

# B.GRIMM POWER PUBLIC COMPANY LIMITED

**EMPOWERING THE WORLD COMPASSIONATELY** 



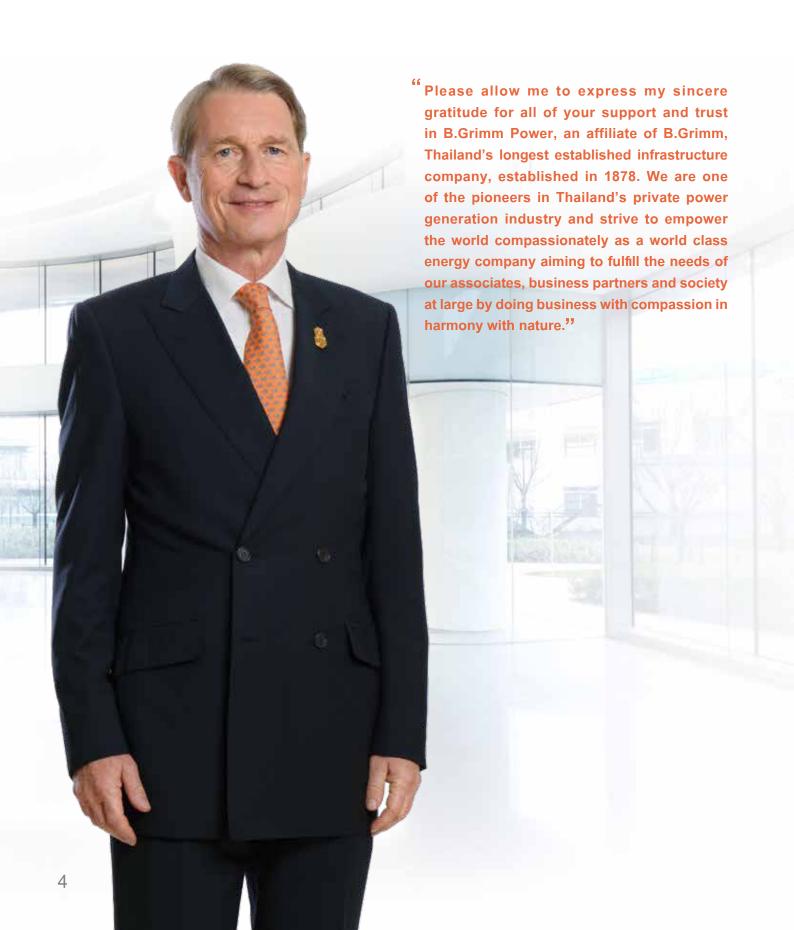




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# Message from Chairman



We started our business, B.Grimm Power, in 1993 when B.Grimm pioneered into Thailand's emerging private power generation industry with B.Grimm Power as its investment arm and in the following joined with Amata Corporation, Thailand's leading industrial estate developer to set up Amata B.Grimm Power.

Throughout the next two decades, Amata B.Grimm Power became one of the leading energy companies in Thailand as a strategic alliance of B.Grimm, Amata Corporation and Sumitomo Corporation - key players in the fields of engineering, industrial estates and business management.

In our 140th year as a Thai corporate citizen, B.Grimm has been the oldest infrastructure developer in Thailand since the late 1800s. During that time, the company joined with the Snidvongse family to build one of Asia's largest infrastructure projects, the 1,500 km Rangsit canals. Later, in 1907, King Chulalongkorn, HM King Rama V, wrote in one of His published letters about B.Grimm's technological advancements in B.Grimm's telegraph concession.

In the decades following World War I and II respectively, the Royal Thai Government considered it their task to develop Thailand's infrastructure. Only in the early 1980s the Royal Thai Government opened infrastructure operations to the private sector,

first the telecommunication market, then some tollroads and then in the 1990s mass transit and electricity generation plus selected distribution. B.Grimm seized this opportunity, in the beginning with Amata Corporation in Amata industrial estates and later with other industrial parks in theirs.

Today we are also one of the leading Thai companies in renewable energy with multiple projects in solar, hydro and wind power in a number of countries.

Ever since then we have embarked on a journey of success that has been possible through the dedication of our highly professional management and associates, our highly supportive partners, our trusted financial institutions, our shareholders, our contractors and suppliers and our highly appreciated and thriving customers, who have been loyal to us since our first commercial operation date in 1998.

We believe building family-like relationships with our business partners is the key to mutual success and future growth. The synergy created together with our strategic partners increase our business capabilities in the power business resulting in supporting the countries' energy security and sustainable economic and social development. This, in the end, will enable us to empower the overall economic and social development potential. With local and

international partners, we expand our business across ASEAN countries to ensure the future energy security of the region.

B.Grimm will continue what we have been doing for the past 140 years and B. Grimm Power for the past 25 years by conducting our business with compassion.

In the past five years our consolidated revenues have grown from 13,804 million baht in 2013 to 31,482 million baht in 2017 with a current capacity of 1,646 MW. We have Power Purchase Agreements signed for a further 872 MW and continue to grow.

I would like to thank all of our stakeholders for being part of our success and being part of our future.

With kind regards,

**Harald Link** 

Chairman

# Message from the President



## "A Heartfelt Thank You to All Shareholders"

In 2017, B.Grimm Power Public Company Limited began a new chapter with the successful initial public offering (IPO) of our shares on July 19, 2017. We received an overwhelming response from both domestic and international institutional and retail investors. The institutional investors include the Asian Development Bank, a leading international financial institution, Muang Thai Life Assurance Public Company Limited and Thai Life Insurance Public Company Limited, all of whom are our cornerstone investors, and their trust in B.Grimm Power has undoubtedly helped to strengthen investors' confidence in the company.

#### **Furthering Success**

The proceeds from the IPO are being utilised as follows to further our success as promised to our shareholders.

First, we have improved our net debt-to-equity ratio. The IPO proceeds have been used to repay bank loans and shareholder loans. As a result, our net debt-to-equity ratio at the end of 2017 was reduced to only 1.4 times, which is a suitable baseline for our future growth and further development of new and existing power plant projects as planned. Furthermore, the lower net debt-to-equity ratio would result in a better credit rating for the company, and we intend to undergo a credit assessment in 2018 in preparation for other capital market fund raising options

that will enable us to manage our funding costs more effectively.

Second, we have invested in power plant projects as planned. B.Grimm Power is a proficient developer and operator of power plants, with a dedicated team of highly experienced and skilled professionals working with transparency and integrity. In the past 6 years, we have successfully developed 25 power plants, all of which were completed according to the scheduled commercial operation date (COD) specified by the power purchase agreement, and within the budgetary framework agreed with the lending banks. In 2017, we allocated a portion of the IPO proceeds to the development of the Xenamnoy 2 and Xekatam 1 project, our first hydro power plant in the Lao People's Democratic Republic. The power plant has an installed capacity of 20 MW, and has been in commercial operation since August 2017. In addition, we are constructing three combined cycle cogeneration power plants in Amata City Industrial Estate, Rayong, with an aggregate installed capacity of 399 MW. The construction of each project is progressing as planned, and the power plants will begin commercial operation in February, June and October 2018, respectively.

Third, we plan to pursue sustainable growth. With an aim to grow sustainably, we have opted for a qualitative approach to select new investment projects by assessing the return on capital based on the associated risks and thecomplexity of each project. The IPO proceeds will serve as an

important capital resource for our future investments.

In 2017, B.Grimm Power has been working on the following new power plant projects:

- Preparation for the development of three SPP replacement power plant projects, namely ABP1, ABP2 and BPLC1, which are considered qualified power plants under the draft of the Energy Regulatory Commission ("ERC")'s =regulations on the purchase of power from Small Power Producers under firm contracts (cogeneration system) with PPAs expiring in 2019 2025. The new power plants will be developed to replace existing plants with expiring PPAs.
- Seven PV solar farm projects for government agencies and agricultural cooperatives with a total capacity of 30.83 MW, comprising five projects with an aggregate capacity of 23.58 MW under joint investment with the War Veterans Organization ("WVO"), and two projects with a total capacity of 7.25 MW for agricultural cooperatives.
- An industrial waste to energy power plant project with a capacity of 4.8 MW is being developed by Progress Interchem (Thailand) Company Limited, a company which is 48% owned by B.Grimm Power Public Company Limited.

These projects are only a part of our endeavours that underline our strong commitment to pursue "quality growth" for the optimum benefit to our shareholders who have trusted and invested with us.

#### **Awards and Recognition**

With the overwhelming interest from local and international investors, the appropriate IPO share allotment, and the price stability of our shares following the SET-listing, B.Grimm Power is very proud to have received four prestigious awards from internationally renowned financial magazines: 1) The Best IPO in Thailand 2017 awarded by The Asset, 2) The Best IPO Deal in Southeast Asia 2017 awarded by Alpha South East Asia, 3) Best Energy Solutions Provider awarded by International Finance, and 4) Deal of the Year awarded by Thai Bond Market Association. We would like to take this opportunity to sincerely thank our shareholders, and would like to dedicate this success to you in recognition that these achievements have been made possible with your kind support.

#### **Performance Excellence**

In addition to the projects under construction and development as mentioned above, we have achieved strong performance on account of our 30 power plants that are in commercial operation, with a total installed capacity of 1,646 MW. In 2017, B.Grimm Power's revenue from sales and services totalled Baht 31,482 million, representing a 13.5% growth and the highest total revenue recorded since the company's inception. The growth is mainly attributable to the

full-year commercial operation of the ABP5 and BPWHA1 combined cycle cogeneration power plants, which have been in commercial operation since 2016; the higher electricity prices which increased in tandem with the government's Ft rates; and the higher electricity consumption from our industrial customers. Besides the significant growth in revenue, we also achieved impressive operating profits, with an EBITDA of Baht 8,725 million, or an EBITDA margin of 28%, which is a reflection of the effectiveness of our power plant operations and operating cost control. Our normalised net profit stood at Baht 2,918 million, representing a net profit margin of 9.3%, which is higher than that of last year, particularly following the change in our debt-to-equity ratio in the second half of the year.

The above-mentioned achievements are only the first step of success for B.Grimm Power Public Company Limited. The management and all employees are strongly determined and committed to continue to take the company forward to become a leading world-class power company. On behalf of all executives and employees, I would like to express our deepest gratitude to all of our shareholders, and I very much hope for your continued trust and support in B.Grimm Power Public Company Limited and our aspiration to "empower the world compassionately".



Mrs. Preeyanart Soontornwata

President

# Report of the Audit Committee

Dear Shareholders.

The Audit Committee of B.Grimm Power Public Company Limited ("the Company") and subsidiaries ("the Group") comprised of 3 independent directors who are qualified with professional experiences in the fields of energy business, engineering and finance, namely Mr. Pakorn Thavisin as the chairman of the Audit Committee, Dr. Anusorn Sangnimnuan as a member of the Audit Committee, and Miss Anchalee Chavanich as a member of the Committee. Mr. Suchol Wattanasukchai, Senior Assistant Vice President (Internal Audit) is the secretary to the Audit Committee.

The Audit Committee independently performs its duties in accordance with the scope of duties and responsibilities assigned by the Board of Directors, specified in writing in the Charter of the Audit Committee, and in compliance with the best practices applicable to the audit committees and the requirements stipulated by the Office of Securities and Exchange ("SEC") and the Stock Exchange of Thailand ("SET").

In 2017, the Audit Committee held 10 meetings, including two meetings with the auditor and the Internal Audit team without the management team's participation. Details are as shown below:

Name	Attendance/Total Meeting
Mr. Pakorn Thavisin	9/10
Mr. Anusorn Sangnimnuan	10/10
Mrs. Anchalee Chavanich	10/10

Highlights of the Audit Committee's performance in 2017 are as outlined below:

#### **Review of Financial Report**

The Audit Committee reviewed the interim financial information, the consolidated and separate 2017 financial statements jointly with the auditors and the management to address key issues and the adjustments of key accounting entries and accounting estimates that affected financial information and financial statements. The Audit Committee concluded, based on the reviews, that the preparation of the financial statements and the disclosure of information in the notes to financial statements of the Group were correct, complete, timely, reliable and in accordance with the Thai Financial Reporting Standards for the benefits of the users of the financial statements.

In addition, the Audit Committee reviewed the management's discussion and analysis (MD&A) to ensure that information therein was correct, complete, adequate and beneficial to the investment decisions of shareholders and general investors.

# Review of Related-Party Transactions or Conflict-of-Interest Transactions

The Audit Committee reviewed the related-party transactions or conflict-of-interest transactions of the Group in accordance with the notifications of the Securities and Exchange Commission and the Stock Exchange of Thailand ("SEC"). The review suggested that related-party transactions of the Group were reasonable, in the best interest of the Group and did not preferentially benefit any particular parties.

#### **Review of Legal Compliance**

The Audit Committee reviewed the operations and exercised oversight to ensure the Group's proper and strict compliance with the securities and exchange laws, the rules stipulated by the SEC, and the laws governing the Group's businesses, including anti-corruption policies and regulations.

#### **Review and Assessment of Internal Control**

The Audit Committee reviewed the internal control system of the Group jointly with the auditor and the Internal Audit Department in accordance with the guidelines established by the Securities and Exchange Commission. No issue or weakness that might materially affect the Group's businesses was found. In addition, the internal control system of the Group was deemed adequate and appropriate to the Group's businesses and contributed to efficient and effective performance.

#### **Supervision of Internal Control Performance**

To ensure the independence of the Internal Audit Department, the Internal Audit Department directly reported to and was supervised by the Audit Committee in accordance with the Charter of the Internal Audit Department. In addition, the Charters of the Audit Committee and the Internal Audit Department were reviewed by the Audit Committee with an aim to assure proper practices and compliance with the regulations and requirements stipulated by the SEC, the Corporate Governance Policy and the International Standards for the Professional Practice of Internal Auditing.

The Audit Committee reviewed the suitability of the annual and long-term internal audit strategy, the plans for key internal audit matters and the annual budget, including the adequacy and suitability of the Internal Audit Department's resources with an aim to assure efficient and effective performance.

# Auditor Nomination and Proposal of Audit Fee for 2018

The Audit Committee considered the nomination of auditors by taking into account their independence, skills, knowledge, capabilities and experiences in particular to the audit of energy business, as well as the audit fee. The Audit Committee recommended through the Board of Directors for the 2017 Annual General Meeting of Shareholders' approval the appointment of the auditors from Pricewaterhouse Coopers ABAS Limited, namely Mr. Kajornkiat Aroonpairojkun, CPA License No. 3445, Mr. Chanchai Chaiprasit, CPA License No. 3760, and Mr. Paiboon Tankul, CPA License No. 4298, as the auditors of Company's financial statements for the year ended December 31, 2018. The three designated auditors were also approved by the Securities and Exchange Commission.

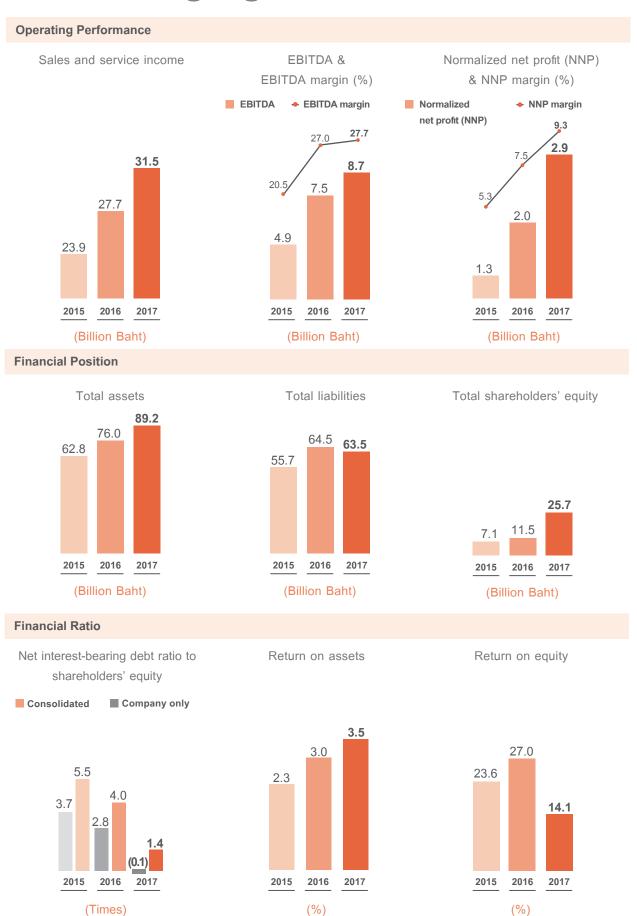
In summary, the Audit Committee fulfilled its duties and responsibilities in accordance with the Charter of the Audit Committee and demonstrated satisfactory independence in 2017. The Audit Committee was of the opinion that the financial statements presented material and reliable information in accordance with the financial reporting standards; related-party transactions or conflict-of-interest transactions were adequately disclosed, effective corporate governance system including appropriate and effective internal control and internal audit systems were in place; and proper compliance with applicable laws, rules and regulations was demonstrated.

(Pakorn Thavisin)

P. Glavoin.

Chairman of the Audit Committee

# **Financial Highlight**



# **Awards and Recognition**



#### 1. The BEST IPO in Thailand 2017

The Company was awarded the Best IPO in Thailand 2017 by The Asset, a leading financial magazine of Asia, at The Asset Triple A Country Awards 2017 on January 17, 2018. The award was bestowed to IPO companies achieving outstanding recognition from domestic and international investors, demonstrating strong performance, and yielding satisfactory return on investment.

# 2. BEST ENERGY SOLUTIONS PROVIDER

The Company was recognized by International Finance as the Best Energy Solutions Provider at the 5<sup>th</sup> Annual International Finance Awards ceremony on January 26, 2018 in recognition of its power plant management excellence.

# 3. BEST IPO DEAL IN SOUTHEAST ASIA 2017

The Company won the Best IPO Deal In Southeast Asia 2017 at the 11<sup>th</sup> Annual Alpha Southeast Asia Deal & Solution Awards 2017 ceremony arranged by Alpha Southeast Asia Magazine on February 13, 2018. The award was given in recognition of companies achieving outstanding IPO performance as suggested by subscripton by domestic and international investors and having suitable IPO prices.

#### 4. DEAL OF THE YEAR

On February 28, 2018, the Company garnerd the Deal of the Year Award at the ThaiBMA Best Bond Awards 2017 ceremony held by the Thai Bond Market Association in recognition of outstanding bond deal achievements.

#### **Pathum Thani**

B.Grimm BIP Power 1 Limited
B.Grimm BIP Power 2 Limited

#### Chonburi

B.Grimm Power (Laem Chabang) 1 Limited
B.Grimm Power (Laem Chabang) 2 Limited
Amata B.Grimm Power 1 Limited
Amata B.Grimm Power 2 Limited
Amata B.Grimm Power 3 Limited
Amata B.Grimm Power 4 Limited
Amata B.Grimm Power 5 Limited
B.Grimm Power (WHA) 1 Limited

#### Rayong

Amata B.Grimm Power (Rayong) 1 Limited Amata B.Grimm Power (Rayong) 2 Limited Amata B.Grimm Power (Rayong) 3 Limited Amata B.Grimm Power (Rayong) 4 Limited Amata B.Grimm Power (Rayong) 5 Limited

#### **Nakhon Pathom**

B.Grimm Yanhee Solar Power Limited Solarwa Limited

#### Saraburi

**TPS Commercial Limited** 

#### Sakaeo

**B.Grimm Solar Power (Sakaeo) 1 Limited** 

#### Ratchaburi

B.Grimm Power (Ratchaburi) 1 Limited B.Grimm Power (Ratchaburi) 2 Limited

#### Mukdahan

**Bo Thong Wind Farm Limited** 

#### Xaysomboun

Nam Che Hydro Power Co., Ltd.

#### **Xiangkhouang**

Nam Khao Hydro Power Co., Ltd.

#### Champasack

Xenamnoy and Xekatam Hydro Power Co., Ltd.

#### **Bien Hoa**

Amata Power (Bien Hoa) Limited







# **Business Policy and Overview**

#### **Business Overview**

B.Grimm Power is a company in B.Grimm Group which has operated in Thailand for over 140 years under our business philosophy of "Doing Business with Compassion" for the mutual benefits to the Company, its associates, business partners, and society at large. Our vision is to "Empower the World Compassionately".

B.Grimm Power is a holding company holding shares in subsidiaries and joint ventures of which core business is the generation and sale of electricity and steam, including other relevant commercial activities, in Thailand and other countries. We are one of the first private participants in the power generation industry in Thailand, starting off in 1993. Our senior management team and employees have been with us for over 20 years and they brought with them unparalleled and well-rounded knowledge and experiences in relation to the acquisition of power purchase agreements, the development, design and construction of projects, the management and maintenance of power plants and transmission and pipeline networks, and the acquisition of good financing for our power plant projects.

B.Grimm Power is one of the largest private power producers in Thailand in terms of small power producer ("SPP") operators by installed capacity. A key strength of our power plants which are located in industrial estates is their ability to provide reliable power and high quality services to customers and this helps attract the foreign investment into Thailand's industrial sector, particularly in businesses that demand a high level of electricity reliability for their production lines such as the automotive business.



In Thailand, B.Grimm Power's electricity and steam are sold through power purchase agreements with these customers:

- Power purchase agreements with EGAT under SPP programs.
- 2) Electricity and steam purchase agreements with industrial customers to deliver electricity and steam through our transmission networks to over 100 industrial users in the following five leading industrial estates in Thailand:
  - 1. Amata Nakorn Industrial Estate
  - 2. Amata City Industrial Estate
  - 3. Bangkadi Industrial Park
  - 4. Hemaraj Industrial Estate
  - 5. Laem Chabang Industrial Estate
- Power purchase agreements with PEA under VSPP programs for solar power plants.

In 2015, B.Grimm Power started expanding its footprints into the renewable energy business, planning to increase the generating capacity of its solar power plants and wind power plants in support of the environmental conservation efforts and the governmental policies.

With regard to the business expansion into foreign countries, B.Grimm Power started its investment in Vietnam in 1999, purchasing power directly from subsidiaries of EVN and on-selling it to all industrial users in the Amata City Bien Hoa Estate through B.Grimm Power's electricity transmission networks.

B.Grimm Power has diversified into the hydro power plant business in Laos since 2015. Aiming to continuously expand its investments in foreign countries, B.Grimm Power is exploring the power plant industry of Malaysia, Vietnam, Cambodia, Myanmar and the Philippines to identify and capture promising business opportunities with attractive investment returns.

As at December 31, 2017, the generating capacity of B.Grimm Power's power plants in commercial operation and under construction and development were as shown below:

		Total			In operation	
Type	No. of Power Plants	Estimated Installed Capacity (MW)	Estimated Equity Capacity (MW)	No. of Power Plants	Installed Capacity (MW)	Equity Capacity (MW)
Combined Cycle Cogeneration	17	2,206.3 <sup>1</sup>	1,497.6 <sup>1</sup>	12	1,498.5	856.9
Diesel	1	13.0	4.0	1	13.0	4.0
Solar	22	145.0	90.2	15	114.2	59.2
Hydro	9	132.6	94.5	2	20.1	14.1
Wind	2	16.0	14.8	-	-	-
Total	51	2,512.9	1,701.1	30	1,645.8	934.2

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  The estimated capacity is based on the following assumptions:

<sup>•</sup> Following the expiry of the Revenue Sharing Agreement with ABP1, ABP2 and ABPIF, B.Grimm Power's economic interest in ABP1 and ABP2 will be 51.2% (from 15.3% through the holding of ABPIF units). The installed capacity of new power plants of ABP1, ABP2 and BPLC1 is expected to be 150 MW each.

