin	Interest is payable semi-annually, principal repayment at year 6 from agreement signing date
The Company	20	USD	USDLIBOR 6M plus a margin	Interest is payable semi-annually, principal repayment at year 6 from agreement signing date
Direct subsidiary	754	Baht	THBFIX 6M plus a margin	Interest is payable semi-annually in 20 instalments starting in August 2013
Direct subsidiary	754	Baht		Interest is payable semi-annually in 34 instalments starting in August 2013
Direct subsidiary	12	USD	Fixed Interest Rate	Interest is payable semi-annually in 34 instalments starting in August 2013
Indirect subsidiary	254	JPY	Fixed Interest Rate	Interest is payable quarterly in 68 instalments starting in April 2015
Indirect subsidiary	355	JPY	Fixed Interest Rate	Interest is payable quarterly in 68 instalments starting in July 2015
Indirect subsidiary	349	JPY	Fixed Interest Rate	Interest is payable quarterly in 68 instalments starting in July 2015
Indirect subsidiary	2,578	JPY	Fixed Interest Rate	Interest is payable quarterly in 68 instalments starting in March 2016

These loan agreements contain certain conditions such as maintaining certain level of financial ratios and right transfer, loans are secured by pledging of land, building, infrastructure, machinery and 33.33% shares of issued and paid up capital of Star Energy Group Holdings Pte. Ltd.

Secured interest-bearing liabilities as at 31 December were secured on the following assets:

	Consolidated financial statements		Separate financial statements			
	2018	2017	2018	2017		
	(in thousand Baht)					
Property, plant and equipment	10,457,153	12,639,709	2,823,153	2,939,429		
Investment in associate	12,295,044	12,344,586	11,956,425	11,956,425		
Total	22,752,197	24,984,295	14,779,578	14,895,854		

# 15 Share capital

	Par value	2018		2	2017
	per share	Number	Baht	Number	Baht
	(in Baht)		(in thousand shar	res/thousand Ba	aht)
Authorised					
At 1 January					
- Ordinary shares	5	2,000,000	10,000,000	2,000,000	10,000,000
At 31 December					
- Ordinary shares	5	2,000,000	10,000,000	2,000,000	10,000,000
Issued and paid-up					
At 1 January					
- Ordinary shares	5	1,992,304	9,961,522	1,990,000	9,950,000
Issue of new shares	5	4,523	22,615	2,304	11,522
At 31 December					· ·
- Ordinary shares	5	1,996,827	9,984,137	1,992,304	9,961,522

#### Warrants

At the Annual General Meeting of the Shareholders of the Company, held on 4 April 2017, the shareholders approved the issuance and offering of the warrants of the Company to directors, executives and employees of Company and its subsidiaries (BCPG ESOP Warrant Scheme) of not exceeding 10 million units equivalent to the ordinary shares allocated to accommodate to the exercise of rights not exceeding 10 million shares (approximately 0.50% of the total issued shares of the Company) within 5 years term and can be exercised to purchase the Company's shares in accordance with the specified terms and conditions. For the nine-month period ended 31 December 2018, the 4.52 million unit of warrants were exercised to 4.52 million ordinary shares.

# 16 Surplus and reserves

#### Surplus on business restructuring under common control

The difference between net book value of asset of subsidiaries as at the business restructuring date and the cost of business combination under common control recognised in surplus on business combination under common control within equity.

#### Share premium

Section 51 of the Public Companies Act B.E. 2535 requires companies to set aside share subscription monies received in excess of the par value of the shares issued to a reserve account ("share premium"). Share premium is not available for dividend distribution.

#### Legal reserve

Section 116 of the Public Companies Act B.E. 2535 Section 116 requires that a public company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward, to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

# Other components of equity

# **Currency translation differences**

The currency translation differences account within equity comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

# 17 Segment information

#### **Business segment**

Management considers that the Group operates in a single line of business, production and distribution of electricity. Therefore, the group has only one reportable segment.

#### Geographical segment

In presenting information on the basis of geographical segments, segment sales are based on the entity's country of domicile. Segment non-current assets (exclude derivatives and deferred tax) are based on the geographical location of the assets.

	Reve	Revenues		ent assets
	2018	2017	2018	2017
		(in thous	and Baht)	
Thailand	2,869,217	2,841,005	10,381,794	9,998,207
Japan	451,106	481,476	4,499,989	5,864,525
Philippines	-	-	1,205,660	1,185,130
Indonesia	-	-	12,295,044	12,344,586
Total	3,320,323	3,322,481	28,382,487	29,392,448

#### **Major customers**

The majority of the Group's revenue approximately Baht 2,869.22 million (2017: Baht 2,841.01 million) were from sales to the Electricity Generating Authority of Thailand and Provincial Electricity Authority and revenue approximately Baht 444.60 million (2017: Baht 481.48 million) were from sales to private companies in Japan.