<sup>•</sup> ABP2 continues its partial operation of the existing power plant generating 59.6 MW and BPLC2 operates at 100% capacity at 56.1 MW (operating since 2009) after the new power plants have commercially operated. (Please see "Our Power Plants" below)

As at December 31, 2017, power plants in which B.Grimm Power invested through its subsidiaries and joint ventures and were in commercial operation were as shown below (grouped by location):

Lastrial Estate  Cycle Cogeneration  Gas-Fired Combined Cycle Cogeneration  Hydro  Hydro				:	Installed	Installed Capacity	Equity C	Equity Capacity
Chonburi Rayong Amata City Industrial Estate Chonburi Hemaraj Industrial Estate Hhon Pathom Ayutthaya Saraburi Sa Kaeo Industrial Estate	Location	Industrial Estate	Plant Type	No. of Power Plants	Electricity (MW)	Steam (Tons/Hour)	Electricity (MW)	Steam (Tons/Hour)
Chonburi Rayong Rayong Amata City Industrial Estate Chonburi Hemaraj Industrial Estate Hemaraj Industrial Estate Hon Pathom Nyutthaya Saraburi Sa Kaeo Industrial Estate								
Rayong Amata City Industrial Estate Chonburi Hemaraj Industrial Estate Hon Pathom Yutthaya Saraburi Sa Kaeo Industrial Estate	Chonburi	Amata Nakorn Industrial Estate	Gas-Fired Combined Cycle Cogeneration	5	732.3	150.0	277.7	9.09
Chonburi Hemaraj Industrial Estate Hemaraj Industrial Estate hon Pathom Nutthaya Saraburi Sa Kaeo Industrial Estate  Amata City Bien Hoa Industrial Estate	Rayong	Amata City Industrial Estate	Gas-Fired Combined Cycle Cogeneration	2	247.7	0.09	152.9	37.0
thum Thani Bangkadi Industrial Estate hon Pathom Nyutthaya Saraburi Sa Kaeo Industrial Estate Industrial Estate		Laem Chabang Industrial Estate	Gas-Fired Combined Cycle Cogeneration	2	159.1	70.0	159.1	70.0
thum Thani Bangkadi Industrial Park hon Pathom Ayutthaya Saraburi Sa Kaeo Industrial Estate Industrial Estate		Hemaraj Industrial Estate	Gas-Fired Combined Cycle Cogeneration	<del>-</del>	130.2	30.0	9.76	22.5
hon Pathom  yutthaya Saraburi Sa Kaeo Amata City Bien Hoa Industrial Estate	thum Thani	Bangkadi Industrial Park	Gas-Fired Combined Cycle Cogeneration	2	229.2	40.0	169.6	29.6
Sien Hoa Amata City Bien Hoa Industrial Estate hampasak -	chon Pathom Ayutthaya Saraburi Sa Kaeo		Solar PV	15	114.2	,	59.2	,
Amata City Bien Hoa Industrial Estate hampasak								
hampasak	Bien Hoa	Amata City Bien Hoa Industrial Estate	Diesel Generator	<del>-</del>	13.0		4.0	
	hampasak	•	Hydro	7	20.1	,	14.1	
lotal		Total		30	1,645.8	350.0	934.2	219.7



#### **History and Developments**

Following the decision of the Thai government to liberalize the power generation industry in Thailand and open it to the private sector in 1990, B.Grimm Power, which was incorporated as Borneo 1993 Limited in July 1993, became one of the first private participants in the power generation industry in Thailand. Our first project, ABP1, a gas-fired combined cycle cogeneration power plant, became commercially operational in 1998. B.Grimm Power has continuously expanded its businesses and its key milestones are as outlined below:

#### 1993

B.Grimm Power was incorporated as Borneo 1993
 Limited with a registered capital of Baht 100,000
 divided into 1,000 shares at a par value of Baht 100
 per share.

#### 1996

 B.Grimm Power was awarded an SPP contract for ABP1.

#### 1997 - 1998

 B.Grimm Power increased its registered capital by Baht 709,500,000 from Baht 100,000 to Baht 709,600,000 through the issue of 7,095,000 new shares at a par value of Baht 100 per share to finance its business expansion.

#### 1998

- B.Grimm Power was awarded an SPP contract for ABP2.
- ABP 1 (with an installed capacity of 166.4 MW of electricity) became commercially operational.

#### 1999

 APB (with an installed capacity of 13.0 MW of electricity) became commercially operational.

#### 1999 - 2001

 B.Grimm Power increased its registered capital by Baht 140,400,000 from Baht 709,600,000 to Baht 850,000,000 through the issue of 1,404,000 new shares at a par value of Baht 100 per share to finance its power plant business expansion.

#### 2001

 ABP2 (with an installed capacity of 171.2 MW of electricity) became commercially operational.

#### 2009

 B.Grimm Power was awarded four SPP contracts for ABP3, ABPR1, ABPR2 and BIP1.

#### 2010

 B.Grimm Power was awarded nine SPP contracts for ABP4, ABP5, ABPR3, ABPR4, ABPR5, BIP2, BPWHA1, BGPR1, and BGPR2.

#### 2011

Our name was changed to "B.Grimm Power Limited".

#### 2012

 ABP 3 (with an installed capacity of 132.5 MW of electricity became) commercially operational.



#### 2013

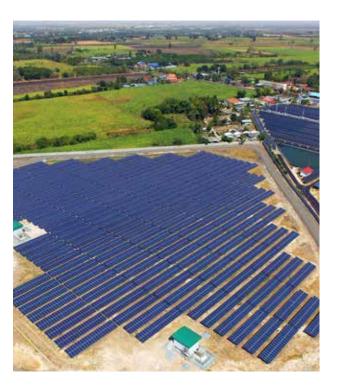
- ABPR 2 (with an installed capacity of 124.4 MW of electricity) became commercially operational.
- The group completed the initial public offering and the SET-listing of ABPIF.
- ABPR1 (with an installed capacity of 123.3 MW of electricity) became commercially operational.

#### 2014

 B.Grimm Power completed the acquisition of BPLC1 (with the installed capacity of 103.0 MW of electricity) and BPLC2 (with an installed capacity of 56.1 MW of electricity) from Sime Darby Energy.

#### 2015

- BIP1 (with an installed capacity of 114.6 MW of electricity) became commercially operational.
- We entered into a memorandum of understanding with SV Group Company Limited, a leading engineering company in Laos, in respect of our joint investment in Xenamnoy 2 and Xekatam 1 hydro power projects.
- B.Grimm Power increased its registered capital by Baht 2,930,000,000 from Baht 850,000,000 to Baht 3,780,000,000 through the issue of 29,300,000 new ordinary shares at a par value of Baht 100 per share to finance its business expansion.
- B.Grimm Power entered into a memorandum of understanding with Daosavanh Company Limited and SV Group Company Limited in respect of B.Grimm Power's joint investment Nam Che 1 hydro power project and Nam Khao 1, Nam Khao 2, Nam Khao 3, Nam Khao 4 and Nam Khao 5 coordinated hydro power projects.
- ABP4 (with an installed capacity of 131.1 MW of electricity) became commercially operational.
- Our 14 solar power plants (with the aggregate installed capacity of 106.2 MW of electricity) became commercially operational.





#### 2016

- BIP2 (with an installed capacity of 114.6 MW of electricity) became commercially operational.
- BGPSK solar power plant (with an installed capacity of 8.0 MW of electricity) became commercially operational.
- ABP5 (with an installed capacity of 131.1 MW of electricity) became commercially operational.
- On September 9, 2016, B.Grimm Power was converted into a public company limited and changed its name to "B.Grimm Power Public Company Limited".
- On September 9, 2016, B.Grimm Power decreased the par value of its shares from Baht 100 per share to Baht 2 per share and increased its registered capital by Baht 1,620,000,000 from Baht 3,780,000,000 to Baht 5,400,000,000 through the issue of 810,000,000 new ordinary shares at a par value of Baht 2 for the initial public offering.
- BPWHA1 (with an installed capacity of 130.2 MW of electricity) became commercially operational.

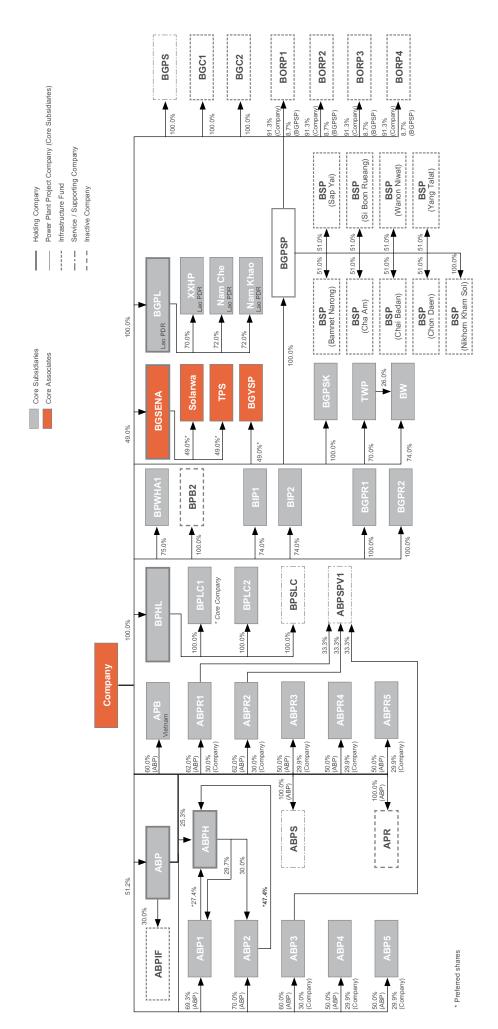
#### **Recent Developments in**

#### 2017

- On July 19, 2017, shares of B.Grimm Power Public Company Limited were first traded on the Stock Exchange of Thailand.
- XXHP (with an installed capacity of 20.1 MW of electricity) became commercially operational.
- B.Grimm Power was selected as a project sponsor qualified to enter into power purchase agreements for seven projects having the aggregate capacity of 30.83 MW with electricity distribution authorities under the 2017 solar farm programs for governmental agencies and agricultural cooperatives.



Shareholding Structure



**Our Power Plants** 

As at December 31, 2017, we commercially operated, through its subsidiaries and joint ventures, 27 power plants in Thailand, one power plant in Vietnam, and two power plants in Laos with the total installed capacity of 1,645.8 MW (total equity capacity of 934.2 MW).

The table below provides an overview of our power plants in commercial operation as at December 31, 2017.

		Installed Capacity	Capacity	Economic	Equity (	Equity Capacity		
Power Plant	Project Company	Electricity (MW)	Steam (Tons/Hour)	Interest (%) <sup>1</sup>	Electricity (MW)	Steam (Tons/Hour)	Plant Type	COD
Amata Nakorn Industrial Estate, Chonburi	honburi							
Amata B.Grimm Power 1	ABP1	166.4	30.0	15.3	25.5	4.6	Natural Gas	September 17, 1998
Amata B.Grimm Power 2	ABP2	171.2	30.0	15.3	26.3	4.6	Natural Gas	September 28, 2001
Amata B.Grimm Power 3	ABP3	132.5	30.0	2.09	80.5	18.2	Natural Gas	October 1, 2012
Amata B.Grimm Power 4	ABP4	131.1	30.0	55.5	72.7	16.6	Natural Gas	November 15, 2015
Amata B.Grimm Power 5	ABP5	131.1	30.0	55.5	72.7	16.6	Natural Gas	June 1, 2016
Amata City Industrial Estate, Rayong	bug							
Amata B.Grimm Power (Rayong) 1	ABPR1	123.3	30.0	61.7	76.1	18.5	Natural Gas	November 1, 2013
Amata B.Grimm Power (Rayong) 2	ABPR2	124.4	30.0	61.7	76.8	18.5	Natural Gas	June 21, 2013
Laem Chabang Industrial Estate, Chonburi	Chonburi							
B.Grimm Power (Laem Chabang) 1	BPLC1	103.0	20.0	100.0	103.0	50.0	Natural Gas	July 16, 2011 <sup>2</sup>
B.Grimm Power (Laem Chabang) 2	BPLC2	56.1	20.0	100.0	56.1	20.0	Natural Gas	February 20, 2009 <sup>2</sup>
Bangkadi Industrial Park, Pathum Thani	Thani							
B.Grimm BIP Power 1	BIP1	114.6	20.0	74.0	84.8	14.8	Natural Gas	April 29, 2015
B.Grimm BIP Power 2	BIP2	114.6	20.0	74.0	84.8	14.8	Natural Gas	January 1, 2016

		Installed Capacity	Capacity	Economic	Equity (	Equity Capacity		
Power Plant	Project Company	Electricity (MW)	Steam (Tons/Hour)	Interest (%) <sup>1</sup>	Electricity (MW)	Steam (Tons/Hour)	Plant Type	COD
Hemaraj Industrial Estate, Chonburi	i.i.							
B.Grimm Power (WHA) 1	BPWHA1	130.2	30.0	75.0	9.76	22.5	Natural Gas	November 1, 2016
Nakhon Pathom								
Sai Luang 2	BGYSP	8.0		49.0	3.9		Solar	December 28, 2015
Sai Luang 3	BGYSP	8.0	ı	49.0	3.9		Solar	December 28, 2015
Sai Luang 9	BGYSP	7.2	ı	49.0	3.5		Solar	December 28, 2015
Sai Luang 10	BGYSP	7.5	ı	49.0	3.7		Solar	December 28, 2015
Sai Yai Nha	BGYSP	8.0	ı	49.0	3.9		Solar	December 28, 2015
Sai Manow	BGYSP	8.0	ı	49.0	3.9		Solar	December 28, 2015
Sai Putsa	BGYSP	8.0	ı	49.0	3.9		Solar	December 28, 2015
Sai Lui Rim Num	Solarwa	8.0	ı	47.53	3.8		Solar	December 28, 2015
Sai Chalouw 1	Solarwa	8.0	ı	47.53	3.8		Solar	December 28, 2015
Sai Sab	Solarwa	8.0	ı	47.53	3.8		Solar	December 17, 2015
Ayutthaya								
Sai Sena 2	BGYSP	5.0		49.0	2.4		Solar	December 22, 2015
Saraburi								
BGTTRE 2	Solarwa	8.0	,	47.53	3.8		Solar	December 18, 2015
BGTTRE 3	Solarwa	6.5	1	47.53	3.1		Solar	December 25, 2015

		Installed	Installed Capacity	Economic	Equity (	Equity Capacity		
Power Plant	Project	Electricity (MW)	Steam (Tons/Hour)	Interest (%) <sup>1</sup>	Electricity (MW)	Steam (Tons/Hour)	Plant Type	COD
BGTTRE 1	TPS	8.0		47.53	3.8	ī	Solar	December 18, 2015
Sa Kaeo								
BGPSK	BGPSK	8.0	•	100.0	8.0	ı	Solar	April 27, 2016
Amata City Bien Hoa Industrial Estate, Vietnam	tate, Vietnam							
Amata Power (Bien Hoa)	APB	13.0	•	30.7	4.0	ı	Diesel	April 9, 1999
Lao PDR								
Xenamnoy 2 and Xekatam 1 (2 Projects)	XXHP	20.1		70.0	14.7	ī	Hydro	August 1, 2017
Total installed capacity		1,645.8	350.0		934.2	219.7		

<sup>1</sup> Based on B.Grimm Power's direct and/or indirect interest in the project company owning the power plant.

 $^{2}\ \mathrm{We}$  acquired BPLC1 and BPLC2 power plants in June 2014.

<sup>&</sup>lt;sup>3</sup> BGSENA (a joint venture which is 49% owned by B.Grimm Power) holds preferred shares in Solarwa and TPS and is thus entitled to receive 97.0% of the dividends paid. Therefore, BGSENA has an economic interest of 97.0% in Solarwa and TPS power plant projects.

# Power Plants under Construction or Development

Power plants under construction or development refer to power plant projects for which PPAs with EGAT, PEA, MEA, EDL, or other governmental agencies have been obtained or guaranteed in writing. The estimated capacity, equity proportion and scheduled commercial operation date (SCOD) of these projects may be changed as deemed appropriate for these projects.

projects, 21 projects are new power plants under construction or development with the aggregate installed capacity of 798.3 MW and three projects are replacement power plants As at December 31, 2017, we had a total of 24 power plant projects under construction or development with the aggregate installed capacity of 867.3 MW. Among these with the aggregate installed capacity of 565.7 MW. In this regard, the aggregate installed capacity of power plants of which PPAs are nearly expired is 496.7 MW

The table below provides an overview of the group's power plants under construction or development as at December 31, 2017.

		Installed	Capacity	Economic	Equity C	Equity Capacity <sup>2</sup>		
Power Plant	Project	Electricity (MW)	Steam (Tons/Hour)	Interest (%) <sup>1</sup>	Electricity (MW)	Steam (Tons/Hour)	Plant Type	SCOD
Amata City Industrial Estate, Rayong								
Amata B.Grimm Power (Rayong) 3	ABPR3	133.0	30.0	55.5	73.8	16.6	Natural Gas	February 1, 2018
Amata B.Grimm Power (Rayong) 4	ABPR4	133.0	30.0	55.5	73.8	16.6	Natural Gas	June 1, 2018
Amata B.Grimm Power (Rayong) 5	ABPR5	133.0	30.0	55.5	73.8	16.6	Natural Gas	October 1, 2018
V.R.M. Industrial Estate, Ratchaburi								
B.Grimm Power (Ratchaburi) 1	BGPR1	120.0	30.0	100.03	120.0	30.0	Natural Gas	June 1, 2021
B.Grimm Power (Ratchaburi) 2	BGPR2	120.0	30.0	100.03	120.0	30.0	Natural Gas	October 1, 2021
Mukdahan								
Bo Thong Wind Farm (2 Projects)	BW	16.0	,	92.2	14.8		Wind	September 1, 2020
Ground-mounted solar farm programs for governmental agencies and agricultural cooperatives	for governmental a	igencies and agric	ultural cooperatives					
Joint investment with WVO	BGRIM	18.6		100.0	18.58		Solar	December 2018
(4 Projects)								
Joint investment with WVO	BGPSP	2.0		100.0	2.0		Solar	December 2018

		Installed	Installed Capacity	Economic	Equity C	Equity Capacity <sup>2</sup>		
Power Plant	Project Company	Electricity (MW)	Steam (Tons/Hour)	Interest (%) <sup>1</sup>	Electricity (MW)	Steam (Tons/Hour)	Plant Type	SCOD
Co-development with agricultural cooperatives	BSP (Chon Daen)	2.2		100.0	2.2		Solar	December 2018
Co-development with agricultural cooperatives	BSP (Chai Badan)	5.0		100.0	5.0		Solar	December 2018
Laos								
Nam Che 1	Nam Che	15.0		72.0	10.8		Hydro	4 <sup>th</sup> quarter of 2019
Nam Khao 1	Nam Khao 1	15.0	1	72.0	10.8		Hydro	4 <sup>th</sup> quarter of 2019
Nam Khao 2	Nam Khao 2	15.0	1	72.0	10.8		Hydro	4 <sup>th</sup> quarter of 2019
Nam Khao 3	Nam Khao 3	15.0	1	72.0	10.8		Hydro	4 <sup>th</sup> quarter of 2019
Nam Khao 4	Nam Khao 4	15.0	,	72.0	10.8		Hydro	4 <sup>th</sup> quarter of 2019
Nam Khao 5	Nam Khao 5	7.5	1	72.0	5.4		Hydro	4 <sup>th</sup> quarter of 2019
Tadsakoi	Tadsakoi	30.0	ı	70.0	21.0		Hydro	4 <sup>th</sup> quarter of 2020
Total installed capacity	ity	798.3	150.0		587.4	109.8		

<sup>1</sup> Based on direct and/or indirect investment of B.Grimm Power.

<sup>&</sup>lt;sup>2</sup> Projected equity capacity represents the projected installed capacity of a plant multiplied by our economic ownership of that plant.

<sup>3</sup> Although BGPR1 and BGPR2 are currently owned by B.Grimm Power, B.Grimm Power may sell a portion of its equity in BGPR1 and BGPR2 to minority investor(s) which may include the owner(s) of industrial estate where the projects are located.

# Power Plants with PPAs Expiring before 2022 and Replacement Power Plants

The Company has three combined cycle cogeneration power plants of which power purchase agreements will expire before the end of 2022 and plans to build replacement power plants in response to the draft of Energy Regulatory Commission (ERC)'s invitation to tender for firm capacity from SPP's cogeneration power plants with power purchase agreements expiring in 2019 - 2025. The estimated capacity, equity proportion and scheduled commercial operation date (SCOD) of these projects may be changed as deemed appropriate for these projects.

		Power	er Plants with P	Plants with PPAs Expiring before 2022	re 2022	N. Power Pla	New Power Plants/ Power Plants Continuing Operation	.s/ Operation
Power Plant	Company	Installed Capacity (MW)	Equity (%)	Equity Capacity (MW)	PPA Expiry	Installed Capacity (MW)	Equity (%)	Equity Capacity (MW)
Amata Nakorn Industrial Estate, Chonburi	Chonburi							
Amata B.Grimm Power 1	ABP1	(166.4)	15.3	(25.5)	September 16, 2019	150.0	51.2 <sup>2</sup>	76.8
Amata B.Grimm Power 2	ABP2	(111.6)	15.3	(17.1)	September 27, 2022	150.0	51.2 <sup>2</sup>	76.8
Amata B.Grimm Power 2 (Continuing Operation)	ABP2	(59.6)	15.3	(9.1)		59.6	51.2 <sup>2</sup>	30.5
Laem Chabang Industrial Estate, Chonburi	Chonburi							
B.Grimm Power (Laem Chabang) 1	BPLC1	(103.0)	100.0	(103.0)	July 15, 2022	150.0	100.0	150.0
B.Grimm Power (Laem Chabang) 2 <sup>1</sup>	BPLC2	(56.1)	100.0	(56.1)		56.1	100.0	56.1
Total installed capacity		(496.7)	100.0	(210.8)		565.7		390.2
Total additional installed capacity						0.69		179.4

On the assumption that ABP2 continues its partial operation of the existing power plant generating 59.6 MW and BPLC2 operates at 100% capacity at 56.1 MW (operating since 2009) after the new power plants have commercially operated. At present, the total installed capacity of ABP2 is 171.2 MW.

Following the expiry of the cash flow transfer agreement with ABP1, ABP2 and ABPIF, B.Grimm Power's economic interest in ABP1 and ABP2 will increase to 51.2% from 15.3%.

#### **Business Strategy**

B.Grimm Power's vision is "To Empower the World Compassionately" and is anchored in three strategic objectives, namely profitability, sustainability and growth.

#### **Profitability**

#### (1) Manage Power Plant Projects Effectively

One of B.Grimm Power's key objectives is to manage the group's power plants efficiently in order to produce reliable power and providing high quality services to customers, reduce cost, and improve profitability. To attain this objective, B.Grimm Power has adopted the plant operation and management strategy as detailed below:

- Build interconnection of transmission and distribution to increase reliability for our customers
- Effectively manage O&M activities of the group's power plants by engaging external technicians, through long-term service agreements, to work with our in-house O&M teams.
- Consistently maintain the high efficiency of the transmission network and plant operations.
- Utilize highly efficient machinery and advanced technology provided by manufacturers meeting international standard. Our combined cycle cogeneration power plants currently utilize machinery manufactured by Siemens and GE.
- Focus on selling electricity and steam to industrial customers in the proximity of our power plants to minimize loss in transmission and distribution.

Our personnel possess functional expertise, skills, and know-how essential for the effective management of power plant projects. We seek to capitalize on the extensive experience of its personnel by reallocating experienced personnel from its established power plants to the newer power plants as well as engaging them in the end-to-end power plant project development in order for them to obtain an in-depth understanding of the engineering process and can tap into and apply knowledge and insights they have gained from their hands-on experience to the operation and maintenance of such power plants once these power plants become operational.

Further, while we have entered into long-term service agreements with third-party contractors, our in-house maintenance teams work closely with the



contractors to obtain know-how from them. Following the expiration of the relevant long-term service agreements, we intend to undertake major overhauls in-house. B.Grimm Power believes that this will help reduce our maintenance costs.

#### (2) Manage Capital Structure Prudently

We aim to prudently manage its capital structure to reduce our finance cost and strengthen its financial position. We intends to develop projects that meet international standards to gain creditability with domestic and international banks and attract banks to finance these projects. Different financial instruments are employed to hedge against foreign exchange rate risk and interest rate risk during the construction and operational phases of each project. To reduce our exposure to foreign exchange rate risk, we structures our USD and THB in a proportion that creates a natural hedge against our revenues because the capacity payments from EGAT are partially linked to the USD-THB exchange rate.

# (3) Complete the Development of Power Plant Projects on Time and within Budget

We always follow our established project timeline to complete and deliver power plant projects on time and engages engineers and engineering consultants to work with and supervise EPC contractors and non-EPC contractors for each project. We standardize its project management process to facilitate proper handling between EPC contractors and non-EPC contractors.

In pursuing its cost control measures, we provide a mechanism that leads to fair and transparent competitions among its prospective vendors and contractors. In addition, we appropriately allocate and balance works between EPC and non-EPC contractors to control costs.



#### Sustainability

# (1) Attract, Develop and Retain Employees with a Focus on Maintaining a Positive Work Environment

B.Grimm Power believes that good corporate culture leads to the ability to attract and retain talents. Guided by B.Grimm's philosophy of "Doing Business with Compassion", we strive to maintain a positive work environment where employees can freely share their constructive feedback and opinions, receive the respect and recognition they deserve, and have opportunities to grow and advance within the organization for the goals of developing our organization and retaining talents.

We continuously offer training and potential development programs to our employees and arrange a leadership development program for individuals having the potentials to become our organization's future leaders. Talents are always provided with training and development supports while they are with the group. This a part of the group's strategy of enhancing the know-how and business relationships.

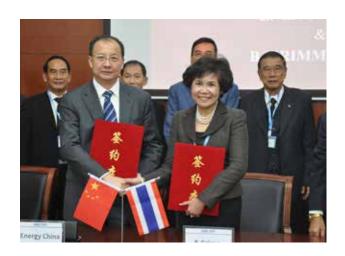
# (2) Maintain and Develop Positive Relationships with Communities

B.Grimm Power believes that maintaining positive relationships with the communities in which it operates is vital for its business and its standing as a good corporate citizen. Therefore, the group has supported initiatives that contribute to the better quality of life of community residents through educational programs, well-being program, cultural and religious programs, and environmental

program. As most of the employees working at the group's power plant are the residents of nearby communities, the group's power plants became part of the community way of life.

#### Pursue Growth in Thailand and Abroad

We target to increase its total installed capacity to 5,000 MW by 2022 and the proportion of renewable power plant projects and investments in foreign countries to 25.0 - 30.0% of our capacity. We also plan to secure licenses and/or concession agreements for the development and construction of power plants in Thailand and other countries, such as Laos, Malaysia, Cambodia, Indonesia, Myanmar and the Philippines. We also explore the possibilities to invest in renewable power plant projects in Thailand and to acquire power plants that are already in operation.





# **Vision**

Our vision is to "Empower the World Compassionately" and we are guided by our business philosophy of "Doing Business with Compassion".

# **Mission**

Our mission is based on the six pillars and the strategic objectives as described below:

#### **Empowering the World Compassionately GROWTH ENVIRONMENT PRODUCT & SERVICE** Constantly improving Growing in a Creating value for Working as a happy Empowering people, Operating our team of compassionate society through our business sustainable way with communities and business in harmony high quality energy professionals with society to better serve with nature and the operations to be strong partnerships & services for our a world class energy domestically and ethics and integrity environment their needs customers, with our internationally company pioneering spirit and by being people centric

With our professionalism that meets international standards and strong people capabilities, we have a solid foundation for robust growth and good reputation as a reliable and credible provider of high quality electricity and services to all sectors in order to create value for all of our stakeholders, namely our customers, shareholders, communities and society, in a sustainable manner.



# **Revenue Structure**

Our core business is: (1) the generation and sale of electricity to EGAT, PEA and industrial users; and (2) the generation and sale of steam to industrial users and (3) other sales and service income which detail is shown in the table below:

		For t	he Year End	led Decembe	er, 31	
	20	15	20	16	20	17
	(Million Bath)	(%)	(Million Bath)	(%)	(Million Bath)	(%)
Electricity Sales	`					
Electricity sales to EGAT	12,558	52.4	16,933	61.0	19,354	61.5
Electricity sales to industrial users in Thailand	8,550	35.7	8,489	30.6	9,394	29.8
Electricity sales to industrial users in Vietnam	1,051	4.4	1,217	4.4	1,189	3.8
Electricity sales to PEA	-	-	44	0.2	65	0.2
Electricity sales to EDL	-	-	-	-	107	0.3
Electricity sales	22,159	92.5	26,683	96.2	30,109	95.6
Steam Sales	694	2.9	539	1.9	529	1.7
Other sales and service income <sup>1</sup>	1,090	4.6	524	1.9	843	2.7
Sales and Service income <sup>2</sup>	23,943	100.0	27,747	100.0	31,482	100.0

<sup>&</sup>lt;sup>1</sup> Other sales and service income include 1) fees charged to associates (BGSENA, BGYSP, Solarwa and TPS) for services such as accounting services provided to them and 2) revenue from payroll services provided to other companies in B.Grimm Group and 3) construction revenue under concession agreement

<sup>&</sup>lt;sup>2</sup> Total Sales and Service income as shown in the table may not reconcile with the summation of each sales item due to the rounding to million Baht



### **Nature of Business**

#### **Products and Services**

#### **Electricity and Steam Generation** and Sale

#### **Electricity Sale**

We generate electricity for sale to EGAT, industrial customers, PEA and EDL. Electricity generated by our gas-fired combined cycle cogeneration plants is sold under our SPP power purchase agreements to EGAT, the principal wholesale buyer of electricity in Thailand, and is dispatched into EGAT's national transmission system. EGAT sells this electricity to PEA and MEA, which distribute it through their respective distribution networks to end users in household and industrial sectors throughout Thailand. The remaining electricity generated by our plants is directly sold to our industrial customers.

Electricity generated by our VSPP solar power plants and our wind power plants (once they become commercially operational) is and will be directly sold to PEA while electricity generated by our hydro power plants in Laos is sold to EDL.

#### Steam Sale

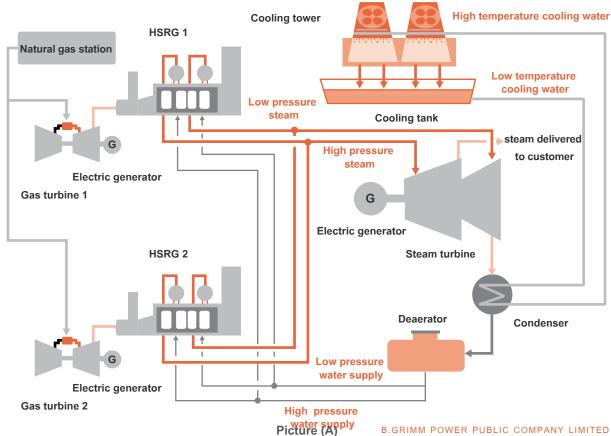
We supply steam to industrial users through our steam pipeline infrastructure which is directly connected to our industrial users. The steam that we sell to our customers, at varying levels of pressure, is used for a variety of industrial purposes.

#### **Generation Process**

#### (1) Electricity and Steam Generation Process

(A) Combined Cycle Cogeneration Process for **Electricity and Steam Generation** 

#### **Combined Cycle Cogeneration Power Plant**



A combined cycle cogeneration process consists of a gas turbine, a heat recovery steam generator ("HRSG") and a steam turbine generator that operate in an integrated configuration to increase efficiency. The generation process is described below:

- In the gas turbine, air is drawn through an air inlet section where it is cleaned, cooled or heated to the desired temperature and purified before passing into a compressor where it is compressed to higher pressure and temperature and then combined with fuel (natural gas or diesel) in the combustion chamber where combustion takes place.
- The hot and high pressure air generated by the combustion moves through the gas turbine blades, making them spin in the process. The fast-spinning turbine drives an electric generator that is on the same axle and converts a portion of the spinning energy into electricity.
- The HRSG captures exhaust heat of hot gases from the gas turbine to transform water into high-pressure and high-temperature steam.

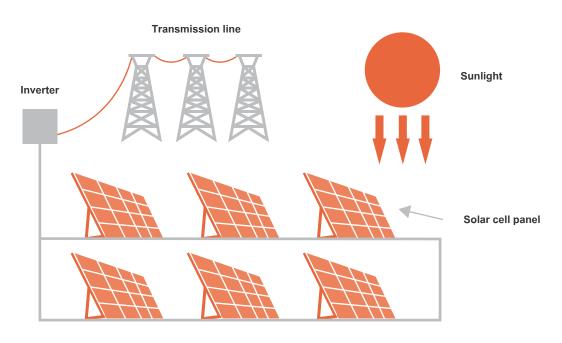
These hot gases them are released through the exhaust stack. In the HRSG, water evaporation results in water loss and highly purified water is added to the HRSG by the control system. The feed water flows in tubes and the hot gases passes around these tubes, producing steam in the process.

- 4. The HRSG then delivers the steam to the steam turbine.
- 5. The steam rotates the steam turbine which drives the coupled generator to produce electricity.
- A portion of steam extracted from an intermediate stage of the steam turbine is modulated and sold to customers according to their steam temperature and pressure requirements.
- Exhaust steam is then sent to a condenser and cooled by a cooling tower. This process forms water that is sent to the feed water to be reused.

All of our gas-fired combined cycle cogeneration power plants can produce both electricity and steam for EGAT and industrial users.

#### (B) Solar Power Generation Process

#### **Solar Power Plant**



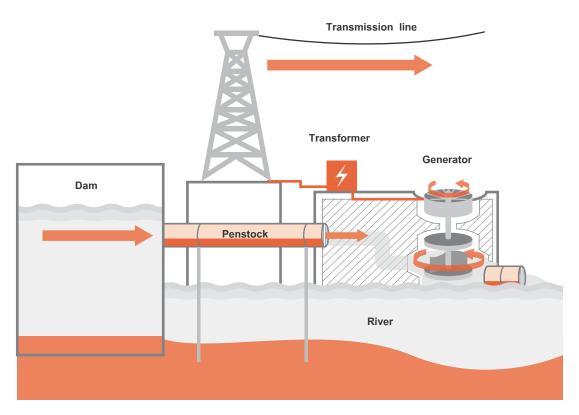
Picture (B)

All of our solar power plants utilize PV technology. Solar cell panels collect energy from the sun and convert the solar power into direct current power. The generation process is as described below:

- 1. Solar panels are arranged in integrated groups to generate the required capacity.
- The output electric currents from the solar panels will then be transferred to a string combiner box, which collects and combines them to higher levels for input into the inverter.
- The inverter transfers the direct current power to alternating current, allowing it to be used with electrical appliances.
- An increase in voltage is required and made using a step-up transformer in order for the power supply to be connected to PEA's transmission line system.

#### (C) Hydro Power Generation Process

#### **Hydro Power**



Picture (C)

Our hydro power plants under construction and under development with PPAs in Laos will be run-of-the-river hydroelectric power plants. No reservoir is needed for such power plants since the operation is done using the water running naturally in the river.

- Our power plants are, by design, located in hilly terrain where there is a difference between the water levels to regulate water into hydro turbines.
- 2. The water flows through the penstock into the hydro turbine at the lower elevation. Due to the difference in altitude, potential energy from the water up river is transformed into kinetic energy while it flows downriver through the penstock, giving it the speed required to spin the turbines.
- The water is then pushed into the hydro turbine, which is jointed to the axel of the generator. Once the water runs into the turbine, the water pressure then operates the turbine and power generator.

 The electricity is generated and transferred to electrical transformer, in which the voltage is increased before the power is sent into the transmission line system.

#### (D) Wind Power Generation Process

Our wind power plants which are under development with PPAs are located in Mukdahan. Electricity is generated from the energy of wind flows exerted on the blades of a wind turbine, which activates an electric generator which is connected to the wind turbine.

Our wind turbines are equipped with a control system that optimizes electricity generation output. As a result, we can remotely operate and control our wind power plants as appropriate to changing weather conditions, including shut down the operation during heavy lightning storms and adjust the position of wind turbines according to the shifts in wind direction.

# (2) Electricity and Steam Transmission and Distribution Infrastructure

- (A) We build and maintain an interconnected system of power transmission lines and steam pipelines used in the distribution of electricity and steam generated at our power plants to our customers.
- (B) Electricity generated by all of our cogeneration power plants (excepting BIP2) for sale to EGAT is distributed to the grid through 115 kV transmission lines which are connected to a PEA substation. Although we built these transmission lines, we only own the transmission lines within our power plant area and PEA owns and maintains the transmission lines between the terminal substations located within our power plant area to the connection point with PEA.

The electricity generated by BIP2 for sale to EGAT is distributed to the grid through a 69 kV transmission line which is connected to an EGAT substation and in this case, we built, own and maintain the entire transmission line.

(C) Electricity generated by our cogeneration power plants for sale to industrial users is distributed directly to each industrial user through 22 kV or 115 kV transmission lines which we built, own and maintain. The steam generated by our cogeneration power plants for sale to industrial users is distributed directly to each industrial user through steam pipelines which we built, own and maintain.

(D) Electricity generated by our solar power plants for sale to PEA is distributed to the grid through 22 kV or 115 kV transmission lines which are connected to a PEA substation. Although we built these transmission lines, we



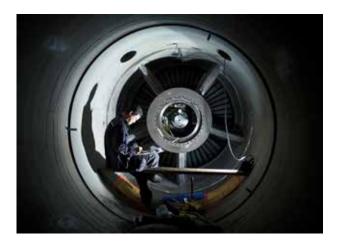
only own the transmission lines within our power plant area and PEA owns and maintains the transmission lines between the terminal substations located within our power plant area to the connection point with PEA.

- (E) In Vietnam, we on-sell and supply electricity purchased from subsidiaries of EVN to industrial users in Amata City Bien Hoa Estate through dedicated 110 kV and 22 kV transmission lines. We built, own and maintain the 110kV transmission line but lease the 22kV transmission line from the industrial estate manager/owner.
- (F) In Laos, electricity generated by our hydro power plants for sale to EDL is distributed to the grid through 115 kV transmission lines. Although we will build these transmission lines, these lines are owned by EDL.

#### (3) Operation and Maintenance

Our strong operations and maintenance ("O&M") capabilities allow us to focus on producing reliable power and providing high quality services, which we believe are crucial to industrial users who require stable and reliable sources of electricity and steam. Our engineering teams are available 24 hours daily to address any O&M issues faced by our customers.

Proper maintenance not only allows us to operate more efficiently and generate more electricity and steam using less fuel, but also protects our power plants against the risk of major breakdowns and failures.



Our power purchase agreements with EGAT, EDL and industrial users provide allowances for our scheduled maintenance outages and we work to ensure that we fall within these parameters:

- Under our power purchase agreements with EGAT, we may shut down our power plants for no more than 840 hours (35 days) for repairs and maintenance and no more than 1,080 hours (45 days) for major overhauls within each calendar year. However, we may not schedule maintenances during the peak period of March, April and May each year except where it is necessary and in such case, such maintenance period must not exceed 30 hours.
- Our power purchase agreements with EDL and industrial users allow for scheduled maintenance as long as requisite notice is provided to the relevant counterparties setting out the estimated start and duration of such scheduled maintenance.

We coordinate our maintenance outages with our customers and plan our maintenance in advance to achieve maximum efficiency and minimize the outage time.

Our in-house maintenance team at each power plant is tasked to undertake routine maintenance. In addition to routine maintenance, our cogeneration power plants generally require major overhauls every three and/or six years. A major overhaul entails:

- (1) the partial or complete disassembly of our gas turbines;
- (2) an inspection to detect damaged, defective or worn parts in our gas turbines;
- (3) the repair or replacement of such parts;
- (4) the reassembly, testing and trial-run prior to returning our gas turbines to their full operating level.

In respect of our other cogeneration power plants, we have entered into long-term service agreements with Siemens Limited for the Siemens gas turbines, IHI Corporation, IHI Power System (Thailand) Company Limited, and Wood Group Heavy Industrial Turbines (Thailand) which provides after-sales maintenance services for GE gas turbine customers in Thailand and ASEAN. These agreements allow us to: (i) maintain the gas turbines in our power plants at a high standard since maintenance activities are performed by experienced personnel; and (ii) control maintenance costs as the service fees under the agreements are inclusive of the cost of supply of spare parts and consumables.

Our in-house maintenance teams at these power plants observe such contractors during their maintenance in order to obtain know-how from such contractors. Following the expiration of the relevant long-term service agreements, we aim to undertake major overhauls in-house.

### (4) Environment and Safety

In Thailand, the electricity generation business is regulated by the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992). The Office of Natural Resources and Environmental Policy and Planning has approved environmental impact assessments for each of our combined cycle cogeneration power plants.

In Laos, we are required to prepare environmental and social impact analysis reports and the impact mitigation plans. The reports and the plans are subject to review and approval by the Ministry of Natural Resources and Environment.

In Vietnam, we are subject to the Law on Protection of the Environment and are required to prepare and submit an annual EIA report of APB to the relevant regulators on an annual basis. All of our operational power plants are in compliance, in all material respects, with existing environmental regulations and standards applicable to them. We believe that our operations are fully in compliance with the World Bank Group Environmental, Health and Safety Guidelines applicable to thermal power plants. We have not been party to any litigation, arbitration, suit or proceeding in relation to environmental matters or non-compliance with any environmental regulation. In addition, we work continuously to supervise, control and improve our electricity generation processes in order to ensure that regulated emissions from our operations are within and below stipulated maximum levels.

We use continuous emission monitoring systems to monitor emissions from our thermal power plants. We also monitor ambient air quality at several locations in the vicinity of our plants. For each combustion process, we monitor and control nitrogen oxides, sulphur oxides and carbon monoxide. The temperature and the fuel/air ratio are controlled in order to maintain emissions within applicable limits. We also control the quality of wastewater discharge against the environmental impact mitigation and monitoring plans specified in our EIA reports to ensure that the pollution emission and waste discharge from all of our power plants comply with legal and regulatory requirements.

We have implemented policies, procedures and control mechanisms in order to reduce the risk of chemical leakages and employee exposure to hazardous chemicals. We carefully select chemicals for our water treatment processes and seek to rely only on chemicals that have a minimal adverse impact on the environment and on employee health.

We have put in place an environmental, health and safety training program to heighten employee awareness of environmental, health and safety issues. A portion of this training encompasses spill prevention and emergency response. We also have a chemical leakage contingency plan in place and provide training for employees, including emergency drills in relation to this plan. We prepare, on a regular basis, reports for government agencies on disposal of our hazardous and non-hazardous waste and implement a waste classification and storage program. We have contracts with noise control specialists who periodically monitor noise levels to ensure compliance with applicable laws.



### (5) ISO Accreditation for Environmental Management

We strive to improve our business processes and service performance by applying the criteria for a quality management system set out in ISO 9001. This standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement.

As a guarantee of environmental and safety standards, our cogeneration power plants in operation have received ISO 14001 for environmental management and TIS/OHSAS 18001 certification for safety, which indicates that we operate our power plants in accordance with internationally recognized standards.

### (6) Information Technology

We use information technology to enhance our operational efficiency and to assist us in the administration of our business.

We believe that our information technology infrastructure, which consists of a mainframe computer that we use to run our management information systems, and computer networks enables effective internal communication among its offices in various districts and regions.

We use a variety of information systems to manage our organization and support our decision-making. These systems consist of both commercially available and internally designed software. We use commercially available systems for accounting, maintenance management and inventory management and procurement. We use proprietary systems for personnel and payroll systems. To enhance the efficiency of our budge control and management system, we implement the IBM Cognos software to reduce time spent on the budgeting process and to reduce human error.

We utilize our automated supervision, control and data acquisition system to monitor and control our power plants from our control centers online. We can continuously monitor the transmission activities of and control our power plants, analyze and respond promptly to any faults or possible faults in our transmission network and shorten service interruption time.

### **Investment Promotion Privileges and Benefits**

We are granted the promotion privileges by the Board of Investment ("BOI") under the Investment Promotional Act and the BOI privilege entitlements of our power plant projects are as shown below:

Company	Exemption of Corporate Income Tax on Profit from Pro- moted Activities for 8 Years from COD	50% Reduction of Corporate Income Tax on Profit from Promoted Activities for 5 Years from the Expiration of the Corporate Income Tax Exemption	Import Duty Exemption on Imported Machinery as Approved by the BOI	Treatment of Dividends from Promoted Activities Entitled to Corporate Income Tax Exemption as Non-Taxable Income throughout the Period of Corporate Income Tax Exemption Entitlement
ABP3	✓	-	✓	✓
ABP4	<b>√</b>	-	✓	✓
ABP5	<b>√</b>	-	✓	✓
ABPR1	✓	✓	✓	✓
ABPR2	<b>√</b>	✓	✓	✓
ABPR3	$\checkmark$	$\checkmark$	✓	$\checkmark$
ABPR4	$\checkmark$	$\checkmark$	✓	$\checkmark$
ABPR5	$\checkmark$	$\checkmark$	✓	$\checkmark$
Solarwa	$\checkmark$	-	✓	$\checkmark$
BGYSP	<b>√</b>	-	✓	$\checkmark$
BGPSK	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
TPS	<b>√</b>	-	✓	✓
BIP1	<b>√</b>	-	✓	<b>√</b>
BIP2	<b>√</b>	-	✓	<b>√</b>
BPWHA1	<b>√</b>	-	✓	<b>√</b>
BPLC2	$\checkmark$	✓	✓	$\checkmark$

## **Power Purchase Agreement**

### (1) Contracted Capacity

The installed capacity and contracted capacity of our power plants as at December 31, 2017 are as shown in the table below:

	December 31, 2017			
	Contracted	d Capacity	No. of PPAs	
Electricity	EGAT	1,410.0 MW	16	
	PEA	141.0 MW	20	
	MEA	20.0 MW	4	
	EDL	132.6 MW	9	
	Industrial users in Thailand			
		543.9 MW	166	
	Industrial users in Vietnam <sup>1</sup>			
		313.7 MW	222	
Steam		141.5 tons per hour	19	

<sup>&</sup>lt;sup>1</sup> Electricity that APB directly purchases from subsidiaries of EVN and on-sells to industrial users in Amata City Bien Hoa Estate.