#### 18 Revenue from sale and rendering of services

			lidated statements	Separ financial sta	
	Note	2018	2017	2018	2017
			(in thousa	nd Baht)	
Revenue from sale of electricity		1,363,188	1,349,629	223,936	194,132
Revenue from adder		1,950,625	1,972,852	489,177	497,629
Rendering of services	5	6,510	-	42,000	42,000
Total		3,320,323	3,322,481	755,113	733,761

# 19 Interest and dividend income

		Consolidated		Separate	
		financial st	tatements	financial statements	
	Note	2018	2017	2018	2017
			(in thous	and Baht)	
Dividend income					
Subsidiaries	5	-	-	1,517,012	1,584,950
	_	-	-	1,517,012	1,584,950
Interest income					
Subsidiaries and indirect					
subsidiaries	5	-	-	160,244	120,429
Financial institutions		4,769	40,941	1,307	36,102
		4,769	40,941	161,551	156,531
Total		4,769	40,941	1,678,563	1,741,481

# 20 Administrative expenses

	Consolidated		Separate	
	financial s	tatements	financial	statements
	2018	2017	2018	2017
		(in thousa	nd Baht)	
Personnel expenses	238,799	279,059	144,202	164,892
Depreciation and amortisation	16,835	9,711	10,968	4,010
Management service expense	20,257	1,320	19,670	1,320
Transportation expense	23,470	27,854	13,898	15,134
Consultancy fee	86,936	155,067	53,398	106,408
Other tax related to disposal of				
assets to infrastructure fund	43,247	-	-	-
Others	161,899	185,871	111,561	124,933
Total	591,443	658,882	353,697	416,697

# 21 Employee benefit expenses

	Consolidated		Separate	
	financial st	atements	financial s	statements
	2018	2017	2018	2017
		(in thouse	and Baht)	
Wages and salaries	159,598	150,472	87,128	60,966
Defined contribution plans	7,716	5,443	7,029	4,796
Share-base payment				
transaction	6,897	39,818	6,897	39,818
Others	102,534	101,813	69,886	61,723
Total	276,745	297,546	170,940	167,303

# Defined contribution plans

The company established provident funds for its employees. Membership to the funds is on a voluntary basis. Contributions are made monthly by the employees at rates ranging from 5% or 10% of their basic salaries and by the Company at rates ranging from 5% or 10% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by a licensed Fund Manager.

# 22 Expenses by nature

The statements of income include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

	Consolidated financial statements		Separate financial statement		
	2018	2017	2018	2017	
	(in thousand Baht)				
Included in cost of sales of goods and rendering of services:					
Depreciation	641,318	659,118	165,712	159,675	
Amortisation	34,998	33,367	2,347	1,234	
Included in administrative expenses:					
Depreciation	11,346	7,289	6,326	2,743	
Amortisation	5,489	2,422	4,642	1,267	

# 23 Finance costs

	Consolida financial sta			-	oarate statements	
	Note	2018	2017	2018	2017	
			(in thousan	d Baht)		
Interest expense:						
Related parties	5	-	-	634	-	
Financial institutions		475,562	398,802	378,986	273,170	
Total interest expense	-	475,562	398,802	379,620	273,170	
Amortisation of transaction						
costs capitalised		44,909	39,503	33,633	27,283	
Other finance costs		99	391	-	-	
	-	520,570	438,696	413,253	300,453	
<i>Less</i> amount included in the cost of qualifying assets:		ŕ	ŕ	·		
- Property, plant and equipment under						
construction		-	(2,644)	-	-	
Net	-	520,570	436,052	413,253	300,453	

# 24 Income tax expense

# Income tax recognised in profit or loss

	Consolidated		Sepa	rate
	financial s	tatements	financial s	tatements
	2018	2017	2018	2017
		(in thoi	ısand Baht)	
Current period tax expense				
Current year	96,715	12,805	-	-
Adjustment for prior years	2,420	106	-	-
	99,135	12,911	-	-
Deferred tax expense				
Movements in temporary differences	6,436	(7,302)	13,198	(506)
1	6,436	(7,302)	13,198	(506)
Total income tax expense (benefit)	105,571	5,609	13,198	(506)

# Reconciliation of effective tax rate

	<b>Consolidated fina</b> 2018			2017
			(R	estated)
	Rate	(in thousand	Rate	(in thousand
	(%)	Baht )	(%)	Baht)
Profit before income tax expense		2,324,800		1,779,829
Income tax using the Thai corporation				
tax rate	20	464,960	20	355,966
Effect of different tax rates in foreign				
jurisdictions		16,559		(154)
Income not subject to tax/ Expenses that				
are deductible at a greater amount		(507,401)		(495,990)
Expenses not deductible for tax				
purposes/ other adjustments		153,230		26,028
Recognition of previously unrecognised				
tax losses		(95,875)		(2,665)
Current year losses for which no				
deferred tax asset was recognised		71,964		122,317
Over provided in prior years		2,420		106
Others		(286)		1
Total income tax expense	4.54	105,571	0.32	5,609

	Separate financial statements			
		2018		2017
	Rate	(in thousand	Rate	(in thousand
	(%)	Baht )	(%)	Baht)
Profit before income tax expense		1,362,640		1,277,937
Income tax using the Thai corporation				
tax rate	20	272,528	20	255,587
Income not subject to tax/ Expenses that				
are deductible at a greater amount		(344,499)		(364,029)
Expenses not deductible for tax				
purposes/ other adjustments		22,797		17,465
Current year losses for which no				
deferred tax asset was recognised		62,372		90,471
Total income tax expense (benefit)	0.97	13,198	0.04	(506)

#### 25 Promotional privileges

By virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520, the Company has been granted privileges by the Board of Investment relating to production of electricity from solar cell. The privileges granted include:

- (a) exemption from payment of import duty on machinery approved by the Board
- (b) exemption from payment of income tax for certain operations for a period of eight years from the date on which the income is first derived from such operations
- (c) a 50% reduction in the normal income tax rate on the net profit derived from certain operations for a period of five years, commencing from the expiry date in (b) above.