### (2) Power Purchase Agreement with EGAT

Power Plants/ Contractual Parties	Signing Date	Period	PPA Term	Capacity (MW)
1. PPAs with EGA	AT under SPP Regulation	B.E. 2535 (A.D.1992) (as Ame	nded in 1994)	
1. ABP1	October 8, 1996	September 17, 1998 to September 16, 2019	21 years from COD	90.0
2. ABP2	January 9, 1998	September 28, 2001 to September 27, 2022	21 years from COD	90.0
3. BPLC1	January 5, 1998	July 16, 2001 to July 15, 2022	21 years from COD	60.0
2. PPAs with EGA	AT under SPP Regulation	B.E. 2550 (A.D.2007) (as Ame	nded in 2009 - 2010)	
1. ABPR1	September 15, 2010	November 1, 2013 to October 31, 2038	25 years from COD	90.0
2. ABPR2	November 6, 2009	June 21, 2013 to June 20 2038	25 years from COD	90.0
3. ABP3	November 6, 2009	October 1, 2012 to September 30, 2037	25 years from COD	90.0
4. BIP1	November 6, 2009	April 29, 2015 to April 28, 2040	25 years from COD	90.0

Power Plants/ Contractual Parties	Signing Date	Period	PPA Term	Capacity (MW)
3. PPAs with EGA	T under SPP Regulation	B.E. 2553 (A.D.2010)		
1. ABP4	August 3, 2011	November 15, 2015 to November 14, 2040	25 years from COD	90.0
2. ABP5	August 3, 2011	June 1, 2016 to May 31, 2041	25 years from COD	90.0
3. ABPR3	August 3, 2011	February 1, 2018 to January 31, 2043	25 years from COD	90.0
4. ABPR4	August 3, 2011	Around June 1, 2018 to May 31, 2043	25 years from COD	90.0
5. ABPR5	August 3, 2011	Around October 1, 2018 to September 30, 2043	25 years from COD	90.0
6. BPWHA1	August 3, 2011	November 1, 2016 to October 31, 2041	25 years from COD	90.0
7. BIP2	August 3, 2011	January 1, 2016 to December 31, 2040	25 years from COD	90.0
8. BGPR1	August 3, 2011	Around June 1, 2021 to May 31, 2046	25 years from COD	90.0
9. BGPR2	August 3, 2011	Around October 1, 2021 to September 30, 2046	25 years from COD	90.0

### (3) PPAs with PEA

### (1) Solar Power Plants

No.	Power Plants/ PPAs	Signing Date	Period	PPA Term from COD	Capacity (MW)
1.	BGYSP				
	Sai Luang 2	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	8.0
	Sai Luang 3	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	8.0
	Sai Luang 10	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	7.5
	Sai Putsa	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	8.0

No.	Power Plants/ PPAs	Signing Date	Period	PPA Term from COD	Capacity (MW)
	Sai Luang 9	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	7.2
	Sai Manow	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	8.0
	Sai Yai Nha	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	8.0
	Sai Sena 2	May 12, 2015	December 22, 2015 to December 21, 2040	25 years	5.0
2.	Solarwa				
	Sai Chalouw 1	June 11, 2015	December 28, 2015 to December 27, 2040	25 years	8.0
	Sai Sab	June 10, 2015	December 17, 2015 to December 16, 2040	25 years	8.0
	Sai Lui Rim Num Sai	July 6, 2015	December 28, 2015 to December 27, 2040	25 years	8.0
	BGTTRE 2	June 12, 2015	December 18, 2015 to December 17, 2040	25 years	8.0
	BGTTRE 3	June 12, 2015	December 18, 2015 to December 17, 2040	25 years	6.5
3.	TPS				
	BGTTRE 1	June 12, 2015	December 18, 2015 to December 17, 2040	25 years	8.0
4.	BGPSK				
	BGPSK	August 10, 2015 <sup>1</sup>	April 27, 2016 to December 30, 2040	25 years	8.0

 $<sup>^{\</sup>rm 1}$  Amendment No. 1 was made on November 9, 2015 and Amendment No. 2 was made on July 8, 2016.

### (2) Wind Power Plants

### PPAs with PEA under VSPP Renewable Energy Regulations B.E. 2549 (A.D. 2006)

No.	Power Plants/PPAs	Signing Date	PPA Term	Capacity (MW)
1.	BW	July 30, 20101 <sup>1</sup>	Five years from the PPA signing date and automatically renewed on a continual basis each time for another period of five years unless terminated.	8.0
2.	BW	July 23, 20101 <sup>1</sup>	Five years from the PPA signing date and automatically renewed on a continual basis each time for another period of five years unless terminated.	8.0

<sup>1</sup> Amended on September 17, 2015

### (3) Hydro Power Plants

### **PPAs with EDL**

Power Plants/ PPAs	Signing Date	PPA Term from COD	Capacity (MW)
1. XXHP (2 Projects)	August 1, 2017 to July 31, 2042	25 yeas and may be extended for at least 10 years	20.1
2. Nam Che	Around December 31, 2018 to December 30, 2043	25 yeas and may be extended for at least 10 years	15.0
3. Nam Khao (5 Projects)	Around June 30, 2019 to June 29, 2044	25 yeas and may be extended for at least 10 years	67.5
4. Tadsakoi	Around December 31, 2019 to December 29, 2046	25 yeas and may be extended for at least 10 years	30.0



# **Market Overview and Competition**

### **Market Overview and Competition**



### **Customers**

Our electricity and steam customers are the Electricity Generating Authority of Thailand (EGAT), the Provincial Electricity Authority (PEA), Electricité du Laos (EDL) and industrial customers.

### 1. EGAT

We sell a significant portion of the electricity that we generate to EGAT, a state enterprise established under the Electricity Generating Authority of Thailand Act B.E. 2512 and Thailand's national electricity generating and transmission entity under the Ministry of Energy. EGAT is the principal wholesale buyer and controls all of the wholesale transmission of electricity in Thailand. EGAT is also Thailand's largest electricity generator.

EGAT plays a central role in Thailand's power system, generating electricity from its own power generating facilities, purchasing electrical energy from IPPs and SPPs in Thailand and neighboring countries, selling and transmitting almost all electricity to the Metropolitan Electricity Authority (MEA) and the PEA, which then distribute the electricity to end users. To date, we have never experienced any material problems with EGAT in respect of its payment for capacity that we have made available and electricity that we have delivered to it under our power purchase agreements with EGAT.

### 2. PEA

PEA is a state enterprise in the utility sector and is supervised by the Ministry of Interior. It was established on September 28, 1960 under the Provincial Electricity Authority Act B.E. 2503 and its primary responsibilities include the generation, procurement, distribution and sale of electricity to the public, business and industrial sectors in 74 provinces of Thailand, covering more than 510,000 square kilometers or 99.4% of Thailand's total area. The scope of services of PEA does not include areas in Bangkok, Nonthaburi and Samut Prakan.

PEA is the sole off-taker for the electricity generated by our solar power plants and will be the sole off-taker for the electricity generated by our wind power plants.

### 3. EDL

EDL is a Lao state enterprise established under the Law on Enterprises (No. 46/NA dated December 26, 2013) and is wholly owned by the Government of Laos (GOL). EDL owns and operates electricity generation, electricity transmission and electricity distribution assets in Laos. EDL also manages the import and export of electricity from the national electricity grid of Laos.

### 4. Industrial Customers

Our industrial customers are mostly large-scale industrial companies in, among others, the automotive, electronics and steel industries. Many of our industrial customers are subsidiaries or affiliates of transnational corporations. Due to the high electricity demand of industrial users in most of the industrial estates in which we operate, we are able to set certain customer screening criteria to enhance the efficiency of our power generation and capture long-term benefits.

### **Marketing and Sales**

### 1. Pricing

We have the Sales and Marketing Department which is specifically in charge of industrial customers and identifying new business opportunities, either from new customers or from expansion of our relationships with existing customers. Our Sales and Marketing Department is also responsible for coordinating arrangements and negotiating for new power purchase agreements with industrial customers. Generally, our electricity and steam pricing is partly based on the avoided cost (the marginal cost that industrial customers would incur if they acquire the power supply themselves or from other sources such as purchase of electricity from EGAT or the cost of installation and steam power generation) model to allow us to effectively price our products and maximize our profit margins.

### 2. Managing Customer Relationships

As we operate under long-term contracts with certain key customers, we have engaged an experienced and expert professional as the manager of our Sales and Marketing Department to effectively manage our relationships with our existing major customers.

Our Sales and Marketing Department develops an action plan for each customer that leads to our greater insights into the specific needs of each customer. The Sales and Marketing Department also manages the electricity demands of industrial users based on their business plans and a physical survey of the total area of their sites and their actual power utilization rates. If there is substantial growth in electricity demand from an industrial user, our Sales and Marketing Department representatives will negotiate with such customer to install a new meter and enter into a new power purchase agreement. The department also handles technical and commercial complaints. We aim to sustain our solid leadership position in the industry by maintaining our operational excellence and delivering high quality services consistently and reliably as these are the key strengths that we have incorporated in our marketing strategy.

### Competition

### 1. Competition in the Electricity Industry

We do not face competition in relation to our contracted electricity sales to EGAT and EDL, as these are contracted for under long-term power purchase agreements. However, we do expect to compete with major regional and Thai energy companies and other parties for future electricity generation projects. We strongly believe that, if and when this happens, we are likely to win as a result of: (a) our experience in developing power plants, (b) the readiness of our management and professional employees, and (c) the positive relationships that we have established with business partners and communities.

In managing our portfolio of industrial customers, one of our top priorities is to retain existing industrial customers and acquire new industrial customers operating in the industrial estates where our power plants are located. Our major competitor in the Thai market is PEA.

We are insulated to a certain extent from direct competition for our existing customers for the following reasons:

- (a) our transmission and distribution system provides a reliable supply of power to each of our customers.
- (b) we have long-term sales contracts with nearly all our existing customers.
- (c) we have laid electrical transmission cables and steam pipelines directly to each of our customers' plants and reconnection costs are high.

### 2. Competition in the Steam Power Business

As steam transportation is limited short distance due to the heat loss during the transportation process, we do not face competition from other operators.

### **Market Overview**

### 1. Electricity Industry Organization

The Electricity Generating Authority of Thailand (EGAT) plays a central role in the Thai electricity industry. EGAT is a state enterprise responsible for electric power generation and transmission, as well as bulk electric energy sales. At the end of 2016, EGAT's generating capacity accounted for 33.4% of the total generating capacity in Thailand.

As the Transmission System Operator (TSO), EGAT balances the demand and supply of electricity to efficiently serve all users. It is also responsible for managing and controlling, via the National Control Centre and five regional control centers, the generation from all centrally-dispatched power plants that generate high-voltage electricity and transmitting this to distributors which in turn deliver the electricity at lower voltage to households and other end-users. EGAT also owns and operates the national transmission network, including transmission lines and high voltage substations (with a few exceptions noted later).

Under Thai laws, all power injected into the national transmission system, whether by private power producers, other government agencies or producers in neighboring countries, must be sold to EGAT exclusively. As such, EGAT is the only entity that can sell wholesale energy to the distributors (with a few exceptions where power is sold directly to the distributors). Figure 1 below illustrates the overview of the organization of the electricity industry organization and the value chain structure in Thailand.

The Provincial Electricity Authority of Thailand (PEA) and the Metropolitan Electricity Authority of Thailand (MEA) are the sole distributors of electricity nationally. MEA is responsible for the distribution, sales and provision of energy services in Bangkok Metropolis<sup>1</sup>, Nonthaburi and Samut Prakan, while the PEA serves the remaining part of the country. In 2016, the market shares of PEA and MEA in terms of electricity distribution were 70% and 29%, respectively. The remaining 1% was a very small number of large direct power users which are served by

Bangkok Metropolis refers to Bangkok's city limits. Not to be confused with Bangkok Metropolitan Region which is defined as the Metropolis and the five adjacent provinces of Nakhon Pathom, Pathum Thani, Nonthaburi, Samut Prakan, and Samut Sakhon.

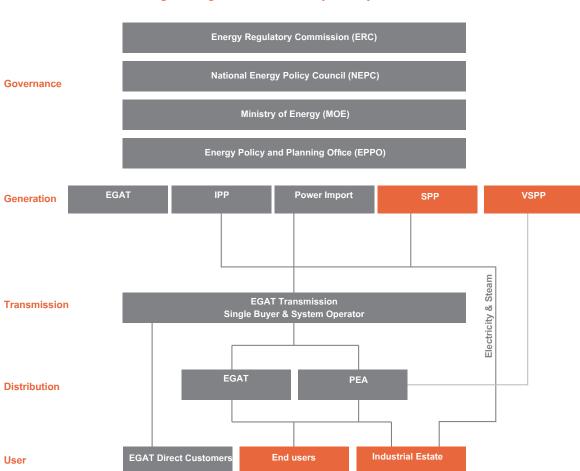


Figure 1 Organization of Electricity Industry in Thailand

Source: EGAT

EGAT under legacy contracts and are unlikely to increase.

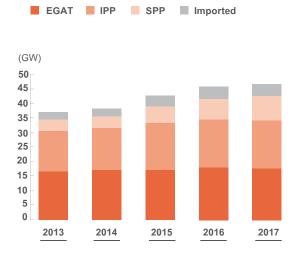
In certain cases, private power companies may run distribution networks in the industrial estates that they serve, often with parallel lines from PEA running in the same estate. In addition, PEA owns some assets that are considered transmission, e.g. high voltage transformers and power lines.

Since 2007, the Energy Regulatory Commission (ERC) has existed as the independent regulatory agency for the energy sector, responsible for monitoring the energy market, regulating electricity tariffs, licensing and dispute settlement. The ERC consists of seven members, whose mandate is to maintain objectivity, through ensuring fairness between consumers, producers and other industry stakeholders. Its primary function is the regulatory control over the generation, transmission, distribution and the system operator (EGAT).

# 2. Independent Power Producers (IPP) and Small Power Producers (SPP) Regime

To meet growing demand for electricity in the past few decades, Thailand opened up the opportunities for the private operators to participate in the power business through the purchase of electricity from Independent Power Producers (IPP), Small Power Producers (SPP), and Very Small Power Producers (VSPP) as illustrated below by the category of power producers.

Figure 2 Growth of IPPs and SPPs in Thailand



Source: EPPO

The IPP program in Thailand began in 1994. There have been three IPP bidding rounds which collectively awarded 16.2 GW of generation capacity.

For smaller developments, EGAT and NEPC initiated the SPP program in 1992 in response to power shortages, a desire to involve the private sector in the power sector, a push towards energy efficiency and the utilization of alternative energy sources such as renewables and waste heat. The SPP program allows developers to propose projects with capacity sales up to 90 MW to EGAT. Any additional capacity can either be used for own consumption (inside the fence) or sold to nearby industries. On a case-by-case basis, EGAT may buy up to 90 MW of capacity from an SPP project. (It has done so in many cases, including with most of B.Grimm Power's SPPs). The SPP program has been very good in attracting investment into the power sector, balancing the needs of investors and off-takers with government policy, with some 5.1 GW of current installed capacity provided by such generators, as of December 2015. This capacity adds to EGAT's own 15.5 GW generation fleet. VSPPs, whose capacity must be less than 10 MW, can sell their energy directly to PEA and MEA. An overview of power producer categories is provided in Table 1 below.

Table 1 Overview of Power Producer Categories in Thailand's Power Generation Market

Power Producer Type	Capacity Sold To	Capacity Constraint
Independent Power Producers (IPP)	EGAT	> 90 MW
Small Power Producers (SPP)	EGAT	>10 MW & 90 MW
Very Small Power Producers (VSPP)	PEA and MEA	10 MW

Source: ERC

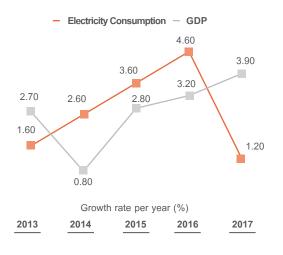
Both IPPs and SPPs have long-term power purchase agreements (PPAs) with EGAT as the single buyer (the PPA terms typically are 20 or 25 years).

As of December 2016, IPPs and SPPs accounted for 24.2 GW (14.8 GW and 9.5 GW respectively) of total capacity in the EGAT system (or approximately 54.5%).

### 3. Electricity Consumption Trends

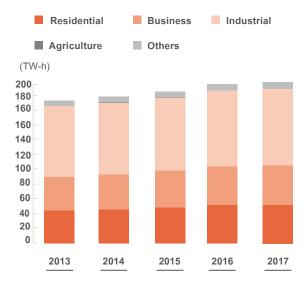
Thai electricity consumption has increased at 4.4% per year on average over the last 15 years. As shown in Figure 3 below, the electricity consumption growth had correlated with the GPD growth which had continuously been on an upward trend until 2007 before decelerating in 2008-2009 and then showing a volatile recovery thereafter. Total final energy consumption reached 182,849 GWh in 2016, an increase of 4.6% YOY. The industrial sector showed the highest rate of electricity consumption, accounting for 42.2% of the total final electricity consumption (77,203 GWh), followed by the commercial and small enterprise sector, which accounted for 30.5% (55,682 GWh), and the residential sector at 24.0% (43,932 GWh). This is as presented in Figure 3 below. GDP growth was low in 2011 due to the flood crisis and shrank again in 2013-2014 due to the slowing global economy and the political situation in Thailand.

Figure 3 Comparison of Electricity Consumption and GDP Growth Rates (2013-2017)



Source: EPPO and NESDB

Figure 4 Thailand Electricity Consumption (2013-2017)



Source: EPPO





### **Peak Demand Trends**

Peak demand has increased from 16.7 GW in 2002 to 29.6 GW in 2016 with the CAGR of 4.2% (as shown in Figure 5 below).

Figure 5 below shows that the electricity demand has been typically peaked in the second quarter of the year, either in April or May.

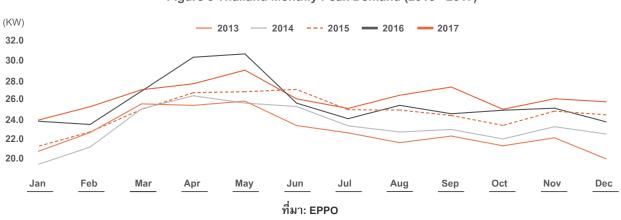


Figure 5 Thailand Monthly Peak Demand (2013 - 2017)

### 4. Electricity Demand Forecast

The annual growth rate of peak electricity demand and electricity consumption in Thailand for 2017-2025 is forecast to remain around 3.9%. Demand growth rate is forecast to slightly decrease from 2021 (from 3.92% to

3.85% by 2025) reflecting the expectation of a slower GDP growth as the economy matures. As a result, we project energy demand to increase from 202.3 TWh in 2017 to 274.6 TWh in 2025, and peak demand to increase from 30.3 GW in 2017 to 41.1 GW in 2025. This is illustrated in Figure 6 below.

Annual Energy Demand (GW-h) ---- Peak Demand (GW) 260,764 254,334 241,671 241,273 234,654 228,238 220,503 212,515 205,649 34.8 2022 2024 2017 2018 2019 2020 2021 2023 2025

Figure 6 Forecast Annual Energy Demand and Peak Demand (2017-2015)

Source: PDP 2015

These forecasts are less aggressive than the PDP's forecasts, which historically have thought to have been overstated. In general policy makers and regulators globally have a stated policy goal of ensuring an adequate supply of electricity. This is understandable given the importance electricity plays in modern life. However, it also means that government projections are often revised downwards over time.

These forecasts have implications for many aspects of the power sector, particularly in terms of the timing of the need for new power plants. The downward revisions in the demand forecasts lead to revisions in the timing of new capacity additions, delays in new IPP/SPP bidding rounds, and so forth. This places companies with signed PPAs in a better position compared to those hoping to enter the market through new bidding rounds.

### 5. New Capacity Build and Reserve Margin **Forecasts**

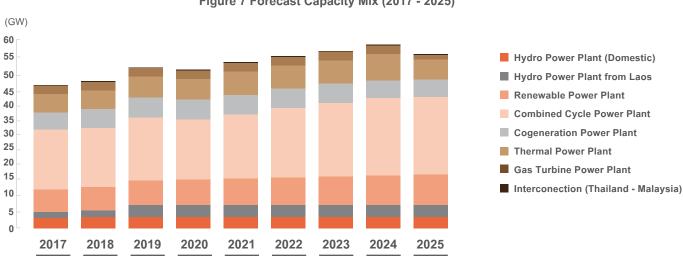
The PDP is a policy-focused document that reflects the consensus during a period of the policy-making process. One of the goals of the PDP is to diversify Thailand's fuel mix in part through the addition of coal, renewables and nuclear.

Historically in Thailand, the development of coal-fired power plants has faced substantial resistance from non-governmental organizations (NGOs) and other parts of society. This has resulted in a number of IPPs switching fuel from coal to gas (Hin Krut and Bo Nok). EGAT is also currently facing challenges to its proposed coal-fired power plant in Krabi.

Nuclear power has long faced objections from society and each PDP has pushed the online date for nuclear plants further out. The PDP 2015 has new nuclear coming online in 2030, although we believe that this is likely to be delayed.

There are also significant amounts of hydro power plant additions scheduled from the mid-2020s in Myanmar. Hydro projects in Myanmar have long been included in the country's future plans and there exists an MOU between the Myanmar and Thai governments. But again, the ability to bring these plants online on time, especially when they have lead times of 6 to 10 years, is in question.

Figure 7 below provides the breakdown of the forecast capacity mix in Thailand to 2025. Total installed capacity in 2017 is estimated at 49 GW, almost half (41.7%) from CCGT. Hydro power plants provide 11.9% of total capacity, with domestic supply at 7.6% and contracted capacity from Laos at 4.3%. Cogeneration power plants, predominantly CCGTs, accounts for 11.9% of total capacity, followed by lignite (7.5%), ST (5.9%) and coal (5.2%). Renewable capacity other than hydro is forecast at 7.4 GW (15.2% of the total).



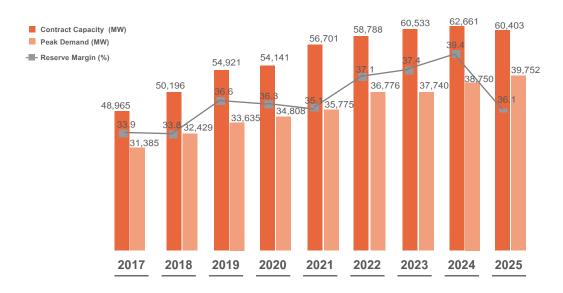
Source: PDP 2015

Figure 7 Forecast Capacity Mix (2017 - 2025)

By 2025, CCGT and ST are expected to decrease their share to 38.0% and 2.3%, respectively, of the capacity mix, while lignite and coal are expected to increase to 9.7%

and 7.9%, respectively. Renewables other than hydro are projected to provide 18.6% of total capacity by 2025.

Figure 8 Forecast of Reserve Margin (2017 - 2025)



Source: PDP 2015

The reserve margin in terms of installed capacity is forecast to increase in 2017, from the current level of 61.0% of peak demand to 61.6%, and remain between 60-65% until 2019, following the firm capacity addition and retirement schedule. From 2020 capacity additions are outpaced by steady demand growth and, consequently, the reserve margin decreases to around 55% of peak demand, corresponding to the targeted 15% in dependable capacity terms.

### 6. SPP Overview

This section examines in detail Thailand's Small Power Producer (SPP) generation sector, providing an analysis of the value chain structure, regulatory and commercial framework, and competitive landscape.

### **Segment Organization and Value Chain Structure**

EGAT and the National Energy Policy Office (NEPO, now known as EPPO) established the SPP program in 1992, allowing developers to propose projects with contracts with EGAT initially up to 60 MW and eventually increased to 90 MW per project by the government, on a case-by-case basis (with one exception, all of B.Grimm Power's gas-fired SPPs are 90 MW PPAs). In particular,

the SPP program was initiated to encourage power plants that utilized renewable energy sources (such as wind, solar and mini-hydro energy), waste-derived or bio-fuels and cogeneration using natural gas and petroleum products (subject to a number of efficiency conditions). SPPs sell some or all of their capacity to EGAT. Steam and electricity not sold to EGAT is sold within industrial estates or to captive customers.