As promoted company, the Company must comply with certain terms and conditions prescribed in the promotional certificates.

Summary of revenue from promoted and non-promoted businesses:

	Consolidated financial statements		Separate financial statements		
	2018	2017	2018	2017	
	(in thousand Baht)				
Promoted businesses	2,869,217	2,841,005	713,113	691,761	
Non - promoted businesses	451,106	481,476	42,000	42,000	
Total	3,320,323	3,322,481	755,113	733,761	

Revenue from promoted businesses is entirely domestic sales.

# 26 Earnings per share

#### Basic earnings per share

The calculations of basic earnings per share for the year ended 31 December 2018 and 2017 were based on the profit for the years attributable to ordinary shareholders of the Company and the weighted average number of ordinary shares outstanding during the years as follows;

	<b>Consolidated financial</b>		Separate financial	
	stater	nents	statements	
	2018	2017	2018	2017
		(Restated)		
	(i	n thousand share	es/thousand Bahi	t)
Profit attributable to ordinary	·			
shareholders of the Company	2,219,228	1,774,219	1,349,442	1,278,443
Number of ordinary shares issued at the				
beginning of the year	1,992,304	1,990,000	1,992,304	1,990,000
Effect of shares issued and paid-up	3,097	1,081	3,097	1,081
Weighted average number of ordinary				<u></u>
shares outstanding (basic)	1,995,401	1,991,081	1,995,401	1,991,081
Basic earnings per share (in Baht)	1.11	0.89	0.68	0.64

# Diluted earnings per share

The calculations of diluted earnings per share for the year ended 31 December 2018 and 2017 were based on the profit for the years attributable to ordinary shareholders of the Company and the weighted average number of ordinary shares outstanding during the years after adjusting for the effects of all dilutive potential ordinary shares as follows:

	Consolidated financial statements		Sepa financial s		
	2018	2017	2018	2017	
		(Restated)			
	(ir	n thousand Baht	/thousand share	es)	
Profit for the period attributable to ordinary shareholders of the Company	any				
(basic)	2,219,228	1,774,219	1,349,442	1,278,443	
Weighted average number of ordinary shares			· · · ·		
outstanding (basic)	1,995,401	1,991,081	1,995,401	1,991,081	
Effect of issuance of shares option	4,501	1,742	4,501	1,742	
Weighted average number of ordinary					
shares outstanding (diluted)	1,999,902	1,992,823	1,999,902	1,992,823	
Earnings per share (diluted) (in Baht)	1.11	0.89	0.67	0.64	

# 27 Dividends

At the Board of Director's meeting of the Company held on 27 November 2018, the meeting approved the interim dividend payment for the third quarter 2018 performance at the rate of Baht 0.16 per share, amounting to Baht 319.49 million. The dividend was paid to the shareholders on 20 December 2018.

At the Board of Director's meeting of the Company held on 21 August 2018, the meeting approved the interim dividend payment for the second quarter 2018 performance at the rate of Baht 0.16 per share, amounting to Baht 319.48 million. The dividend was paid to the shareholders on 13 September 2018.

At the Board of Director's meeting of the Company held on 22 May 2018, the meeting approved the interim dividend payment for the first quarter 2018 performance at the rate of Baht 0.16 per share, amounting to Baht 319.44 million. The dividend was paid to the shareholders on 15 June 2018.

At the Annual General Meeting of the Shareholders of the Company, held on 27 April 2018, the shareholders approved the appropriation of dividend from 2017 performance at Baht 0.61 per share, totaling Baht 1,215.46 million. The dividend was paid to the shareholders as interim dividend at Baht 0.45 per share, remaining dividend at Baht 0.16 per share, totaling Baht 319.09 million. The dividend was paid to the shareholders on 8 May 2018.

At the Board of Director's meeting of the Company held on 28 November 2017, the meeting approved the interim dividend payment for the third quarter 2017 performance at the rate of Baht 0.15 per share, amounting to Baht 298.84 million. The dividend was paid to the shareholders on 22 December 2017.

At the Board of Director's meeting of the Company held on 29 August 2017, the meeting approved the interim dividend payment for the second quarter 2017 performance at the rate of Baht 0.15 per share, amounting to Baht 298.82 million. The dividend was paid to the shareholders on 22 September 2017.

At the Board of Director's meeting of the Company held on 30 May 2017, the meeting approved the interim dividend payment for the first quarter 2017 performance at the rate of Baht 0.15 per share, amounting to Baht 298.70 million. The dividend was paid to the shareholders on 26 June 2017.

At the Annual General Meeting of the Shareholders of the Company, held on 4 April 2017, the shareholders approved the appropriation of dividend from 2016 performance at Baht 0.69 per share, totaling Baht 1,373.10 million. The dividend was paid to the shareholders as interim dividend at Baht 0.54 per share, remaining dividend at Baht 0.15 per share, totaling Baht 298.50 million. The dividend was paid to the shareholders on 20 April 2017.

# 28 Financial instruments

#### Financial risk management policies

The Group is exposed to normal business risks from changes in market interest rates and currency exchange rates and from non-performance of contractual obligations by counterparties. The Group does not hold or issue derivative financial instruments for speculative or trading purposes.

Risk management is integral to the whole business of the Group. The Group has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The management continually monitors the Group's risk management process to ensure that an appropriate balance between risk and control is achieved.

# Capital management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board monitors the return on capital, which the Group defines as result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

#### Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Group's operations and its cash flows. The Group is primarily exposed to interest rate risk from its borrowings *(see note 14).* The Group mitigates this risk by ensuring that the majority of its borrowings are at fixed interest rates.

The effective interest rates of loans to related parties as at 31 December and the periods in which the loans receivable mature or re-price were as follows:

	Separate financial statements After 1 year					
	Interest rate (% per annum)	Within 1 year	but within 5 years	After 5 years and Baht)	Total	
2018						
Current						
loans to related parties	2.88 - 3.64	1,495,138	-	-	1,495,138	
Non-current			0.000.154		0.000.174	
loans to related parties	2.88 - 4.50		3,883,174	-	3,883,174	
Total		1,495,138	3,883,174	<b>F</b>	5,378,312	
			Separate final	ncial statements		
			After 1 year			
	Interest	Within 1	but within 5			
	rate	year	years	After 5 years	Total	
	(% per annum)		(in thous	and Baht)		
2017						
Non-current						
loans to related parties	2.88 - 4.50	-	4,463,765	-	4,463,765	
Total			4,463,765		4,463,765	

The interest rates of interest bearing liabilities as at 31 December and the periods in which the loans mature were as follows:

$\begin{array}{c c c c c c c c c c c c c c c c c c c $			С		ancial statemen	ts
$ \begin{array}{c} \textbf{Current} \\ \textbf{loans from financial institutions} \\ \textbf{loans from financial institutions}$		rate (% per		but within 5 years		Total
loans from financial institutions $1.86 - 5.25$ $1,520,576$ $ 1,520,576$ Non-current $1.86 - 5.66$ $11,430,064$ $2,616,527$ $14,046,688$ Total $1.520,576$ $11,430,064$ $2,616,527$ $14,046,688$ 2017 $2,616,527$ $14,046,688$ Current $10ans from financial institutions0.30 - 5.251,415,239 1,415,239Non-current0.30 - 5.251,415,239 1,415,23910,191,12415,613,152Ioans from financial institutions0.30 - 5.25 5,522,02810,191,12415,613,152Total0.30 - 5.25 5,522,02810,191,12415,613,152Non-current0.30 - 5.25 5,522,02810,191,12417,028,391Non-current0.30 - 5.25 5,522,02810,191,12417,028,391Interest(% perarman)arte(% perarman)yearAfter 1 yearYearsAfter 5 years(in thousand Baht)2018Currentloans from financial institutions1.60 - 4.231,313,515  1,313,515Non-currentloans from financial institutions1.60 - 4.23 10,610,6291,853,92512,464,554loans from financial institutions1.60 - 4.231,017,431  1,017,431Non-currentloans from financial institutions1.60 - 4.231,017,431  1,017,431Don-surrentloans fr$						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	loans from financial institutions	1.86 - 5.25	1,520,576	-	-	1,520,576
Total $1,520,576$ $11,430,064$ $2,616,527$ $15,567,167$ 2017       Current       loans from financial institutions $0.30 - 5.25$ $1,415,239$ - $1,415,239$ Non-current       loans from financial institutions $0.30 - 5.25$ $1,415,239$ $-5,522,028$ $10,191,124$ $15,613,152$ Total $1,415,239$ $-5,522,028$ $10,191,124$ $17,028,391$ Separate financial statements After 1 year         Interest (% per armum)         Within 1 years         years       After 5 years (in thousand Baht)         Total         Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ - $1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ Output         1,313,515         Non-current loans from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ Output         Output $ 500,000$		186 566		11 /30 06/	2 616 527	14 046 688
2017         Current         loans from financial institutions $0.30 - 5.25$ $1,415,239$ $ 1,415,239$ Non-current       loans from financial institutions $0.30 - 5.25$ $ 5,522,028$ $10,191,124$ $15,613,152$ Total $1,415,239$ $5,522,028$ $10,191,124$ $17,028,391$ Separate financial statements         After 1 year       but within 5         year $After 5$ years       Total         Otal         Separate financial statements         After 1 year       but within 5         year $After 5$ years       Total         Otal         Otal         Otal         Separate financial statements         After 1 year       but within 5         years       After 5 years       Total         Otal         Otal         Otal         Otal         Otal         Otal         Otal         Otal         Otal <td< td=""><td></td><td>1.80 - 5.00</td><td></td><td></td><td></td><td></td></td<>		1.80 - 5.00				
Current loans from financial institutions $0.30 - 5.25$ $1,415,239$ $ 1,415,239$ Non-current loans from financial institutions $0.30 - 5.25$ $ 5,522,028$ $10,191,124$ $15,613,152$ Total $1,415,239$ $5,522,028$ $10,191,124$ $15,613,152$ Separate financial statements After 1 year $After 1 year$ $After 1 year$ Dut within 1 rate (% per annum)       year       years       After 5 years       Total         2018       Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ $ 1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $1,313,515$ $ 1,313,515$ Ourse from financial institutions $1.60 - 4.23$ $ 1,313,515$ $ 1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $ 1,017,431$ $  1,017,431$ 2017       Current loans from financial institutions $1.60 - 4.23$ $1,017,431$ $ 1,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $ 4,223,811$ $7,737,167$ $11,960,978$ <	1 0721		1,520,570	11,430,004	2,010,527	15,50/,10/
loans from financial institutions $0.30 - 5.25$ $1,415,239$ $1,415,239$ Non-current loans from financial institutions $0.30 - 5.25$ - $5,522,028$ $10,191,124$ $15,613,152$ Total $1,415,239$ $5,522,028$ $10,191,124$ $15,613,152$ $17,028,391$ Separate financial statements After 1 year but within 5 yearsAfter 5 years yearsTotalOld Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ - $1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $2.57$ $200,000$ $ 500,000$ Total2017Current loans from financial institutions $1.60 - 4.23$ $1,017,431$ $ 1,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $ 4,223,811$ $7,737,167$ $11,960,978$	2017					
Non-current loans from financial institutions $0.30 - 5.25$ $ 5,522,028$ $10,191,124$ $15,613,152$ Total $1,415,239$ $5,522,028$ $10,191,124$ $15,613,152$ $17,028,391$ Separate financial statements After 1 year         Interest (% per arrum)       Within 1 year       years       After 5 years (in thousand Baht)       Total         2018       Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ $ 1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ loans from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ loans from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $14,278,069$ 2017 $11,110,629$ $1,853,925$ $14,278,069$ $14,278,069$ 2017 $1.60 - 4.23$ $1.60 - 4.23$ $1.017,431$ $ 1.017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $ 4,223,811$ $7,737,167$ $11,960,978$						
loans from financial institutions $0.30 - 5.25$ - $5,522,028$ $10,191,124$ $15,613,152$ Total1,415,239 $5,522,028$ $10,191,124$ $15,613,152$ TotalSeparate financial statements After 1 year but within 5 yearAfter 1 year yearsSeparate financial statements (in thousand Baht)2018Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ $1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $2.57$ - $10,610,629$ $1,853,925$ $12,464,554$ loans from financial institutions $1.60 - 4.23$ - $10,610,629$ $1,853,925$ $12,464,554$ loans from financial institutions $1.60 - 4.23$ - $10,610,629$ $1,853,925$ $12,464,554$ loans from financial institutions $1.60 - 4.23$ - $10,17,431$ - $10,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $1,017,431$ - $1,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $1,017,431$ $ 1,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $ 4,223,811$ $7,737,167$ $11,960,978$		0.30 – 5.25	1,415,239	-	-	1,415,239
Total $1,415,239$ $5,522,028$ $10,191,124$ $17,028,391$ Separate financial statements After 1 year but within 5 year         Niterest (% per armum)         2018         Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ $  1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ Dom from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ Dom from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ Dom from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $12,464,554$ Dom from financial institutions $1.60 - 4.23$ $ 10,610,629$ $1,853,925$ $14,278,069$ Dom financial institutions $1.60 - 4.23$ $  1,017,431$ $ -$ <		0.20 5.25		5 522 028	10 101 124	15 613 152
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		0.30 - 3.23	1 415 239			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Total		1,413,439			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				Separate finar	icial statements	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$\begin{array}{c} (\% \ per \\ annum) \end{array} (in thousand Baht) \\ \hline \\ 2018 \\ \hline \\ Current \\ loans from financial institutions \\ loans from financial institutions \\ loans from financial institutions \\ loans from related parties \\ \hline \\ 2.57 \\ \hline \\ 1.313,515 \\ \hline \\ 1.60 - 4.23 \\ 2.57 \\ \hline \\ \\ 1.313,515 \\ \hline \\ 1.313,515 \\ \hline \\ 1.1,110,629 \\ \hline \\ 1.853,925 \\ \hline \\ 1.853,925 \\ \hline \\ 14,278,069 \\ \hline \\ 2017 \\ \hline \\ Current \\ loans from financial institutions \\ loo - 4.23 \\ \hline \\ 1.60 - 4.23 \\ \hline \\ 1.60 - 4.23 \\ \hline \\ 1.60 - 4.23 \\ \hline \\ \\ 4.223,811 \\ \hline \\ 7.737,167 \\ \hline \\ 11,960,978 \\ \hline \end{array}$		Interest	Within 1	but within 5		
$\begin{array}{c} annum) \\ \hline 2018 \\ \hline Current \\ loans from financial institutions \\ loans from related parties \\ \hline 2.57 \\ \hline - \\ \hline 500,000 \\ \hline 1,313,515 \\ \hline 11,110,629 \\ \hline 1,853,925 \\ \hline 14,278,069 \\ \hline 2017 \\ \hline Current \\ loans from financial institutions \\ l.60 - 4.23 \\ \hline 1,017,431 \\ \hline Non-current \\ loans from financial institutions \\ \hline 1.60 - 4.23 \\ \hline - \\ 4,223,811 \\ \hline 7,737,167 \\ \hline 11,960,978 \\ \hline \end{array}$			year	-		Total
Current loans from financial institutions $1.60 - 4.23$ $1,313,515$ $1,313,515$ Non-current loans from financial institutions $1.60 - 4.23$ - $10,610,629$ $1,853,925$ $12,464,554$ loans from related parties $2.57$ - $500,000$ - $500,000$ Total $1.313,515$ $11,110,629$ $1,853,925$ $14,278,069$ 2017 Current loans from financial institutions $1.60 - 4.23$ $1,017,431$ - $1,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $ 4,223,811$ $7,737,167$ $11,960,978$				(in thous	and Baht)	
loans from financial institutions $1.60 - 4.23$ $1,313,515$ $1,313,515$ Non-currentloans from financial institutions $1.60 - 4.23$ - $10,610,629$ $1,853,925$ $12,464,554$ loans from related parties $2.57$ - $500,000$ - $500,000$ Total1,313,51511,110,629 $1,853,925$ $14,278,069$ 2017Current1.60 - 4.23 $1,017,431$ $1,017,431$ Non-current1.60 - 4.23 $1,017,431$ $1,017,431$	2018					
Non-current loans from financial institutions $1.60 - 4.23$ $2.57$ $ 10,610,629$ $500,000$ $1,853,925$ $500,000$ $12,464,554$ $500,000$ Total $1.313,515$ $11,110,629$ $1,853,925$ $12,464,554$ $14,278,069$ 2017 Current loans from financial institutions $1.60 - 4.23$ $1,017,431$ $  1,017,431$ Non-current loans from financial institutions $1.60 - 4.23$ $ 4,223,811$ $7,737,167$ $11,960,978$			1 0 1 0 5 1 5			1 0 1 0 5 1 5
loans from financial institutions $1.60 - 4.23$ - $10,610,629$ $1,853,925$ $12,464,554$ loans from related parties $2.57$ - $500,000$ - $500,000$ Total1,313,51511,110,6291,853,92514,278,0692017Currentloans from financial institutions $1.60 - 4.23$ $1,017,431$ $1,017,431$ Non-currentloans from financial institutions $1.60 - 4.23$ - $4,223,811$ $7,737,167$ $11,960,978$		1.60 – 4.23	1,313,515	-	68	1,313,515
loans from related parties       2.57       -       500,000       -       500,000         Total       1,313,515       11,110,629       1,853,925       14,278,069         2017       Current       Ioans from financial institutions       1.60 - 4.23       1,017,431       -       -       1,017,431         Non-current       Ioans from financial institutions       1.60 - 4.23       -       4,223,811       7,737,167       11,960,978		1.60 - 4.23	_	10 610 629	1 853 925	12 464 554
Total       1,313,515       11,110,629       1,853,925       14,278,069         2017       Current       Ioans from financial institutions       1.60 - 4.23       1,017,431       -       -       1,017,431         Non-current       Ioans from financial institutions       1.60 - 4.23       -       4,223,811       7,737,167       11,960,978			-		1,000,020	
2017         Current         loans from financial institutions       1.60 - 4.23       1,017,431       -       -       1,017,431         Non-current       1.60 - 4.23       -       4,223,811       7,737,167       11,960,978	-	2.07	1 313 515		1 853 925	
Current         1.60 - 4.23         1,017,431         -         -         1,017,431           Non-current         1.60 - 4.23         -         4,223,811         7,737,167         11,960,978	10(21		1,010,010		1,000,720	11,270,000
loans from financial institutions         1.60 - 4.23         1,017,431         -         -         1,017,431           Non-current         Ioans from financial institutions         1.60 - 4.23         -         4,223,811         7,737,167         11,960,978	2017					
Non-current         -         4,223,811         7,737,167         11,960,978	Current					
loans from financial institutions 1.60 – 4.23 – 4,223,811 7,737,167 11,960,978	loans from financial institutions	1.60 - 4.23	1,017,431	-	-	1,017,431
				(		11.0/0.070
$1,017,431 \qquad 1,017,431 \qquad 4,223,811 \qquad 7,73,167 \qquad 12,978,409$		1.60 – 4.23				
	Lotal					