SPP plants are required to utlize:

- Renewable sources such as wind, biomass, solar, mini-hydro, as well as waste or by products from agricultural and industrial activities; or
- Co-generation using natural gas or petroleum products under a number of conditions.
   (For example, the plants must achieve an overall net efficiency¹ of 45 percent or higher (measured from a lower heating value) and at least 10 percent of the annual output² must be used to provide steam).

Overall net efficiency = (power export + heat export - heat import) / fuel consumption (lower heating value), where heat import includes the heat of condensate return and make-up water.

<sup>&</sup>lt;sup>2</sup> Measured as heat-to-power ratio = (heat export – heat import) / power export.

Table 2 Installed and Contracted Capacity of SPPs by Fuel Type (January 2017)

Fuel Type	Installed Capacity (MW)	Contracted Capacity (PPA with EGAT) (MW)
Biomasss	928	631
Bunker Oil	10	5
Coal	851	423
Natural Gas	6,545	4,332
Other	21	14
Solar	589	436
Waste	80	73
Wind	457	430
Гotal	9,481	6,333

Source: ERC

For renewable power plant projects, conventional fossil fuels can be used for up to 25% of the total amount of thermal energy on an annual basis. Generators exceeding this maximum are subject to significant penalties. For cogeneration power plants, overall thermal efficiency must be 45% or higher, and at least 10% of the energy output must be used for thermal applications such as process heat or district cooling in order for the SPP to receive the full fuel saving (FS) payment as described below.

The SPP program increased overall economic and energy efficiency and thus the FS mechanism was put in place. Many industrial customers utilize the steam offtake from SPPs to generate heat for production processes and other uses, and they have become dependent upon the provision of the steam from the SPPs, often with either no backup boiler or one that would not fully sustain their

operations. Cogeneration and the utilization of the waste heat from electricity production almost always results in overall higher levels of energy efficiency.

### **Commercial Framework**

Different tariff structures are applied to the different producer categories (IPP, SPP and VSPP). These structures depend on the type of contract (firm or non-firm), and energy source (conventional or renewable). Firm contracts mean that the SPP can guarantee availability of electricity supply during the system peak months.

EGAT has defined two types of purchasing rates for buying SPP power: non-firm and firm contracts. The breakdown of SPPs by these contract types is shown in Table 3 below.

Table 3 Installted and Contracted Capacity of SPPs by Contract Type (January 2017)

Fuel Type	Installed Capacity (MW)	Contracted Capacity (PPA with EGAT) (MW)
Firm	6,976	4,800
Non-firm	2,505	1,533
Total	9,481	6,333

Source: ERC

Firm fossil fuel-fired SPPs must generate power for at least 7,008 hours per year and they must generate during the months of March, April, May, June, September and October. Payment to firm SPPs is determined by EGAT's long-run avoided capacity and energy costs. Firm commercial energy SPPs receive an unbundled base tariff, which comprises of a capacity payment, an energy payment and a fuel savings payment.

Firm renewable energy SPPs receive the same base tariff plus two additional payments (adders): one fixed, called the Renewable Energy Promotion (REP), and one that varies depending on the type of renewable energy. This is summarized in Table 4 below.

Table 4 Breakdown of SPP Firm Tariff

Component	Unit	Description
Capacity Payment (CP)	Baht/kWh	Fixed payment on capacity available on a monthly basis. Generally, most of the earnings of SPPs are from this component.
Energy Payment (EP)	Baht/kWh	Variable payment based on energy provided to EGAT. This includes operations and maintenance expenses, fuel expense and other variable charges and is intended to cover costs without providing significant margins.
Fuel Saving (FS)	Baht/kWh	FS is scaled according to how well SPPs meet the 10% energysavings target.
Renewable Energy Promotion (REP)	Baht/kWh	Defined by the government based on the technology type
Adder	Baht/kWh	Defined by the government based on the technology type



## **Risk Factors**

### **Risk from Fluctuation in Fuel Prices**

Natural gas is the primary fuel used by our gas-fired combined cycle cogeneration power plants. If there are material increases in our cost of fuel and we are unable to pass these increases through to our customers, this will directly reduce our profit margins.

We can pass fuel price fluctuations through to our electricity customers under the power purchase agreements: 1) Under the terms of our power purchase agreements with the Electricity Generating Authority of Thailand ("EGAT"), our natural gas costs are passed through to EGAT determined by the formula specified in the agreements; and 2) Under the terms of our power purchase agreements with industrial users in Thailand, we typically sell electricity at the rates which are based on the retail electricity tariff charged by the Provincial Electricity Authority ("PEA"). PEA's tariff factors in the fuel adjustment charge (the "Ft") which is adjusted every four months according to various prices of fuel used to generate electricity such as coal, oil, natural gas and other fuels as well as the inflation rate, currency exchange rate and other factors.

## Risk from Dependency on Availability of Natural Gas from PTT

Our business is dependent on the availability of fuel, in particular natural gas which we purchase solely from PTT Public Company Limited ("PTT") and accounts for 70-80% of our cost of sales and services. Shortages in natural gas or an inability of PTT to provide natural gas to us could prevent our cogeneration power plants from being able to generate electricity and steam and, as a consequence, prevent us from fulfilling our obligations under our power purchase agreements and steam supply agreements.

However, the gas supply agreement between us and PTT define the minimum gas supply to be provided by PTT and we determined our annual natural gas demand which is based on our production plan. PTT has the duty to deliver natural gas to us according to the agreement terms and to partially compensate us for our revenue loss

if PTT fails to deliver the natural gas supply to us at the quantity mutually agreed upon. In addition, we are exploring the possibility of increasing the proportion of power plants harnessing other energy sources, particularly renewable energy such as hydro power and solar power, to reduce dependency on natural gas power plants as our main source of income.

### **Risk from Dependency on EGAT**

EGAT which is a state-owned enterprise and Thailand's largest electricity generator as well as the principal wholesale buyer and controls all of the wholesale transmission of electricity in Thailand, is our largest customer. Sales of electricity to EGAT account for approximately 60% of our sales and service income. SPP power purchase agreements are standard form agreements, meaning that we did not have an opportunity to negotiate these agreements.

All of our power plants had successfully complied with the substantive terms specified in the power purchase agreements made with EGAT. The Operation Control Department was also established to: centralize the control and coordination, consolidate and submit to EGAT the reports on the performance of power plants, electricity sale and maintenance plan of all of our power plants to EGAT, and develop a plan for reliable plant operations to minimize our risk of failing to satisfy our contractual obligations to EGAT.



# Risk from Operations and Maintenance of Operational Power Plants

Our business involves the use of highly complex machinery and generation processes and the generating capacity and efficiency of our power plants are dependent upon the reliable operation and maintenance of the equipment in our power plants. Any unexpected operational failures or breakdowns could cause our power plants' generating capacity to fall below expected levels or the heat rate to be above the contracted heat rate, impairing the profitability of our power plants.



With more than 20 years of experience in SPP plant operation and maintenance, we have strong operations and maintenance ("O&M") capabilities and key activities in our O&M strategy include:

- Our O&M teams have been commissioned to each power plant since the construction phase, i.e. 6-12 months prior to the commercial operation date, to familiarize with the machinery design and operation.
- 2) By design, we have multiple power plants operating in the same industrial estates to optimize the efficiency of our plant operations and to allow switching load in the event of disturbance caused by mechanical failure.

- We have engaged specialized technicians in the machinery maintenance activities through our long-term service agreements with manufacturers and have our in-house O&M teams supervise these activities.
- 4) Our Asset Management Department is central in coordinating and scheduling maintenance activities of each plant based on the manufacturers' requirements to complete the maintenance in the shortest possible time.

As a result of this strategy, the actual fuel consumption rates of our commercially operational power plants are lower than the contracted heat rates and the maintenance periods are in accordance with the contractual terms and conditions.

# Risk from Construction Delay or Construction Cost Overrun

There may be delays in completing our projects under construction which could cause the construction costs of these projects to exceed our expectations. This may result from a variety of factors such as delays in the delivery of critical components and equipment, failure to secure permits required for the construction, including any other events that are beyond our control and cause us to delay the commercial operation of projects.

However, with our effective construction planning and budgeting system that meets international standard, we are able to complete all projects on time and within budget through systemic collaboration with all relevant parties, namely the Procurement and Commercial Department which defines the machinery specifications and eligible contractor qualifications and establishes transparent bidding processes, the License, Community and Environment Department which is in charge of obtaining required licenses and permits, liaising with local communities to promote their understanding, and preparing environmental impact reports in advance of the construction phase, the Project Management Department which monitors the construction progress and budget disbursement on a monthly basis, and the Finance Department that sources financing for each power plant project.

## Risk from Competition for Future Electricity Generation Projects

In order to expand our business, we plan to bid for future electricity generation projects in Thailand or elsewhere. Our business expansion ability depends on whether the government opens for any future bidding for its power purchase programs, our ability to meet the technical qualification criteria applicable to these programs, our capital availability for investment, and the level of competition that we face.

Before deciding to bid for any projects, we conduct a comprehensive risk assessment for such projects using our pre-determined risk assessment approach to evaluate, among others, technical risk, rates of return, and legal risk, to identify the suitability of the project's risk-adjusted return on capital. The Board of Directors and our management team consisting of members possessing extensive knowledge and experience in this industry will deliberate on the risks associated with each of these projects.





# Risk from Loss Senior Management or Key Employees

Our growth strategy relies on our senior management and key employees for their visionary guidance and expertise. Our senior management and key employees have built up extensive managerial and technical knowledge. Our senior management also has a track record of success in developing, financing, constructing, acquiring and operating power plants as well as turning around acquisitions. If we lose a member of our senior management or a key employee, we may not be able to find a replacement and this could be disruptive to our operations.

Fully aware that our employees are fundamental to our success, we focus a significant amount of attention on human resources development, aiming to attract, develop and retain competent professionals based on the individual development plans and the four pillars of our corporate value (4 Ps), namely Positivity, Professionalism, Partnership and Pioneering Spirit. We also identify successors to key positions and focus on developing and training those individuals along the line of progression to prepare them for taking up their future roles as senior executives of the Company.



# Risk from Operating as Holding Company

We are a holding company which does not have its own business operations and our ability to declare dividends will depend on the future financial performance of its subsidiaries and associates including the subsidiaries and associates of our project companies. There may be limits on the ability of our project companies to pay dividends as the ability is subject to their operating results, financial conditions, liquidity, investment requirements, restrictions under project finance agreements and other factors as their boards of directors and/or shareholders may consider appropriate.

Pursuant to the dividend policies of the subsidiaries, dividend payment is based on the net profits after the deduction of tax and legal reserve, subject to financial conditions under project finance agreements, cash flows and other considerations as they deem appropriate.

### Risk from Exchange Rate Fluctuation

We are exposed to foreign exchange risk because: some of our loan facilities are denominated in USD; we purchase machinery for our power plants in foreign currencies; and some of our revenue is denominated in foreign currencies such as USD, Lao Kip and Vietnamese Dong or in Baht but linked to the U.S. dollar.

We manage our foreign exchange rate risk through:

1) Structuring the USD loans of the project companies and our USD revenue to achieve a natural hedge against exposures to foreign currency fluctuations of projects in commercial operations, and 2) Using derivatives such as forward contracts to hedge against the foreign exchange rate risk associated with the import of machinery for power plants under construction.

### **Risk from Interest Rate Fluctuation**

Power plant development is capital intensive in nature and a substantial portion of our capital investment is financed by bank loans that apply floating interest rates and use London Interbank Offered Rate ("LIBOR"), the Minimum Lending Rate ("MLR") or the Thai Baht Interest Rate Fixing ("THBFIX") as reference rates. We intend to hedge against most of our interest rate risk through interest-rate derivatives to convert floating interest rates into fixed interest rates.

# Risk from having interest-bearing debt greater than total equity

We have net interest-bearing debt to equity ratio of 1.4 times according to consolidated financial statement as at 31 December 2017. In other word, we have net debt greater than total equity which may impact on our financial stability and capital structure.

However, more than 80% of our debt is indebtedness at project level or our subsidiaries in which we hold majority and have control over. The result of this is that we need to consolidate their assets and liabilities of our subsidiaries into our consolidated financial statement. Nevertheless, our subsidiaries' debts are mostly Project Financing which is limited recourse basis to the sponsor. Considering our separate financial statement as at 31 December 2017, we have net debt to equity of -0.1 times or have cash and cash equivalent greater than interest-bearing debt.

# **General Information**

Name : B.Grimm Power Public Company Limited

Ticker Symbol : BGRIM

**Date of Incorporation** : July 26, 1993

Date of Registration as Public Limited Company: September 9, 2016

First Day of Trading on SET : July 19, 2017

Company Registration Number : 0107559000427

Registered Capital : As at December 31, 2017, the Company had registered capital

of Baht 5,400,000,000 million and paid-up capital of

Baht 5,213,800,000 millon, divided into 2,606,900,000 shares

at a par value of Baht 2 per share.

Type of Business : A holding company holding shares in companies of which core

business is the generation and sale of electricity and steam, including other relevant commercial activities, in Thailand and

other countries

Sector : Energy and utilities

Industry : Resources

Number of Employees : 810 employees as at December 31, 2017

Website : www.bgrimmpower.com

Contact Information : Investor Relations

Tel: 02-710-3528 Fax: 02-379-4259

E-mail: ir@bgrimmpower.com

Company Secretary : Tel: 02-710-3429 Fax: 02-379-4259

E-mail: comsec@bgrimmpower.com

Head Office : 5 Krungthepkreetha Road, Huamark, Bangkapi, Bangkok 10240

**Referral Parties** 

Registrar : Thailand Securities Depository Company Limited

The Stock Exchange of Thailand Building (next to the Embassy of China)

93, Rachadapisek Road, Din Daeng, Bangkok 10400

Tel: 0-2009-9999 Fax: 0-2009-9991

Debentureholders' Representative : Bank of Ayudhya Public Company Limited

(B.Grimm Power Public Company Limited 17<sup>th</sup> Floor 1222 Rama III Road, Bang Phongphang,

and Amata B.Grimm Power SPV1 Limited) Yan Nawa, Bangkok 10120

Tel: 0-2296-3582 Fax: 0-2683-1298

Auditor : Mr. Kajornkiat Aroonpairojkun

CPA License No. 3445

PricewaterhouseCoopers ABAS Limited

15<sup>th</sup> Floor, Bangkok City Tower 179/74-80 South Sathorn Road

Tel: +66 (0) 2344 1000, +66 (0) 2824 5000

# **Description of Securities** and Shareholders

### **Registered Capital and Paid-Up Capital**

B.Grimm Power Public Company Limited is listed on the Stock Exchange of Thailand. As at December 31, 2017, our registered capital totaled Baht 5,213,800,000 million, consisting of 2,606,900,000 ordinary shares at a par value of Baht 2 per share.

### **Major Shareholders**

Top 10 Shareholders as at December 29, 2017

Major Shareholder	Number of Shares	%
1. B.Grimm Power (Singapore) Pte. Ltd. <sup>1</sup>	886,002,000	34.00
2. Mr. Harald Link	633,399,700	24.30
3. B.Grimm Joint Venture Holding Ltd. <sup>2</sup>	235,997,750	9.05
Euroclear Nominees Limited	123,000,000	4.72
Bualuang Long-Term Equity Fund	47,032,400	1.80
Muang Thai Life Assurance PCL	34,771,800	1.33
7. Miss Caroline Monique Marie Christine Link	28,350,000	1.09
8. Thai Life Insurance PCL	28,300,000	1.09
9. N.C.B. Trust Limited-Norges Bank 11	24,625,400	0.95
10. Bualuang Long-Term Equity Fund 75/25	19,622,700	0.75
Total	2,061,101,750	79.08

<sup>1</sup> A limited company which is incorporated under Singaporean laws and has Mr. Harald Link and Miss Caroline Monique Marie Christine Link as the beneficiaries.

<sup>&</sup>lt;sup>2</sup> A limited company which is incorporated under Thai laws and its shares are directly and indirectly owned by Mr. Harald Link.

### **Other Securities Issued**

B.Grimm Power Public Company Limited issued and offered two series of debentures in an aggregate principal amount of Baht 5,500 million to institutional investors and/or high net worth investors with the Bank of Ayudhya Public Company Limited as the debenture holders' representatives. Details are as follows:

Series	Issue Size (MB)	Unredeemed Amount (MB)	Maturity Date	Interest Rate (% p.a.)
1/2016, Series 1	2,300	2,300	October 4, 2018	3.60
1/2016, Series 2	3,200	3,200	October 4, 2019	3.80
Total	5,500	5,500		

Amata B.Grimm Power SPV1 Company Limited issued and offered 11 series of debentures in an aggregate principal amount of Baht 11,500 million to institutional investors and/or high net worth investors. The debentures are guaranteed by ABP3, ABPR1 and ABPR2 and the Bank of Ayudhya Public Company Limited is the debenture holders' representatives. Details are as follows:

Series	Issue Size (MB)	Unredeemed Amount (MB)	Maturity Date	Interest Rate (% p.a.)	Credit Rating*
1	1,800	1,800	April 21, 2020	2.68	A-
2	600	600	April 21, 2021	3.00	A-
3	1,500	1,500	April 21, 2022	3.25	A-
4	900	900	April 21, 2023	3.58	A-
5	900	900	April 21, 2024	3.76	A-
6	1,000	1,000	April 21, 2026	4.01	A-
7	1,500	1,500	April 21, 2027	4.17	A-
8	800	800	April 21, 2028	4.33	A-
9	1,000	1,000	April 21, 2029	4.35	A-
10	600	600	April 21, 2030	4.48	A-
11	900	900	April 21, 2032	4.79	A-
Total	11,500	11,500			

<sup>\*</sup> All debentures are rated by TRIS Rating.

## **Dividend Policies**

### Dividend Policies of B.Grimm Power, Subsidiaries and Joint Ventures

### **Dividend Policy of B.Grim Power**

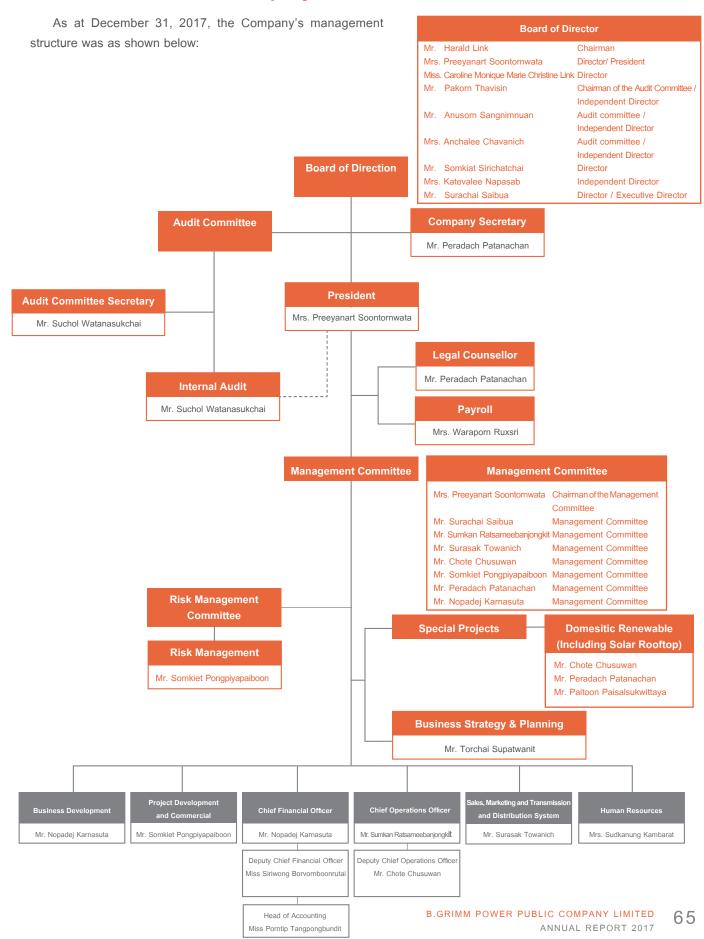
According to the Dividend Policy of B.Grimm Power, dividend will be paid to shareholders at least 40% of the Normalized Net Profit (net profit excluding unrealized gain or loss on exchange rate and non recurring income or expense) of B.Grimm Power after deduction of tax and legal reserve, subject to obligations under credit facilities agreements. The actual dividend rate may differ from the intended rate due to actual operating results, cash flows, investment requirements, restrictions and conditions under credit facilities agreements and other future considerations. An annual dividend payment proposal, after being endorsed by the Board of Directros, will be proposed to a meeting of shareholders for approval while an approval of an interim dividend payment proposal is within the authority of the Board of Directors and shall be reported to shareholders at a subsequent meeting of shareholders.

# Dividend Policies of Subsidiaries and Joint Ventures

The dividend policy of our subsidiaries and joint ventures will be endorsed by the board of directors of each subsidiary and joint venture and further approved at a shareholders' meeting of such company each year. Dividend will be paid from the net profit under the separate financial statements of each subsidiary and joint venture after deduction of tax and legal reserve, subject to obligations under credit facilities agreements. The actual dividend rate may differ from the intended rate due to actual operating results, cash flows, investment requirements, restrictions and conditions under credit facilities agreements and other considerations that each subsidiary and joint venture deems appropriate. An approval of an interim dividend payment proposal is within the authority of the board of directors of each subsidiary and joint venture and shall be reported to shareholders at a subsequent meeting of shareholders.

# **Management Structure**

### **B.Grimm Power Public Company Limited**



### 1. Board and Board Committees

### (A) Board of Directors

As at December 31, 2017, the Board of Directors had nine members, comprising two executive directors, three non-executive directors and four independent directors, as listed below:

Name	Position
1. Mr. Harald Link	Chairman
2. Mrs. Preeyanart Soontornwata	Director/ President
3. Miss Caroline Monique Marie Christine Link	Director
4. Mr. Somkiat Sirichatchai*	Director
5. Mrs. Katevalee Napasab*	Independent Director
6. Mr. Surachai Saibua*	Director/Executive Director
7. Mr. Pakorn Thavisin*	Independent Director
8. Mr. Anusorn Sangnimnuan*	Independent Director
9. Mrs. Anchalee Chavanich*	Independent Director

Remark \* Appointed by the Extraordinary General Meeting of Shareholders No. 2/2016 on June 8, 2016.

From January 1, 2018 onward, Mr. Somkiat Sirichatchai will qualify as an independent director of the Company. Therefore, from January 1, 2018, Mr. Somkiat's position will change from "Director" to "Independent Director" and the Board of Directors will have five independent directors out of a total of nine directors.

### **Directors with Signing Authority**

Any two of these four directors, namely Mr. Harald Link or Miss Caroline Monique Marie Christine Link or Mrs. Preeyanart Soontornwata or Mr. Surachai Saibua, shall co-sign and affix the company seal to legally bind the Company.

# Authority, Duties and Responsibilities of the Board of Directors

(1) Define vision, mission, policies, strategies and business goals of the Company and its subsidiaries; consider and approve policies and business directions proposed by the management team; exercise oversight to ensure that the management team operates businesses in accordance with the Company's vision, mission, policies, strategies and business goals by taking into account the interest of all stakeholders in order to create higher economic value for shareholders.

- (2) Review the charter of the Board of Directors at least annually.
- (3) Lay down the structure and processes of the Company and its subsidiaries to establish an appropriate system for risk management, supervision, audit and internal control in order to bolster the confidence that the Company has complied with applicable rules and regulations, the resolutions of the Board of Directors and the meeting of shareholders in accordance with the duties of good faith and care.
- (4) Control, monitor and assess the performance of the Company and its subsidiaries to realize the strategies within the budgetary framework approved by the Board of Directors.
- (5) Consider potential key risk factors and devise a comprehensive risk management framework and exercise oversight to ensure that the management team operates with systems and processes that can effectively manage risks including risk factors potentially arising from new business opportunities.
- (6) Ensure adequate, efficient and effective internal control and internal audit as well as the regular assessment of the suitability of the internal control system of the Company and its subsidiaries.

- (7) Ensure that a remuneration system or mechanism for senior executives is appropriate in light of the Company's performance to effectively create motivation both in the short term and the long term.
- (8) Have the authority to, without any limit, approve capital expenditures for investments and operations, requests for loans or credit facilities from banks, lending and obligations as a guarantor in support of the ordinary course of business of the Company and its subsidiaries within the scope permissible by the regulations and rules of the Company and the applicable regulations and laws of the Stock Exchange of Thailand and the Office of Securities and Exchange Commission.
- (9) Ensure that the Company and its subsidiaries adopt appropriate and effective accounting, financial reporting and auditing systems, maintain relevant accounts and documents, and disclose information to shareholders and the public as appropriate.
- (10) Provide appropriate channels for communicating with each group of shareholders and supervise information disclosure to achieve the highest level of accuracy, clarity, transparency, reliability and standard.
- (11) Perform oversight and undertakings to assure that the Company and its subsidiaries comply with the ethical standards established by the Board of Directors as well as formulae the policies governing corporate governance and corporate social responsibility for the Company and its subsidiaries.
- (12) Have the authority to appoint directors or executives of the Company's subsidiaries at least according to the Company's entitlements conferred by its equity ownership in such subsidiaries; clearly define the scope of duties and responsibilities of directors and executives appointed including the extent to which the discretion can be exercised by requiring that the voting on material matters at the boards of directors' meeting of subsidiaries shall be subject to prior consideration by the Company's Board of Directors; and exercise oversight to ensure that the management of businesses is in accordance with the Company's policies, transactions are in compliance with applicable laws, and information about financial positions, operating results, related-party transactions, and acquisition or disposal of material assets is fully and properly disclosed.
- (13) Appoint the President, the Board Committees and the Company Secretary and fix the remuneration of

the Board Committees (within the total limit approved by the shareholders).

- (14) Consider and approve the business undertakings of the Company and its subsidiaries in accordance with their Articles of Association, including the following matters:
  - (a) Vision, mission, policies and business strategy (subject to annual review)
  - (b) Annual business plan
  - (c) Annual budget plan
  - (d) Annual and quarterly financial statements
  - (e) Payment of interim dividends
  - (f) Organizational restructuring at group level and other major organizational changes
  - (g) Acquisition, establishment, disposal, transfer and freezing of any material assets or businesses of the Company
  - (h) Changes to the authority delegated by the Board of Directors or any persons.
- (15) Delegate certain authority, from time to time, to the Board Committees.
- (16) Establish the enterprise-wide anti-corruption supervision system, formulate policies, rules and procedures in support of effective anti-corruption efforts, and disclose to the auditor the information about the Board's roles in managing the corruption risk. The Board of Directors plays a key and leading role in demonstrating earnest commitment to fighting against corruption to the Company's employees, business partners and the general public.

The delegation of authority, duties and responsibilities by the Board of Directors shall in no way constitute the delegation or sub-delegation of authority that empowers the Board of Directors or the persons delegated by the Board of Directors to approve any transactions that they or any persons who may have conflicts of interest with them (as defined in the notifications of the Capital Market Supervisory Board or the SEC) may have interest or may benefit in any manners or may involve any other conflicts of interest with the Company and its subsidiaries, unless such transactions are approved in accordance with the policies and criteria approved by the shareholder meeting or the Board of Directors.

### **Board Meetings**

The Board meeting calendar for 2017 was set in advance for the entire year. In 2017, there were a total of 13 regular Board meetings.

For each Board meeting, supporting documents were submitted to directors seven days in advance of the meeting date to allow sufficient time for reading.

Attendance at the Board meetings by directors in 2017 is as shown below:

Name	Attendance/Total Meeting
1. Mr. Harald Link	11/13
2. Mrs. Preeyanart Soontornwata	13/13
3. Miss Caroline Monique Marie Christine Link	11/13
4. Mr. Somkiat Sirichatchai	13/13
5. Mrs. Katevalee Napasab	9/13
6. Mr. Surachai Saibua	13/13
7. Mr. Pakorn Thavisin	9/13
8. Mr. Anusorn Sangnimnuan	12/13
9. Mrs. Anchalee Chavanich	13/13

### (B) Audit Committee

As at December 31, 2017, the Audit Committee had 3 members as listed below:

Name	Position
1. Mr. Pakorn Thavisin	Chairman of the Audit Committee
2. Mr. Anusorn Sangnimnuan	Member
3. Mrs. Anchalee Chavanich	Member

The Company requires that the Audit Committee meetings be held regularly at least six meetings per year to perform duties as specified in the charter of the Audit Committee. Key issues from every meeting of the Audit Committee are reported to the Board of Directors.

In 2017, the Audit Committee held 10 meetings including meetings with the auditor and the Internal Audit team. Details are as shown below:

Name	Attendance/Total Meeting
Mr. Pakorn Thavisin	9/10
M r. Anusorn Sangnimnuan	10/10
Mrs. Anchalee Chavanich	10/10

- (1) Screen and propose the nomination of auditors and the auditor's fee and recommended the matters to the Board of Directors prior to proposal thereof to the meeting of shareholders for approval as well as evaluate the performance of the auditors.
- (2) Endorse the appointment, transfer, employment termination and performance evaluation of the Head of Internal Audit.
- (3) Have the authority to access the Company's information at all levels as well as invite the executives, employees or related persons to attend meetings and provide the information about relevant issues within the scope of their authority and duties assigned by the Board of Directors.
- (4) Be entitled to seek independent opinions from auditors or consult with professional advisors for suggestions, advices or opinions as the Audit Committee deems appropriate whereby the expenses are absorbed by the Company. The meeting with the auditors shall be arranged for at least one time per year.
- (5) Conduct reviews to ensure the Company's compliance with policies and regulations governing anti-corruption and corruption risk management. This includes the anti-corruption measures, the corruption identification and responses, the review and revision of policies, procedures, code of ethics, and code of conduct of the Company to ensure proper and enterprise-wide compliance therewith.

The duties and responsibilities of the Audit Committee also include the following:

- (1) Internal control and risk management
  - (a) Conduct reviews to ensure that the Company has a proper, efficient and effective internal control system and internal audit system.
  - (b) Consider the reports of the Risk Management Committee and discuss the risk assessment and management policy with the management.
- (2) Legal and regulatory compliance
  - (a) Conduct reviews to ensure that the Company's operations are in compliance with the securities and exchange laws, the rules of the SET and the laws relevant to the Company's business

- as well as that the Company's subsidiaries conform with the rules set forth in supervisory policies and corporate governance mechanisms applicable to the businesses in which the Company has invested.
- (b) Review connected transactions, related-party transactions, and acquisitions and disposals of assets to ensure that the Company's execution of such transactions are in accordance with the laws and the relevant rules and regulations, reasonable and of the utmost benefit to the Company.

### (3) Financial reporting

- (a) Conduct reviews to ensure that the Company's financial reports are correct and adequately disclosed in accordance with applicable financial reporting standards.
- (b) Evaluate the appropriateness of the accounting principles adopted for financial reports.
- (4) Supervision of performance of the external auditors and internal auditors
  - (a) External auditors
    - Meet with the external auditor to acknowledge the auditor's report on the reviewed quarterly financial statements and the audited annual financial statements and to discuss issues and obstacles that may arise during the course audit operations. The meeting with the auditors, without the presence of the management, should be held at least one time per year.
    - Evaluate the efficiency and effectiveness including the independence of the auditor's performance.
  - (b) Internal auditor
    - Review the independence of the Internal Audit Department by requiring the Internal Audit Department to directly report to the Audit Committee.
    - Meet with the Head of Internal Audit, without the presence of the management, at least one time per year in order to discuss the substantial matters

- Review and approve the charter of the Internal Audit Department at least annually.
- Consider and approve the annual budget, manpower and resources necessary for the operations of the Internal Audit Department.
- Approve the annual audit plan as well as consider and approve the review and revision of the audit plan in respect of the material parts.
- Supervise the Internal Audit Department's operations to ensure conformity with the approved annual audit plan and the international standards for the professional practice of internal auditing.
- Evaluate the internal audit quality annually as well as arrange for the internal audit quality evaluation by an independent external party at least every five years.

### (5) Reporting

- (a) Prepare the report of the Audit Committee to be disclosed in the Company's annual report and signed by Chairman of the Audit Committee.
- (b) If the Audit Committee, during its course of operation, finds any suspicious transactions or acts that may materially affect the financial status and performance of the Company, the Audit Committee shall report such matters to the Board of Directors for corrective or improvement actions within such period that the Audit Committee deems appropriate. The abovementioned transactions or actions are as follows:
  - Transactions involving conflicts of interest;
  - Corruption or irregularities or material inefficiencies in the internal control system; and
  - Violation against the laws governing the Company's business.

- If the Board of Directors or the management does not take corrective or improvement actions within such period, any members of the Audit Committee may report the abovementioned transactions or acts to the SEC or the SET.
- (c) The Chairman of the Audit Committee shall periodically report the performance of Audit Committee to the Board of Directors' meeting for acknowledgment or consideration on a regular basis.

### (6) Other matters

- (a) Perform any other tasks as required by laws or future laws.
- (b) Perform any other tasks as assigned in writing by the Board of Directors and consented to by the Audit Committee.
- (c) Review the charter of the Audit Committee at least annually and propose the charter to the Board of Directors for approval.

### (C) Management Committee

### Authority, Duties and Responsibilities of the Management Committee

- (1) Consider and set the goals of the Company and its subsidiaries, provide guidance about the strategic directions, management structure, annual business plan and the budget of the Company and its subsidiaries as assigned by the President.
- (2) Examine and report the performance of the Company and its subsidiaries to the Board of Directors for acknowledgment.
- (3) Examine and make recommendations about the Dividend Policy of the Company and its subsidiaries to the Board of Directors.
- (4) Examine and approve transactions relating to investment or asset disposal transactions of the Company and its subsidiaries, human resources management, finance and treasury, general administration, and transactions relating to the Company's business within the scope of approval

- authority assigned by the Board of Directors or the Company's line of authority manual, including approval of off-budget procurement transactions within the limit of Baht 50 million.
- (5) The Management Committee may delegate to executives or employees the authority to perform on its behalf any specific duties as deemed appropriate whereby the Management Committee or such delegates shall not perform any acts or approve any transactions that they or any persons who may have conflicts of interest with them may have interest or may benefit in any manners or may involve any other conflicts of interest with the Company and its subsidiaries (as defined in the notifications of the Capital Market Supervisory Board or the SEC). Approval of such transactions must comply with the laws, the policies and the principle established the Board of Directors.
- (6) Engage advisors or persons with independence to provide opinions or recommendations as deemed applicable.
- (7) Have executives or employees attend the meetings of the Management Committee or provide information relevant to matters discussed by the Meeting Committee at the meetings.
- (8) Regularly report to the Board of Directors the activities that the Management Committee has undertaken within its scope of authority and duties, including any other matters that deemed necessary and appropriate to be reported to the Board of the Directors.
- (9) Deliberate on the feasibility of new investment projects.
- (10) Review and assess the adequacy of this charter by bringing into comparison the Management Committee's performance and its compliance with this charter. The Management Committee will consider measures to improve its performance based on the assessment results.
- (11) Perform any other tasks as assigned by the Board of Directors or the President.

(12) Establish guidelines in support of effective anti-corruption policies and regulations. Ensure that communication and training programs with respect to relevant policies and regulations are implemented for employees at all levels for satisfactory understanding and knowledge of the employees including their ability to efficiently and effectively apply the policies and regulations in alignment with the changing businesses, rules, regulations and laws.

### (D) Risk Management Committee

### Authority, Duties and Responsibilities of the Risk Management Committee

- (1) Formulate and propose for the Management Committee's consideration the Risk Management Policy that elaborates the overall risk management and addresses key risks such as business risk, liquidity risk, operational risk and reputation risk.
- (2) Strategize based on the Risk Management Policy to achieve the ability to assess, monitor and control the Company's risks at an appropriate level.
- (3) Review the adequacy of the Risk Management Policy and system, including the efficiency and effectiveness of the system and the compliance with the established policy.
- (4) Recommend the Management Committee the improvements for greater alignment with the policies and strategies set forth by the Management Committee.
- (5) Review the charter of the Audit Committee at least annually for alignment with the Company's business operation and propose the charter to the Board of Directors for approval.

### 2. Executive Officers\*

As of December 31, 2017, the Company had nine executive officers and a Head of Accounting as shown below:

Name	Position
Mrs. Preeyanart Soontornwata	President
2. Mr. Surachai Saibua	Executive Director
3. Mr. Sumkan Ratsameebanjongkit	Senior Executive Vice President, Chief Operation Officer
4. Mr. Surasak Towanich	Executive Vice President, Sales, Marketing and Transmission and Distribution System
5. Mr. Chote Chusuwan	Executive Vice President, Deputy Chief Operation Officer
6. Mr. Somkiet Pongpiyapaiboon	Executive Vice President, Project Development and Commercial
7. Mr. Peradach Patanachan	Executive Vice President, Legal Counsellor
8. Mr. Nopadej Karnasuta	Executive Vice President, Chief Financial Officer
9. Miss Siriwong Borvornboonrutai	Deputy Chief Financial Officer
10. Miss Porntip Tangpongbundit	First Senior Vice President (Accounting)

**Remark** \* Based on the definition of "executive officers" per the Securities and Exchange Commission's Notification No. GorJor. 17/2551 Re: Determination of Definitions in Notifications relating to Issuance and Offer for Sale of Securities (Amended)

### Authority, Duties and Responsibilities of the President

The President is entrusted with the authority and duties to manage the Company as assigned by the Board of Directors. The compensation of the President is fixed and approved by the Board of Directors. The President must manage the operations and businesses of the Company in strict compliance with the business plan and the budget plan that have been approved by the Board of Directors on the basis of integrity, honesty and prudence in the best interest of the Company and its shareholders. The authority and duties of the President shall also include the following:

- (1) Manage the daily operations of the Company.
- (2) Formulate and propose to the Board of Directors for approval the business strategy and the annual based on the proposals made by the management team and the Management Committee.
- (3) Implement the business plan and the budget plan that have been approved by the Board of Directors.
- (4) Prepare and propose reports, business plans and financial statements to the Board of Directors on a quarterly basis.
- (5) Formulate the Company's trading policies and, on behalf of the Company, enter into or cancel any agreements or obligations associated with the existing

or future purchase/sale of raw materials and products in accordance with the scope of approval authority given by the Board of Directors.

- (6) Enter into or cancel any agreements or obligations other than those specified in (5) above in accordance with the scope of approval authority given by the Board of Directors.
- (7) Approve hiring, appointment, removal, transfer, promotion, demotion, salary/wage reduction, disciplinary punishment or employment termination of employees on behalf of the Company; approve the appointment or compensation of any other employees/officers and all subordinates who are ranked below the President; and delegate his/her authority and duties to such officers as deemed appropriate.
- (8) Approve transactions within the scope of approval authority specified in the Company's Line of Authority, including off-budget procurement transactions within the limit of Baht 10 million and financing transactions within the limit of Baht 300 million.
- (9) Comply with the Company's Anti-Corruption Policy and support the compliance with and communication of the Anti-Corruption Policy among employees and all relevant parties.

Additionally, the Board of Directors has empowered the President to manage the Company in accordance

with the principles and scope of authority set forth below:

- (a) Have the authority to manage all operations of the Company in accordance with the Company's objectives, Articles of Association, policies, regulations and rules and the instruction and resolutions of the Board of Directors and/or the resolutions of the meeting of shareholders.
- (b) Have the authority to supervise, contact, instruct, execute and sign legal contracts, agreements, instructions, notices or any correspondences to governmental agencies, state enterprises and other parties as well as the authority to perform any acts as deemed necessary and appropriate for the completion of the aforesaid undertakings.
- (c) Have the authority to sub-delegate or assign other persons to perform any specific acts on his/her behalf

whereby such sub-delegation and/or assignment shall be in accordance with the applicable powers of attorney and/ or rules, regulations, requirements or instructions given by the Company's Board of Directors and/or the Company.

The aforementioned authority of the President cannot be exercised where the President has interest or potential conflicts of interest in respect of such matters of the Company in any manner.

### 3. Remuneration of Directors and Executive Officers

#### (A) Remuneration of Directors

The 2017 Annual General Meeting of Shareholders of the Company which was held on March 17, 2017 resolved to fix the remuneration of the Board of Directors and a Board Committee as follows:

Position	Monthly Remuneration (Baht)	Attendance Fee (Baht/Meeting)	
Board of Directors			
Chairman	110,000	26,000	
Member	100,000	25,000	
Audit Committee			
Chairman	40,000	50,000	
Member	35,000	50,000	

The table below outlines the cash remuneration of directors, i.e. salary and attendance fee, for the accounting year ended December 31, 2017.

	Remuneration (Baht)  January 1, 2017 - December 31, 2017			
Name				
Name	Board of Directors	Audit Committee	Total	
1. Mr. Harald Link *	-	-	-	
2. Mrs. Preeyanart Soontornwata*	-	-	-	
3. Miss Caroline Monique Marie Christine Link	-	-	-	
4. Mr. Somkiat Sirichatchai	1,525,000	-	1,525,000	
5. Mrs. Katevalee Napasab	1,425,000	-	1,425,000	
6. Mr. Surachai Saibua <sup>*</sup>	-	-	-	
7. Mr. Pakorn Thavisin	1,425,000	930,000	2,355,000	
8. Mr. Anusorn Sangnimnuan	1,500,000	920,000	2,420,000	
9. Mrs. Anchalee Chavanich	1,525,000	920,000	2,445,000	

**Remark** \* Waiving their directors' remuneration.

#### (B) Remuneration of Executive Officers

The total remuneration paid by the Company and ABP to executive officers in the form of salary, bonus and other benefits, such as contribution to the provident fund, was Baht 138,972,425 for the accounting year ended December 31, 2017.

#### (C) Other Remuneration

The 2017 Annual General Meeting of Shareholders of the Company which was held on March 17, 2017 resolved to:

- (1) Approve the special remuneration for each of the directors in an amount of Baht 2,000,000 (after deduction of withholding tax) in consideration of the directors' dedication and assistance in our business operation, which was granted in the form of a right to subscribe for shares in the initial public offering. However, Mr. Harald Link, Miss Caroline Monique Marie Christine Link and Mr. Pakorn Thavisin waived their right to such special remuneration.
- (2) Approve the allocation of IPO shares to the directors or executive officers of the Company.

Details of the allocation of IPO shares to the directors or executive officers of the Company are as follows:

Name of Director and/or Executive Officer	No. of Shares which can be Allotted
Ms. Preeyanart Soontornwata     (as director and executive officer)	212,100
2. Mr. Somkiat Sirichatchai	121,200
3. Mrs. Katevalee Napasab	424,200
4. Mr. Surachai Saibua (as director and executive officer)	212,100
5. Mr. Anusorn Sangnimnuan	321,200
6. Mrs. Anchalee Chavanich	121,200
7. Mr. Sumkan Ratsameebanjongkit	240,900
8. Mr. Surasak Towanich	90,900
9. Mr. Chote Chusuwan	90,900
10. Mr. Somkiet Pongpiyapaiboon	290,900
11. Mr. Peradach Patanachan	90,900
12. Mr. Nopadej Karnasuta	90,900
13. Miss Siriwong Borvornboonrutai	172,200
14. Miss Porntip Tangpongbundit	269,800
Total	2,749,400

#### **Employees of the Company and Subsidiaries Operating Core Business**

#### Manpower

For the accounting year ended December 31, 2017, the total number of employees of the Company and its subsidiaries was 810 as detailed below:

Core Function	For the year ended December 31, 2017 (No. of Employees)
Administration and Secretariat Department	6
Operations Department	32
Business Strategy Department	2
Business Development Department	13
Project Development and Commercial Department	70
Finance and Accounting Department	51
Human Resources Department	18
Sales and Marketing Department	26
Legal Department	7
Internal Control Department	6
Plant Operation Department	579
Total	810

#### **Company Secretary**

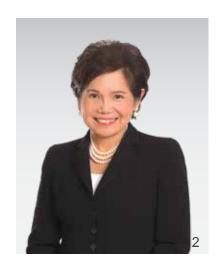
The Board of Directors, at its meeting no. 4/2016 which was held on June 8, 2016, resolved to appoint Mr. Peradach Patanachan as the Company Secretary of the Company to comply with Section 89/15 of the Securities and Exchange Act. The duties and responsibilities of the Company Secretary are as follows:

- 1. Prepare and retain the following documents of the Company:
  - (A) Director register
  - (B) Meeting notices and meeting minutes of the Board of Directors
  - (C) Meeting notices and meeting minutes of the shareholder meeting
  - (D) Annual reports
- 2. Keep reports on conflicts of interest declared by directors or executive officers.

- Make arrangements for the meetings of the Board of directors and the shareholder meeting.
- Provide advice pertaining to requirements, rules and regulations that the directors and executive officers should be aware of.
- Arrange onboarding and training programs for current and new directors and provide them with information necessary for their performance of duties.
- Undertake supervision and coordination to ensure the Company's full and proper compliance with applicable laws, regulations, requirements, the resolutions of the Board of Directors' meetings and shareholder meetings, the Corporate Governance Policy and the Business Code of Conduct.
- Perform other acts per the requirements announced by the Capital Market Supervisory Board.