# Foreign currency risk

The Group is exposed to foreign currency risk primarily from long-term loans from financial institutions outstanding in foreign currencies.

# BCPG Public Company Limited and its Subsidiaries Notes to the financial statements

# For the year ended 31 December 2018

At 31 December, the Group and the Company were exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

· · · ·	Consolidated financial statements		Separate stater		
	2018	2017	2018	2017	
		(in thouse	and Baht)		
Japanese Yen					
Cash and cash equivalents	1,732,503	979,402	2,360	7,096	
Trade account receivable	12,311	30,556	-		
Other receivables	183,031	162,500	84,144	122,222	
Other payables	(72,890)	(83,124)	(1,046)	(913)	
Interest-bearing liabilities	(6,562,550)	(9,042,915)	(5,710,297)	(6,087,377)	
Gross balance sheet exposure	(4,707,595)	(7,953,581)	(5,624,839)	(5,895,972)	
United States Dollars					
Cash and cash equivalents	3,952	5,037	906	1,616	
Other receivables	-	-	-	25,298	
Other payables	(66,803)	(16,759)	(2,692)	(16,759)	
Interest-bearing liabilities	(1,098,169)	(542,343)	(909,692)	(326,897)	
Gross balance sheet exposure	(1,161,020)	(554,065)	(911,478)	(316,742)	
Other currencies					
Other payables	(26)	(9,744)	(33)	(9,445)	
Gross balance sheet exposure	(26)	(9,744)	(33)	(9,445)	
Cross currency swap contracts	188,477				
Net exposure	(5,680,164)	(8,517,390)	(6,536,350)	(6,222,159)	

#### Credit risk

Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the Group as and when they fall due. The Group has concentrations of credit risk since most of its revenues are contracted under long-term agreements with a small number of parties. However, counterparties are generally government authorities and large public or private corporations and the risk perceived is low.