### **Board of Director**



















- 1. Mr. Harald Link Chairman
- Director / President
- 2. Mrs. Preeyanart Soontornwata 3. Miss Caroline Monique Marie Christine Link Director
- 4. Mr. Pakorn Taweesin Independent Director / Chairman of the Audit Committee
- 5. Mr. Anusorn Sangnimnuan Independent Director / Member of the Audit Committee
- 6. Mrs. Anchalee Chavanich Independent Director / Member of the Audit Committee

- 7. Mr. Somkiat Sirichatchai Director
- 8. Mrs. Katevalee Napasab Independent Director
- 9. Mr. Surachai Saibua Director/ Executive Director



## Mr. Harald Link Current Position: Chairman

#### **Date of Appointment**

July 26, 1993

Age 63 years

#### **Education**

Master of Business Administration,
 University of St. Gallen Switzerland

### Training Program of Thai Institute of Directors Association

DAP 2017

#### **Other Training**

- Certificate, National Defence College (NDC 2004)
- Certificate, The Capital Market Academy (CMA 11)
- Certificate, "Energy Literacy for Sustainable Future"
   Thailand Energy Academy, TEA Class 2
- Institute of Business and Industrial Development (IBID 1)

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

#### 2 Companies

- Director, True Corporation Public Company Limited
- Director, Siam City Cement Public Company Limited

#### **Non-Listed Companies**

#### 73 Companies

- · Chairman, Carrier (Thailand) Company Limited
- Director, B.Grimm Air Conditioning Limited
- · Director, B.Grimm Air Conditioning Holding Limited
- Director, B.Grimm Alma Link Building Company Limited
- Director, B.Grimm Alma Link Building Services Company Limited

- · Director, B.Grimm Carrier (Thailand) Limited
- · Director, B.Grimm Country Club Limited
- Director, B.Grimm Dr. Gerhard Link Building Company Limited
- · Director, B.Grimm International Company Limited
- · Director, B.Grimm International Service Company Limited
- · Director, B.Grimm Joint Venture Holding Company Limited
- · Director, B.Grimm Maritime Limited
- · Director, MBM Metalworks Limited
- · Director, B.Grimm Multi Products Company Limited
- · Director, B.Grimm Trading Corporation Company Limited
- · Director, Hamon B.Grimm Company Limited
- · Director, H & Co Company Limited
- · Director, Phud Nam Limited
- Director, Anacot Company Limited
- · Director, B.Grimm Cooling Company Limited
- Director, Link Manufacturing 1999 Limited
- Director, Modern Engineering and Consultant Company Limited
- · Director, Newco Marketing Limited
- · Director, Panrail (Thailand) Company Limited
- Director, PCM Transport and Industrial Supplies Limited
- · Director, Ueang Naang Limited
- Director, Ueang Saai Limited
- · Director, Grimm Installation Services Company Limited
- · Director, B.Grimm Healthcare Company Limited
- · Director, Biomonde (Thailand) Company Limited
- · Director, Merck Limited
- · Director, Chubb (Thailand) Company Limited
- · Director, Siemens Company Limited
- · Director, Pimalai Resort & Spa Company Limited

- Director, Metalwork Services Company Limited
- Director, B.Grimm Energy Investments Pte.
- Director, B.Grimm Power (Singapore) Pte. Limited
- Director, B.Grimm Industrial Investments Cor-poration
- · Director, B.Grimm Investments Pte. Limited
- Director in our subsidiaries and associates (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

1993 - Present Chairman, B.Grimm Power Public

Company Limited

1993 - Present Chairman, Carrier (Thailand) Company

Limited

Please refer to Current Positions in Other Entities

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 633,399,700 share (24.29704%)

Spouse - share
Dependent children - share
Total 633,399,700 share

### Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries

• Father of Miss Caroline Monique Marie Christine Link



#### Mrs. Preeyanart Soontornwata

**Current Position:** 

Director / President /

Chairman of the Risk Management Committee / Chairman of the Management Committee

#### **Date of Appointment**

August 3, 1996

#### Age 60 years

#### **Education**

- Master's Degree in Business Administration, Faculty of Commerce and Accountancy, Chulalongkorn University
- Bachelor's Degree in Banking and Finance, Faculty of Commerce and Accountancy, Chulalongkorn University

### Training Program of Thai Institute of Directors Association

DAP 2016

#### **Other Training**

- Course, Advanced Master of Management Program (AMM1)
- Course, Intermediate Certificate Courses Good Governance for Medical Executives Class 6
- Certificate, "The Rule of Law and Democracy" Class 3
- Certificate, The Program of Senior Executives on Justice Administration Class 18
- Certificate, "Energy Literacy for Sustainable Future",
   Thailand Energy Academy, TEA Class 3
- Certificate, The Fourth Training Course on Administrative Justice for Executives
- Certificate, Top Executive Program in Commerce and Trade (TEPCoT5)
- · Certificate, The Capital Market Academy (CMA9)
- Degree, National Defence College (NDC 2007)
- Advance Management Harvard School Business, Boston, USA
- · Strategic Finance IMD Lausanne- Switzerland

- International Financial Reporting Conference Conducted by ROCHE Group in Singapore
- Advance Management Course conducted by Thammasart University

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 81 Companies

- · Director, B.Grimm & Co Limited
- · Director, B.Grimm Air Conditioning Limited
- Director, B.Grimm Air Conditioning Holding Limited
- · Director, B.Grimm Alma Link Building Company Limited
- Director, B.Grimm Alma Link Building Services Company Limited
- Director, B.Grimm Dr. Gerhard Link Building Company Limited
- · Director, B.Grimm International Company Limited
- Director, B.Grimm International Service Company Limited
- Director, B.Grimm Joint Venture Holding Company Limited
- · Director, B.Grimm Maritime Limited
- · Director, MBM Metalworks Limited
- · Director, B.Grimm Multi Products Company Limited
- · Director, B.Grimm Trading Corporation Company Limited
- Director, British Fashion Company Limited
- Director, Link Manufacturing 1999 Limited
- Director, M & E Installation Company Limited
- · Director, Newco Marketing Limited
- Director, PCM Transport and Industrial Supplies Limited
- Director, Ueang Naang Limited
- · Director, Ueang Saai Limited
- · Director, Anacot Company Limited
- · Director, Phud Nam Limited

- Director, B.Grimm Healthcare Company Limited
- · Director, Biomonde (Thailand) Company Limited
- Director, B.Grimm Power (Singapore) Pte. Limited
- Director, B.Grimm Investments Pte. Limited
- · Director, Grimm Installation Services Company Limited
- Director in our subsidiaries and associates (Please refer to 56-1 for additional details)

#### Work Experience in the Past 5 Years

1996 - Present President, B.Grimm Power Public

Company Limited

Please refer to Current Positions in Other Entities

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 6,462,150 share (0.247%)

Spouse - share

Dependent children - share

Total 6,462,150 share

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



### Miss Caroline Monique Marie Christine Link

Current Position : Director

#### **Date of Appointment**

January 1, 2009

Age 35 years

#### **Education**

 Bachelor's Degree in Finance, European Business School Madrid (EPS)

### Training Program of Thai Institute of Directors Association

• DAP 2016

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 27 Companies

- · Director, B.Grimm Power (Singapore) Pte. Limited
- · Director, B.Grimm Investments Pte. Limited
- Director, Anacot Company Limited
- Director, B.Grimm Dr. Gerhard Link Building Company Limited
- · Director, B.Grimm Alma Link Building Company Limited
- Director, B.Grimm Alma Link Building Services
   Company Limited
- · Director, B.Grimm International Service Company Limited
- Director, B.Grimm Joint Venture Holding Company Limited
- · Director, B.Grimm Maritime Limited
- Director, B.Grimm & Co Limited

- · Director, B.Grimm Cooling Company Limited
- · Director, Carrier (Thailand) Limited
- · Director, Merck Limited
- · Director, Omroom Company Limited
- Director in our subsidiaries and associates (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

2009 - Present Director, B.Grimm Power Public Company Limited

Please refer to Current Positions in Other Entities

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 28,350,000 share (1.08749%)

Spouse - share
Dependent children - share
Total 28,350,000 share

### Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries

Daughter of Mr. Harald Link



#### Mr. Pakorn Thavisin

**Current Position:** 

**Chairman of the Audit Committee / Independent Director** 

#### **Date of Appointment**

June 8, 2016

Age 78 years

#### **Education**

- Diploma, The Chartered Institute of Bankers, London
- Degree, National Defence College, The National Defence Course Class 311

### Training Program of Thai Institute of Directors Association

- DCP 2000
- RCP 2007

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

#### 1 company

Chairman of the Audit Committee / Independent Director,
 Royal Orchid Hotel (Thailand) Public Company Limited

#### **Non-Listed Companies**

#### 5 companies

- · Chairman, Sakornkamol Company Limited
- · Chairman, Kasukon Company Limited
- Chairman, Colgate-Palmolive (Thailand)
   Company Limited
- · Director, TD Consulting Company Limited
- · Director, Daido Sittipol Company Limited

#### **Work Experience in the Past 5 Years**

2016 - Present Chairman of the Audit Committee /
Independent Director, B.Grimm Power

Public Company Limited

2002 - 2014 Chairman and Independent Director,

L.P.N. Development Public Company

Limited

2010 - Present Chairman, Sakornkamol Company Limited

2010 - Present Chairman, Kasukon Company Limited

2002 - Present Chairman, Colgate-Palmolive (Thailand)

Company Limited

1999 - Present Chairman of the Audit Committee /

Independent Director,

Royal Orchid Hotel (Thailand) Public

Company Limited

Present Director, TD Consulting Company

Limited

Present Director, Daido Sittipol Company Limited

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent -None-

Spouse - share
Dependent - share

Total -None-

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



## Mrs. Katevalee Napasab Current Position: Independent Director

#### **Date of Appointment**

June 8, 2016

Age 62 years

#### Education

- Master of Business Administration (MBA),
   Fairleigh Dickinson University
- · Bachelor of Laws, Thammasat University

#### **Training Program of Thai Institute of**

#### **Directors Association**

DCP 2003

#### **Other Training**

- Certificate, National Defence College, Class 17 (NDA 2004)
- Certificate, The Capital Market Academy (CMA 14)
- Bhumipalung Phandin for National Leader, Class 1, Chulalongkorn University
- Thammasat Leadership Program, Class 2, Thammsat University
- Certificate, "Energy Literacy for Sustainable Future",
   Thailand Energy Academy, TEA Class 5

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 26 companies

- Chairman / Chief Executive Officer,
   S.Napa (Thailand) Company Limited
- · Chairman, Global Utilities Services Company Limited
- Chairman, GEM Environmental Management Company
  Limited
- · Chairman, True ICONSIAM Company Limited
- Director, S.Napa Property Company Limited
- Director / Member of the Executive Committee, Siam Piwat Company Limited
- Director, Siam Paragon Development Company Limited
- Director, Siam Paragon Retail Company Limited
- · Director, ICONSIAM Company Limited
- Director, The ICONSIAM Residence Corporation Limited

- Director, The ICONSIAM Superlux Residence Corporation Limited
- · Director, Gusco Water Company Limited
- · Director, KSPKH Holding Company Limited
- Director, The ICONSIAM Chaopraya River Holdings Company Limited
- Director, Royal Paragon Enterprise Company Limited
- Director, Siam Piwat Holding Company Limited
- · Director, SNC (2015) Company Limited
- · Director, SNV Company Limited
- Phufa Shop Operation Committee
- Director, C&K Holding Company Limited
- Director, True ICONSIAM Company Limited
- · Director, TP Land (2017) Company Limited
- Director, Siam River Holdings Company Limited
  Director, HH Land Development Company Limited
- Director, MPP Holding Company Limited
- Director, SNG Solutions Company Limited
- Director, Pra Artid Land Company Limited

#### **Work Experience in the Past 5 Years**

2016 - Present Independent Director, B.Grimm Power Public

Company Limited

Present Chairman / Chief Executive Officer, S.Napa

(Thailand) Company Limited

Present Chairman, Global Utilities Services Company

Limited

Present Chairman, GEM Environmental Management

Company Limited

Please refer to Current Positions in Other Entities

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 424,200 share (0.01627 %)

Spouse - share Dependent children - share Total 424,200 share

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



#### Mr. Surachai Saibua

**Current Position:** 

Director / Member of the Risk Management Committee / Member of the Management Committee

#### **Date of Appointment**

January 1, 2013

Age 67 years

#### **Education**

- Ph.D, in Electrical Engineering, University of Taxas, Austin
- Master of Engineering (Electrical), University of Missouri, Columbia
- Bachelor of Engineering (Electrical),
   Chulalongkorn University

### Training Program of Thai Institute of Directors Association

DAP 2017

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 48 companies

• Director in our subsidiaries and associates (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

2013 - Present Director, B.Grimm Power Public

Company Limited

2007 - 2013 Senior Executive Vice President,

Amata B.Grimm Power Limited

Please refer to Current Positions in Other Entities

#### **Shareholdings (as at December 31,2017)**

#### (Including Spouse and Dependent Children)

Incumbent 212,150 shares (0.0081%)

Spouse - share
Dependent children - share
Total 212,150 share

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



## Mr. Anusorn Sangnimnuan Current Position: Member of the Audit Committee /

Independent Director

#### **Date of Appointment**

June 8, 2016

Age 63 years

#### **Education**

- Ph.D. (Chemical Engineering), Monash University,
- M.Eng. (Environmental Engineering), Asian Institute of Technology
- B.Sc. (Chemical Engineering), Chulalongkorn University

### Training Program of Thai Institute of Directors Association

- DCP 2005
- DAP 2005

#### **Other Training**

- FN 2005
- DCPRE 2008

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

#### 3 companies

- · Director, IRPC Public Company Limited
- Director, Pruksa Holding Public Company Limited
- Director, Pruksa Real Estate Public Company Limited

#### **Non-Listed Companies**

#### 1 company

· Commissioner, The Civil Aviation Authority of Thailand

#### **Work Experience in the Past 5 Years**

2016 - Present	Independent Director / Member of the Audit Committee, B.Grimm Power Public Company Limited
2016 - Present	Director, IRPC Public Company Limited
2016 - Present	Director, Pruksa Holding Public Company Limited
2014 - Present	Director, Pruksa Real Estate Public Company Limited
2014 - 2015	Director, Loxley Public Company Limited
2014 - 2015	Chairman, Hydrotek Public Company Limited
2013 - 2015	Senior Consultant, Bangchak Petroleum Public Company Limited
2005 - 2012	President, Bangchak Petroleum Public Company Limited

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 321,200 share (0.0123%)

Spouse - share

Dependent children - share

Total 321,200 share

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



# Mrs. Anchalee Chavanich Current Position: Member of the Audit Committee / Independent Director

Date of Appointment	Present	Chairman of the Audit Committee/
June 8, 2016		Independent Director, Inoue Rubber
Age 67 years	2016 - Present	(Thailand) Public Company Limited Honorary Advisor, Eastern Economic
Education		Corridor Office of Thailand (EEC)
<ul> <li>Master of Science (Engineering Management), University of Missouri-Rolla, USA</li> </ul>	2016 - Present	Director, Hemaraj Land and Development Public Company Limited
Bachelor of Engineering (Industrial), Chulalongkorn	2011 - Present	President, Thai Industrial Estate and Strategic Partner Association
University	2000 - Present	Chairman, Coral and Coastal Conservation
Training Program of Thai Institute of		Foundation
Directors Association	2016 - 2017	Member, Economic Reform Steering
• DCP 2004	2016 - 2017	Commission (Industrial and Service) Advisor, National Reform Steering
• ACP 2004	2010 - 2017	Commission (Energy)
	2015 - 2016	Member, National Reform Council
Other Training	2013 - 2014	Chairman, Electricity Generating
• RCM 2006		Authority of Thailand
• FN 2004	2011 - 2014	Director, Krungthep Land Public Company Limited
<b>Current Positions in Other Entities</b>	2011 - 2013	Chairman, Siam Solar Company Limited
SET-Listed Companies	2011 - 2013	Director, Engineering Institute of Thailand
1 company		under H.M. The King's Patronage
Chairman of the Audit Committee/ Independent Director,	2000 - 2015	Chairman, Thai Industrial Estate
Inoue Rubber (Thailand) Public Company Limited		Foundation

#### **Non-Listed Companies**

#### 3 companies

•	2016 - Present	Director, Hemaraj Land And
		Development Public Company Limited
•	2011 - Present	President, Thai Industrial Estate and
		Strategic Partner Association
•	2000 - Present	Chairman, Coral and Coastal
		Conservation Foundation

#### Work Experience in the Past 5 Years

2016 - Present Independent Director / Member of the Audit Committee, B.Grimm Power Public Company Limited

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 121,200 share (0.00464 %)
Spouse - share
Dependent children - share
Total 121,200 share

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



### Mr. Somkiat Sirichatchai Current Position:

. Director

#### **Date of Appointment**

June 8, 2016

Age 53 years

#### **Education**

- Master of Business Administration (Finance), University of Pennsylvania (Wharton), USA
- Bachelor of Engineering (Honours), Chulalongkorn University

### Training Program of Thai Institute of Directors Association

- ITG 2017
- RCP 2016
- DCP 2013
- DAP 2010
- RCC 2010

#### **Other Training**

- Advanced Management Program, Harvard Business School, USA, 2015
- · Certificated, Capital Market Academy, 2014
- Certificated, National Defence College, (NDC 2010)
- High Performance Leadership, IMD, Lausanne Switzerland, 2008
- Advanced HR Executive, Michigan Ross School of Business, USA, 2007

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

#### 2 companies

- Director, Thai Airways Public Company Limited
- Director / Member of the Executive Committee / Chairman of the Risk Management Committee, Muang Thai Insurance Public Company Limited

#### **Non-Listed Companies**

#### 8 companies

- Director / Chairman of the Risk Management Committee / Chairman of the CEO Advisory Board, Muang Thai Life Assurance Public Company Limited
- · Director, Muang Thai Group Holding Company Limited
- Member of Manpower Preparation for Government Sector Subcommittee, Office of the Civil Service Commission
- Advisor to the Executive Committee, Queen Savang Vadhana Memorial Hospital (Si Racha), Thai Red Cross Society
- Advisor to the Executive Committee, King Chulalongkorn Memorial Hospital, Thai Red Cross Society
- Chief of the Advisory Panel of the Human Resource Management Committee, The Thai Red Cross Society
- Risk Management Sub Committee, The Stock Exchange of Thailand
- Member of the Workforce Management in Public Sector Subcommittee, Office of the Civil Service Commission

#### **Work Experience in the Past 5 Years**

2016 - Present	Director, B.Grimm Power Public Company Limited
2013 - 2015	Director and Chairman of the Risk Management Committee, Kasikornbank Public Company Limited
2011 - 2012	Chairman, Kasikorn Asset Management Company Limited
2011 - 2012	Chairman, Kasikorn Research Center Company Limited
2010 - 2013	Senior Executive Vice President, Kasikornbank Public Company Limited

### Shareholdings (as at December 31,2017) (Including Spouse and Dependent Children)

Incumbent 121,200 share (0.00464%)

Spouse - share
Dependent children - share
Total 121,200 share

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries

### **Management Team**



Mrs. Preeyanart Soontornwata
Director /
President



Mr. Surachai Saibua Director/ Executive Director



Mr. Peradach Patanachan Executive Vice President, Legal



Mr. Somkiet Pongpiyapaiboon
Executive Vice President,
Business Development and Commercial



Mr. Surasak Towanich
Executive Vice President,
Sales and Marketing



Mr. Sumkan Ratsameebanjongkit Senior Executive Vice President / Chief Operation Officer

**Mr. Chote Chusuwan**Executive Vice President,
Operation

Mr. Nopadej Karnasuta
Executive Vice President /
Chief Financial Officer



**Miss Siriwong Borvornboonrutai**Deputy Chief Financial Officer



Miss Pornthip Tungpongbandit
First Senior Vice President (Accounting)



### Mr. Sumkan Ratsameebanjongkit Current Position:

Member of the Risk Management Committee /
Senior Executive Vice President / Chief Operation Officer /
Member of the Management Committee

#### **Date of Appointment**

March 1, 2013

Age 67 years

#### **Education**

- Bachelor of Engineering (Mechanical), Kasetsart University
- Naval War College Class 37, Naval War College

### Training Program of Thai Institute of Directors Association

• DAP 2017

#### **Other Training**

· Role of Company Secretary, 2009

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 37 companies

 Director in our subsidiaries and associates (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

2013 - Present Senior Executive Vice President /

Chief Operation Of-ficer, B.Grimm Power

**Public Company Limited** 

Please refer to Current Positions in Other Entities

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 240,950 shares (0.00924%)

Spouse - shares
Dependent - shares
Total 240,950 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries -None-



#### Mr. Surasak Towanich

#### **Current Position:**

Member of the Risk Management Committee / Executive Vice President, Sales and Marketing, Electricity Transmission and Distribution / Member of the Management Committee

#### **Date of Appointment**

January 1, 1996

Age 56 years

#### **Education**

 Bachelor of Engineering (Electrical), King's Mongkut Institute of Technology Thonburi

### Training Program of Thai Institute of Directors Association

• DCP 2015

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 8 companies

Director in our subsidiaries and associates
 (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

Present Executive Vice President, Sales and

Marketing, Elec-tricity Transmission

and Distribution

1996 - 2015 Executive Vice President, Amata

**B.Grimm Power Limited** 

Please refer to Current Positions in Other Entities

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 90,950 shares (0.00348%)

Spouse - shares
Dependent - shares
Total 90,950 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



### Mr. Chote Chusuwan Current Position:

Member of the Risk Management Committee / Executive
Vice President, Operation /
Member of the Management Committee

#### **Date of Appointment**

February 17, 2014

Age 54 years

#### **Education**

- Master of Business Administration (Finance and Banking),
   Sripatum University
- Bachelor of Engineering (Electrical), Prince of Songkla University

### Training Program of Thai Institute of Directors Association

• DCP 2015

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

**SET-Listed Companies** 

-None-

#### **Non-Listed Companies**

#### 33 companies

Director in our subsidiaries and associates
 (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

Present Executive Vice President, Operation,

B.Grimm Power Public Company Limited

1996 - 2015 Executive Vice President, Amata B.Grimm

Power Limited

Please refer to Current Positions in Other Entities

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 90,950 shares (0.00348%)

Spouse - shares
Dependent - shares
Total 90,950 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries -None-

fer to Current Positions in Other E



#### Mr. Somkiet Pongpiyapaiboon

**Current Position:** 

Member of the Risk Management Committee / Executive Vice President, Business Development and Commercial / Member of the Management Committee

#### **Date of Appointment**

February 18, 2014

Age 55 years

#### **Education**

 Bachelor of Engineering (Electrical), Chulalongkorn University

### Training Program of Thai Institute of Directors Association

-None-

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

#### **SET-Listed Companies**

-None-

#### **Non-Listed Companies**

#### 11 companies

- Executive Vice President, Amata B.Grimm Power Limited
- Director in our subsidiaries and associates (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

Present: Executive Vice President, Business

Development and Commercial, B.Grimm Power Public Company

Limited

2010 - Present Executive Vice President, Amata

**B.Grimm Power Limited** 

Please refer to Current Positions in Other Entities

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 290,950 shares (0.01116%)

Spouse - shares
Dependent - shares
Total 290,950 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



#### Mr. Peradach Patanachan

**Current Position:** 

Member of the Risk Management Committee /
Executive Vice President, Legal / Company Secretary /
Member of the Management Committee

#### **Date of Appointment**

March 1, 2007

Age 45 years

#### **Education**

- · Master of Laws, Chulalongkorn University
- · Bachelor of Laws, Thammasat University

### Training Program of Thai Institute of Directors Association

• DCP 2015

#### **Other Training**

- Thammasat Leadership Program, Class 5 (Year 2015),
   Thammsat University
- Certificate, "Energy Literacy for Sustainable Future", Thailand Energy Academy, TEA Class 11

#### **Current Positions in Other Entities**

**SET-Listed Companies** 

-None-

#### **Non-Listed Companies**

#### 30 companies

Director in our subsidiaries and associates
 (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

2007 - Present Executive Vice President, Legal /

Company Secre-tary, B.Grimm Power

**Public Company Limited** 

Please refer to Current Positions in Other Entities

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 90,950 shares (0.00348%)

Spouse - shares
Dependent - shares
Total 90,950 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



### Mr. Nopadej Karnasuta

#### **Current Position:**

Member of the Risk Management Committee /
Executive Vice President / Chief Financial Officer /
Member of the Management Committee

#### **Date of Appointment**

March 30, 2015

Age 42 years

#### **Education**

- Master of Arts in Economics, University of Texas, Arlington, USA
- Bachelor of Arts in Economics, University of Maryland at College Park, USA

### Training Program of Thai Institute of Directors Association

• DCP 2014

#### **Other Training**

- Thai Intelligent Investors Program (TIIP) Class 4,
   Thai Investors Association
- Institute of Business and Industrial Development (IBID 2)
- Strategic CFO in Capital Markets, Class 3,
   Thailand Securities Institute, Stock Exchange of Thailand
- Certificate, The Capital Market Academy (CMA25)