## Liquidity risk

The Group monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations and to mitigate the effects of fluctuations in cash flows.

# Fair values of financial assets and liabilities

As at 31 December 2018 and 2017, fair value of financial assets and liabilities is taken to approximately the carrying value, except the following items;

	Consolidated financial statements						
		Carrying value		Fair value			
-	Current	Non-current	Total	Level 1	Level 2	Level 3	Total
			(in th	housand Baht)			
31 December 2018							. *
Financial assets							
Cross currency and							
interest rate swap					6 001		5 2 2 1
contracts	-	-	-	-	5,321	-	5,321
<i>Financial liability</i> Interest rate swap							
contract	_	_	-	-	41,740	-	41,740
Loans from financial	-	_			-11,7 10		11,710
institutions (fixed							
rate)	100,700	730,129	830,829	-	877,727	-	877,727
,		·			-		
<b>31 December 2017</b>							
Financial asset							
Cross currency and							
interest rate swap					( 705		6 705
contracts	-	-	-	-	6,705	-	6,705
Interest rate swap contract	_			_	4,636	-	4,636
Financial liability		-	-	-	7,050		4,050
Interest rate swap							
contract	-	-	-	-	44,111	-	44,111
Loans from financial							,
institutions (fixed							
rate)	235,305	3,343,208	3,578,513	-	3,716,740	-	3,716,740
			<b>a</b>	<b></b>			
		C11	Seperate	financial state		value	
	Comment	Carrying value	Total	Level 1	Level 2	Level 3	Total
	Current	Non-current		housand Baht)		Level 5	Total
31 December 2018			(1111	nousana banij			
Financial assets				÷			
Loan to related parties							
(fixed rate)	1,495,138	3,883,174	5,378,312	-	4,700,150	-	4,700,150
							•
Financial liabilities							
Loan from related		500 000	500 000		180 220		489,330
party (fixed rate)	-	500,000	500,000	-	489,330	-	409,330

Level 2 fair values for simple over-the-counter derivative financial instruments are based on broker quotes. Those quotes are tested for reasonableness by discounting expected future cash flows using market interest rate for a similar instrument at the measurement date. Fair values reflect the credit risk of the instrument and include adjustments to take account of the credit risk of the Group and counterparty when appropriate.

# 29 Commitments with non-related parties

	Consoli		Separate		
	financial st	tatements	financial st	atements	
	2018	2017	2018	2017	
		(in thousa	nd Baht)		
Capital commitment					
Project management fee	169,995	-	-	-	
Buildings, equipment, machinery and					
other constructions	1,480,875	41,008	-		
Others	10,567	2,597	10,567	2,480	
Total	1,661,437	43,605	10,567	2,480	
Future minimum lease payments					
under non-cancellable operating					
leases					
Within one year	5,898	5,363	4,539	3,958	
After one year but within five years	25,322	21,934	16,184	13,440	
After five years	50,828	59,907	15,656	21,163	
Total	82,048	87,204	36,379	38,561	
Other commitment					
Bank guarantee	61,097	105,097	61,097	85,097	
Total	61,097	105,097	61,097	85,097	

# Cross currency swap contracts

The Group entered into cross currency swap contracts to buy U.S. Dollars currency of U.S. Dollars 11.60 million and sell Thai Baht currency of Baht 334.02 million. The contract expires in 2030. All counterparties agree to pay the interest and the notional amount in accordance with the terms and conditions specified in the contract.

#### Interest Rate Swap Agreements

The Group entered into interest rate swap agreements for loans from bank with a floating interest rate of 3M TIBOR+180BPS per annum, to a fixed rate of 2.94% per annum with the principal amount of JPY 2,577.42 million, which pays every 3 months and the contracts expire in 2022.

# 30 Thai Financial Reporting Standards (TFRS) not yet adopted

A number of new and revised TFRS which relevant to the Group's operations are expected to have significant impact on the consolidated and separate financial statements on the date of initial application. Those TFRS become effective for annual financial reporting periods beginning on or after 1 January of the following years

TFRS	Topic	Effective
TFRS 7*	Financial Instruments: Disclosures	2020
TFRS 9*	Financial Instruments	2020
TFRS 15	Revenue from Contracts with Customers	2019
TFRS 16	Leases	2020
TAS 32*	Financial Instruments: Presentation	2020
TFRIC 16*	Hedges of a Net Investment in a Foreign Operation	2020
TFRIC 19*	Extinguishing Financial Liabilities with Equity Instruments	2020

\* TFRS - Financial instruments standards

TFRS 15 has been published and is mandatory for the accounting period beginning on 1 January 2019 or later. The Group has not early adopted TFRS 15.

#### (a) TFRS 15 Revenue from Contracts with Customers

TFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. Revenue should be recognised when (or as) an entity transfers control over goods or services to a customer, measured at the amount to which the entity expects to be entitled.

The Group has completed assessing the impact of application of TFRS 15. The impact assessment performed included the review of the recognition of the Group's revenues, revenue from sales and rendering of services, including the review of contract assets and contract liabilities and revenue recognition of investment in associates.

For the sale of steam under minimum take or pay arrangement of an associate in Indonesia, Under TFRS 15, revenue should be recognised upon fulfillment of the performance obligation.

The Group plans to adopt TFRS 15 using the cumulative effect method, with the effect of initially applying this standard recognised at the date of initial application (1 January 2019). As a result, the Group will not apply the requirements of TFRS 15 to the comparative period presented. Thus, if the Group were to initially adopted TFRS 15, the impacts to consolidated statement of financial position are investments in associates and retained earnings would decrease approximately Baht 54.13 million.

#### (b) TFRS - Financial instruments standards

These TFRS establish requirements related to definition, recognition, measurement, impairment and derecognition of financial assets and financial liabilities, including accounting for derivatives and hedge accounting.

Management is presently considering the potential impact of adopting and initially applying TFRS – Financial instruments standards on the consolidated and separate financial statements.

# 31 Event after the reporting period

At the Board of Director's meeting of the Company held on 20 February 2019, the Board approved to submit for approval at the Annual General Meeting of the Shareholders, a full year 2018 dividend payment at the rate of Baht 0.64 per share, of which Baht 0.48 per share was paid as interim dividend as disclosed in note 27. Thus, the remaining dividend will be at the rate of Baht 0.16 per share payable to the shareholders entitled to receive dividend. This dividend is subject to the approval of the Shareholders at the Annual General Meeting to be held on 9 April 2019.

# 32 Reclassification of accounts

Certain accounts in the statement of financial position as at 31 December 2017 which are included in the 2018 financial statements for comparative purposes, have been reclassified to conform to the presentation in the 2018 financial statements.

2017

			- 20	17			
•		Consolidated		<i>•</i>	Separate		
	tina	ancial stateme	ents	financial statements			
	Before		After	Before		After	
	reclass.	Reclass.	reclass. (in thouse	reclass.	Reclass.	reclass.	
Statement of financial position as at 31 December 2017			(	<i></i> ,			
Other payables	229,659	3,560	233,219	91,584	1,048	92,632	
Retention payable	3,560	(3,560)	-	1,048	(1,048)	-	
Statement of income for the year ended 31 December 2017 Administrative							
expenses Loss on disposal	179,441	527	179,968	126,820	-	126,820	
of assets	527	(527)	-	-			

The reclassifications have been made because, in the opinion of management, the new classification is more appropriate to the Group's business.

# General Information and Other Key Information

# **Company Information**

BCPG PUBLIC COMPANY LIMITED Registration No. 0107559000095

# **Company establishment and Commercial operation**

July 17, 2015

# **Business**

Operating and distributing electrical power from renewable resources including invest in renewable power company.

# Customers

- Electricity Generating Authority of Thailand
- Provincial Electricity Authority
- Electric Power Company



# Contact

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#### Office

#### BCPG Public Company Limited (Head Office)

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# **Subsidiaries**

#### Bangchak Solar Energy Co., Ltd.

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Bangchak Solar Energy (Buriram1) Co., Ltd. 120 - 120/2 Moo 7, Tambon Bukkrasang, Nong Kri District, Buri Ram 31210

Bangchak Solar Energy (Nakhonratchasima) Co., Ltd. 111 - 111/2 Moo 9, Tambon Takien, Dan Khun Thot District, Nakhonratchasima 30210

**Bangchak Solar Energy (Chaiyaphum1) Co., Ltd.** 216 - 218 Moo 4, Tambon Huatalay Bamneyt Narong District, Chaiyaphum 36220

**Bangchak Solar Energy (Prachinburi) Co., Ltd.** 137 - 139 Moo 30, Tambon Nakam, Kabin Buri District, Prachinburi 2511

**BCPG Biopower 1 Co., Ltd.** 14 moo 1, Tambon Banma, Bang Krasan District, Phra Nakorn Sri Ayudthaya 13220

BCPG Biopower 2 Co., Ltd. 14 moo 1, Tambon Banma, Bang Krasan District, Phra Nakorn Sri Ayudthaya 13220

Lom Ligor Co., Ltd., 480 moo 5, Soi Chaloem Phra Kiat 1, Pak Phanang Bypass Road, Tambon Pak Phanang Fang Tawan-ok, Pak Phanang District, Nakhon Si Thammarat 80140

#### **BCPG** Japan Corporation

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#### Huang Ming Japan Company Limited

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#### BCPG Investment Holding Pte. Ltd (BCPGI)

8 Marina Boulevard # 05-02, Marina Bay Financial Centre, Singapore 018981

#### BSE Energy Holding Pte. Ltd. (BSEH)

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#### BCPG Wind Cooperatief UA

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# Petro Wind Energy

7/F JMT Building, ADB Avenue, Ortigas Business Center, Pasig City, The Phillipines

# Star Energy Group Holding

9 Battery Road #15-01 MYP Centre, Singapore (049910)

# Information on Reference Persons

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# **Auditor**

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#### **Others**

- Investor support
- Reporting losses of share certificates
- Shareholders' information change

# Contact

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