#### **Current Positions in Other Entities**

SET-Listed Companies

-None-

#### **Non-Listed Companies**

#### 20 companies

Director in our subsidiaries and associates
 (Please refer to 56-1 for additional details)

#### **Work Experience in the Past 5 Years**

2013 - Present	Executive Vice President / Chief Financial
	Officer, B.Grimm Power Public Company
	Limited
2002 - 2013	First Senior Vice President, Multi-Business
	Division, KasikornBank Public Company
	Limited
2010 - 2002	Treasury and Project Finance Specialist,
	Electricity Generating Public Company
	Limited
1999 - 2010	Business Promotion Department, Industrial
	Finance Corporation of Thailand

Please refer to Current Positions in Other Entities

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 90,950 shares (0.00348%)

Spouse - shares
Dependent - shares
Total 90,950 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries -None-



## Miss Siriwong Borvornboonrutai Current Position: Deputy Chief Financial Officer

#### **Date of Appointment**

April 24, 2017

Age 42 years

#### **Education**

- Master of Science in Finance (Academic Excellent),
   University of Illinois at Urbana-Champaign, USA
- Master of Accounting Science, University of Illinois at Urbana-Champaign, USA
- Bachelor of Business Administration in Accounting (Honors), Thammasat Business School (International Program), Thammasat University

### Training Program of Thai Institute of Directors Association

-None-

#### **Other Training**

- Chartered Financial Analyst (CFA)
- Certified Public Accountant (CPA)
- Strategic CFO in Capital Markets, Class 5,
   Thailand Securities Institute, Stock Exchange of Thailand
- Thai Intelligent Investors Program (TIIP) Class 5,
   Thai Investors Association

#### **Current Positions in Other Entities**

**SET-Listed Companies** 

-None-

**Non-Listed Companies** 

-None-

#### **Work Experience in the Past 5 Years**

Present	Deputy Chief Financial Officer, B.Grimm
	Power Public Company Limited
	Deputy Chief Financial Officer, Amata
	B.Grimm Power Public Company Limited
2013 - 2016	Senior Assistant Vice President,
	Finance, Amata B.Grimm Power Limited
2011 - 2013	First Senior Vice President, Credit
	Product Origi-nation Department,
	The Siam Commercial Public Company
	Limited

### Holding of the Company's Securities (Including Spouse and Dependent Children)

Incumbent 172,200 shares (0.00660%) Spouse - shares

Dependent - shares Total 172,200 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



### **Miss Pornthip Tungpongbandit**

**Current Position:** 

First Senior Vice President (Accounting)

#### **Date of Appointment**

January 1, 2014

Age 53 years

#### **Education**

- · Master of Accounting, Thammasat University
- Bachelor of Accounting, Thammasat University

### Training Program of Thai Institute of Directors Association

-None-

#### **Other Training**

-None-

#### **Current Positions in Other Entities**

**SET-Listed Companies** 

-None-

**Non-Listed Companies** 

-None-

#### **Work Experience in the Past 5 Years**

Present First Senior Vice President

(Accounting) B.Grimm Power Public

Company Limited

2537 - 2016 Senior Vice President, Amata

B.Grimm Power Limited

#### **Holding of the Company's Securities**

#### (Including Spouse and Dependent Children)

Incumbent 269,800 shares (0.01035%)

Spouse - shares
Dependent - shares
Total 269,800 shares

Family Relationship with Other Directors, Executives or Major Shareholders of the Company or Subsidiaries



### Corporate Governance

#### **Corporate Governance Policy**

The Board of Directors treats our compliance with the corporate governance principles as a priority and recognizes the roles, duties and responsibilities of the Board of Directors and the management team in this respect to strengthen our competitive advantages and to build up the trust of shareholders, investors and stakeholders through our efficient and transparent management. To this end, we have established the Corporate Governance Policy based on the Stock Exchange of Thailand's Code of Corporate Governance for Listed Companies ("CG Code"). In addition, the Board of Directors has deliberated on and review the Company's adoption of the CG Code within the extent appropriate to the Company's business context. The Company's corporate governance practices are as enumerated below.

#### **Rights of Shareholders**

Shareholders have the rights as the owners of the Company to attend the meetings of shareholders to determine the business direction of the Company, through the Board of Directors elected by the shareholders, or to make decisions on issues that materially affect the Company. The meeting of shareholders is a major forum for shareholders to express their opinions, pose questions and make decisions on key issues. Shareholders are entitled to attend the meeting of shareholders, be given sufficient time for deliberation, and be informed of the voting results. Practices regarding the basic rights of shareholders are as outlined below:

(1) The Company shall not act in such a way that restricts access to its information. Shareholders shall have the right to, among others, receive adequate and complete information about the procedures and agenda of the meetings of shareholders and supporting information at least seven days prior to such meetings in order that they are allowed sufficient time for reading. The Company shall also make available multiple communication channels for shareholders to make inquiries regarding the meetings of shareholders.

- (2) The Board of Directors shall facilitate the participation of shareholders in the meeting. The size of the meeting venue should be adequate to accommodate all participating shareholders and the meeting venue should be in Bangkok or nearby provinces and conveniently accessible. The venue must have facilities for disabled persons, reliable security system and well-prepared to allow for effective and timely emergency responses.
- (3) The Company shall not act in such a way that restricts the participation in meetings of shareholders. Shareholders are entitled to attend the meetings of shareholders throughout the meeting sessions, to raise questions and inquiries, to share their opinions with the meetings on the matters being discussed in accordance with the meeting agenda, and to exercise their voting rights.
- (4) The chairman of the meeting should ensure appropriate time allocation, encourage shareholders to share their opinions and raise questions pertaining to the Company during the meeting, and provide them with opportunities to submit their questions in advance of the meeting date. Criteria applicable to the submission of questions prior to the meeting date shall be clearly defined, sent to shareholders together with the notice of the shareholder meeting, and published on the Company's website in advance.
- (5) Shareholders have the rights to appoint proxies to attend and vote at the meetings on their behalf and shall be provided with documents and advice relating to the proxy appointment. Proxies who are legally appointed and present their proxy forms to the competent directors have the same rights to attend and vote as shareholder in all respects. Alternatively, shareholders may appoint an independent director as their proxy. Shareholders have the right to receive complete information about the profiles and professional background of each independent directors to support their consideration.

- (6) Shareholders have the right to vote separately on each item on the meeting agenda. Voting procedures and equipments for the election of directors shall contribute to the transparency, convenience, rapidity and efficiency of voting and the timely announcement of the voting results. Shareholders have the right to know the voting results in a timely manner.
- (7) All directors, members of Board committees and the Company Secretary must attend every shareholder meeting, unless they have other important engagements, to respond to questions and acknowledge opinions of shareholders. All senior executives should attend shareholder meetings to respond to questions from shareholders as well.
- (8) The voting results of each item on the agenda of the annual general meetings of shareholders and extraordinary general meetings of shareholders shall be publicly disclosed on the Company's website on the business day that immediately follows such meeting.

The Board of Directors shall report changes in their holding of the Company's securities in accordance with the rules and regulations stipulated by the Securities and Exchange Commission and such reports shall also be presented to the meetings of the Board of Directors for acknowledgment.

#### The Equitable Treatment of Shareholders

The Company shall treat shareholders equitably regardless of gender, age, race, nationality, religion, belief, political view, or disability condition. If a shareholder cannot attend a shareholder meeting due to any reasons whatsoever, the shareholder shall be entitled to appoint a proxy to attend a shareholder meeting. Guidelines are as follows:

- (1) The Board of Directors shall protect shareholders' rights and treat every shareholder equitably. Every shareholder has the rights to receive information or documents in Thai or, for foreign shareholders, in English. Any documents provided for foreign shareholders shall be translated into English.
- (2) Voting at meetings shall be on the one-share-one-vote basis.

The Board of Directors shall encourage minority shareholders to exercise their rights with respect to the proposal of additional items for the meeting agenda and the nomination of candidates for directorship whereby such proposal and nomination shall be in accordance with the applicable laws and the Company's regulations. The Office of the Managing Director and Company Secretary shall be ready to accept proposals and provide support and advice to shareholders. Contact information is as detailed below:

#### **B.Grimm Power Public Company Limited**

5 Krungthepkreetha Road, Huamark, Bangkapi, Bangkok 10240

(E-mail Address : ir@bgrimmpower.com or Fax: 02-3794259)

#### Role of Stakeholders

The Company's business operation generally involves several constituents, i.e. shareholders, directors, management, employees, creditors, customers, business partners, competitors, communities, the country and the global society. The Company is cognizant of the importance of and consideration for all stakeholders. In operating its business, the Company gives heed to the rights of all stakeholders based on the following guidelines to achieve mutual and sustainable benefits of all parties:

(1) The Company and its subsidiaries classify its stakeholders into: creditors, customers, business partners, companies owned by the Company or its subsidiaries, personnel of the Company and its subsidiaries, the community and the society as a whole. The Company has made available adequate channels for communicating with each group of its stakeholders as detailed below:

Head Office: :	Dr. Gerhard Link Building,
	5 Krungthepkreetha
	Road, Huamark, Bangkapi,
	Bangkok 10240
Telephone:	+662 710 3400
Fax:	+662 379 4245
Website:	www.bgrimmpower.com

- (2) The Company and its subsidiaries feel an obligation towards our customers to continuously develop our products and services, make sure that our pricing is appropriate to circumstances, refrain from taking advantage of customers, and comply with the consumer protection laws and the anti-monopoly laws. As for the treatment of business partners, the Company and its subsidiaries deal businesses honestly and fairly while protecting their interests.
- (3) The Company and its subsidiaries give attention to the welfare of their personnel, making sure that the terms of employments are fair and compensation and benefits are commensurate with the competencies of employees of the Company and its subsidiaries in order to strengthen employee motivation. Provident funds are also offered to employees for their long-term benefits. Training and educational opportunities are also provided with a view to developing the potentials of our personnel. We ensure positive work environment, a high standard of safety, effective work discipline, good employee care, and remedial plans for employees who are obliged to stop working due to any reasons whatsoever.
- (4) The Company shall have a corporate social responsibility team in charge of providing assistance and support and contribute to the community and the society as a whole. The Company has in place an environmental protection and safety plan that addresses, among others, the environmental impact that may be caused by the Company's operation, effective remedial actions in response of accidents, and long-term solutions.

The Board of Directors has promoted the awareness and concerns about stakeholders on a continuous and regular basis.

#### **Disclosure and Transparency**

The Company has attached importance to the disclosure of material information in a complete, accurate and timely manner without distortion to reveal the Company's actual business and financial status in support of stakeholders' informed decision-making. Information disclosure indicates the transparency of business which is key to building investor confidence in the business integrity and is a mechanism that facilitates inspection. Therefore, the Company attaches great importance to information disclosures and always seeks to expand its disclosure channels.

- (1) The Board of Directors has disclosed financial and non-financial information in an adequate, reliable and timely manner in order that the shareholders and stakeholders of the Company equally receive information in accordance with applicable legal and regulatory requirements and the Company's regulations. In addition, the Company has published and regularly updated information on its website in a timely manner to ensure that the contents are always complete and up-to-date and that shareholders can always access information to support their consideration and can conveniently, quickly and effectively reach the entities in charge of information disclosure.
- (2) The Company has established a corporate communication team and an investor relations team to promote and disseminate information and news about the operations and performance of the Company and its subsidiaries that are useful for the shareholders, employees, stakeholders and the public in an efficient and regular manner to correct misunderstanding. In addition, the investor relations team shall be responsible for coordinating with institutional investors, creditors, securities analysts and shareholders of the Company, providing them with information about performance, operations and investments of the Company and its subsidiaries through channels that are convenient, timely and easily accessible.
- (3) The Board of Directors has ensured that the balance sheet, the income statement, the auditor's report and the annual report of the Board of Directors are prepared and proposed to the annual general meeting of shareholders for approval.

- (4) For the annual report, the Board of Directors has prepared and included a simplified summary of the status and outlook of the Company and its subsidiaries, the report on the Board of Directors' responsibility for financial report that shall accompany the auditor's report, the management reports essential for analyses in addition to financial reports and audit reports, and the report on meeting attendance of the Board of Directors and/or Board committees and the total number of meetings held each year.
- (5) The Company has disclosed the policy on director remuneration and senior executive remuneration that reflects the duties and responsibilities of each individual including the forms and types of such remuneration.

#### **Board Responsibility**

The Board of Directors is composed of individuals who possess knowledge, expertise and experience that are greatly beneficial to the Company and can fully dedicate their efforts and time to the fulfilment of their functional responsibilities. The Board of Directors is appointed by the shareholders to oversee the Company's business operation. The Board of Directors appoints: the management team to be in charge of business operation; the Board committees in charge of responsibilities as assigned; and the Company's auditor; and the Company Secretary in charge of meetings and legal compliance. The roles, duties and responsibilities of the Board of Directors and the management team are clearly segregated.

#### (1) Composition of the Board of Directors

Pursuant to the Company's Articles of Association, the Board of Directors shall be comprised of at least five members but not more than 12 members. The directorship term shall be three years. At least one-third of the total directors shall be independent directors but the number of independent directors shall not be less than three. Directors' qualifications must meet applicable eligibility criteria and directors shall not possess prohibited characteristics specified by laws. The Board of Directors should represent the diversity of knowledge, expertise and experience that are beneficial to the Company.

#### (2) Independence of the Board of Directors

Directors shall consider, render opinions on and vote on matters that are within the authority of the Board of Directors. If decision-making of the Board of Directors is influenced by their professional engagement or family or personal interest, their decisions may be biased in favor of themselves, their close relationships or personal interest. Independence is critical to protect the interest of the shareholders and the Company. Therefore, directors lacking independence should not be delegated to make decisions.

- To ensure that the Board of Directors, led by the Chairman of the Board of Directors, possesses leadership and is able to effectively and efficiently govern the performance of the management, the roles of the Chairman of the Board of Directors and the President have been clearly segregated.
- Independent directors have adequate access to financial information and business-related information required for their ability to make independent judgment and protect the interest of stakeholders. Independent directors have regularly attended meetings and held an independent director meeting at least once per year. Independent directors also prepare a report certifying their independence upon their appointment and annually thereafter as part of the Company's annual report.
- Independent directors possess independence as defined in the notifications of the Capital Market Supervisory Board, the Securities and Exchange Commission and the Stock Exchange of Thailand concerning the qualifications and the scope of work of independent directors. Independent directors are able to protect the interest of all shareholders equitably, prevent conflicts of interest between the Company and major shareholders or other companies having the same management/groups of major shareholders as the Company, and render independent opinions at meetings.

#### (3) Roles and Duties of the Board of Directors

The roles, duties and responsibilities of the Board of Directors are to oversee the operation of the Company to ensure strict compliance with laws, objectives, articles of association, the resolutions of the shareholder meetings, the Corporate Governance Code and the best practices for directors of listed companies stipulated by the Stock Exchange of Thailand.

#### (4) Appointment of Board Committees

To ensure that material matters are thoroughly and efficiently considered and reviewed, the Board of Directors has appointed three Board committees, namely the Audit Committee, the Management Committee and the Risk Management Committee. In addition, the Board of Directors have discussed the appointment of additional Board committees, namely the Corporate Social Responsibility Committee and the Nomination and Remuneration Committee.

#### (5) Meetings of the Board of Directors and Supporting Documents

For the meetings of the Board of Directors, the Company Secretary is responsible for preparing meeting documents and meeting venue, and coordinating relevant arrangements. Each director is informed of meeting dates, meeting agenda and supporting information well in advance of the meeting in order that directors have proper time for studying the documents.

- The Board of Directors has fully devoted their time and efforts to the Company's business and regularly attended the Board meetings which are held at least once per month and when necessary. The Company Secretary is responsible for coordinating and making relevant arrangements, preparing meeting documents, and submitting notices of the meetings. Every meeting of the Board of Directors is attended by at least one-half of the total directors and thus the meeting quorum requirement is always met.
- Directors who could not attend any meetings due to necessities have informed the Chairman of the Board of their absence with apologies in writing.
- Meeting agendas have been approved by the Chairman of the Board of Directors, in consultation with the President. The President has considered the proposal from directors for important matters to be included in the agenda for a subsequent meeting.

- The Chairman of the Board of Directors has allocated sufficient time for the management team's presentation and for the Board of Directors' discussion about material issues.
- The Chairman of the Board has established a mechanism to ensure that directors are provided with relevant information at least seven days in advance of each meeting, except for urgent meetings, to allow them proper time to study, deliberate on and make informed decisions on matters proposed to the Board of Directors.
- The Board of Directors may request additional documents, information, consultation and support relevant to the Company's business and each meeting from senior executives through the Company Secretary and may seek opinions of independent, external consultant as deemed necessary where all costs incurred are absorbed by the Company.
- Directors having potential connected interest or conflicts of interest in any items on the meeting agenda shall not vote on nor render opinions on such matters or shall leave the meeting room during the consideration of such agenda items.
- Meeting minutes of the Board of Directors represent a clear report of the meeting resolutions and opinions of the Board of Directors and are available for use as reference.

#### (6) Company Secretary

The Company Secretary is in charge of facilitating the smooth running, transparency, and legal and regulatory compliance of the meetings of the Board of Directors and the meetings of shareholders.

• The Company Secretary has been appointed by the Board of Directors, by the recommendation of the President, in accordance with the securities and exchange laws. The Company shall be responsible for retaining meeting documents and keeping and sending copies of the conflict of interest reports to the Chairman of the Board and the Chairman of the Audit Committee within seven days. The Company Secretary shall perform other duties as stipulated by the Capital Market Supervisory Board in accordance with the securities and exchange laws on behalf of the Board of Directors. The appointment of the Company Secretary shall be reported to the Office of Capital Market Supervisory Board within 14 days.

 The Company Secretary has the duty to coordinate the meetings of the Board of Directors, offer useful legal advice to the Board of Directors, arrange training programs for directors, and provide information to the directors.

#### (7) Remuneration of the Board of Directors and the President

The remuneration of the Board of Directors is approved by the shareholders of the Company while the remuneration of the President is approved by the Board of Directors.

- The director remuneration criteria and policy shall be considered by the shareholders on an annual basis. The Board of Directors has presented the director remuneration proposal to the shareholders as an item on the agenda of the annual general meeting of shareholders.
- The Board of Directors and senior executives have disclosed the director remuneration policy, principle and rationale in the Company's annual report.

#### (8) Succession Planning

The Company has implemented an effective plan for the nomination of candidates for key management positions at all levels. The nomination of the President and Managing Director shall be in accordance with the nomination procedures and both internal and external candidates are considered.

#### (9) Performance Evaluation

The Board of Directors conducted the Board performance assessment at least once per year in accordance with the Corporate Governance Code for Listed Companies. As part of the process, the Board of Directors jointly reviews its performance and identifies areas for improvement. The assessment encompasses both the performance assessment for the Board as a panel and for individual directors. Performance ratings are based on the percentage of the total score, i.e. above 85 percent = Excellent, above 75 percent = Very Good, above 65 percent = Good, above 50 percent = Fair, and 50 percent or below = Unsatisfactory. Both the Board of Directors and individual directors were assigned the performance rating of "Excellent".

#### Nomination and Appointment of Directors, Members of Board Committees and the President

#### **Board of Directors**

The composition of the Board of Directors and the qualifications of directors are enunciated in the charter of the Board of Directors. Details are as summarized below:

#### (1) Composition

- (a) Directors of the Company shall be appointed by the shareholders by way of voting on a one-share-one-vote basis.
- (b) The Board of Directors shall consist of at least five directors but not more than 12 directors and at least one-half of the total directors must have domicile in the Kingdom of Thailand.
- (c) At least one-third of the total directors shall be independent directors but the number of independent directors shall not be less than three.

#### (2) Qualifications of Directors

(a) Directors shall meet eligibility criteria and shall not possess prohibited characteristics specified by the public company limited laws and the securities and exchange laws. Directors shall also possess qualifications specified in the Company's Articles of Association.

- (b) Directors must hold, at a minimum, a bachelor's degree in any fields and must possess knowledge and experiences in fields that are relevant to the Company's business and as deemed by the Board of Directors as appropriate and beneficial for the Company.
- (c) Directors must be knowledgeable about the Company's business and can sufficiently dedicate their time to the Company, and apply their knowledge and abilities to the Company's benefits.
- (d) Directors shall demonstrate high level of integrity and business ethics.
- (e) Directors of the Company shall not operate or be engaged as partners or directors of entities operating any business having the same nature as the Company's business or in competition with the Company, regardless of whether such engagement is for personal benefits or the benefits of others.

#### **Independent Directors**

The Board of Directors collectively considers the qualifications of candidates for the position of independent directors based on the eligibility criteria and the prohibited characteristics set forth by the Public Company Limited Act, the Securities and Exchange Act, the notifications of the Capital Market Supervisory Board, and relevant notifications, rules and/or regulations. The Board of Directors also take into consideration the qualifications, professional experience and other qualities of independent director candidates before proposing the nominations to the shareholder for appointment. According to the Company's policy, at least one-third of the total directors shall be independent directors but the number of independent directors shall not be less than three. Eligibility criteria for the position of independent directors adopted by the Board of Directors are as follows:

(1) Must not hold shares in excess of one percent of the total number of voting shares of the Company, or the Company's parent company, subsidiary, associated company, major shareholder, or controlling person, whilst the number of shares held by any related person of such independent director must also be included.

- (2) Is not and has not been a director participating in management role, or an employee, an officer, an advisor who receives regular salary, or a person having controlling power, of the Company, or the Company's parent company, subsidiary, associated company, sister company, major shareholder, or controlling person, unless such an independent director has not possessed the characteristics referred to above for at least two years prior to the date on which a permission request is submitted to the Office of the Securities and Exchange Commission.
- (3) Is not a person having blood relationship or relationship through legal registration as a father, mother, spouse, sibling, and child, including as a spouse of a child of other directors, management person, major shareholder, controlling person, or the person being nominated to be a director, management person or a controlling person of the Company or the Company's s subsidiary.
- (4) Does not have and has not had any business relationship with the Company, or the Company's parent company, subsidiary, associated company, major shareholder, or controlling person in the manner in which his/her independent judgment might be affected, and is not and has not been a significant shareholder or a controlling person of the person that has business relationship with the Company, or the Company's parent company, subsidiary, associated company, major shareholder, or controlling person, unless such an independent director has not possessed the characteristics referred to above for at least two years prior to the date on which a permission request is submitted to the Office of the Securities and Exchange Commission.

A business relationship referred to in paragraph one above shall include any trading transaction in the ordinary course of business for any lease taking or lease out of any immovable property, any transaction relating to asset or service, or granting or accepting any financial support by way of either borrowing, lending, guaranteeing, or collateral providing, including any other act in similar manner thereto, that could result in the obligation of the Company or its counterparty, to repay its debt to the other party in an amount equal to three percent or more of the net

tangible asset value of the Company or Baht twenty million or higher, whichever is lesser. The method for the valuation of connected transactions pursuant to the Notification of the Capital Market Supervisory Board concerning connected transaction criteria shall be applied mutatis mutandis, provided that the amount of debt incurred during the past one year prior to the date on which such business relationship with such a person exists shall be included.

- (5) Is not and has not been an auditor of the Company, or the Company's parent company, subsidiary, associated company, major shareholder, or controlling person, and is not a significant shareholder, a controlling person, or a partner of any auditing firm or office for which the auditor of the Company, or the Company's parent company, subsidiary, associated company, major shareholder, or controlling person is working, unless such an independent director has not possessed the characteristics referred to above for at least two years prior to the date on which a permission request is submitted to the Office of the Securities and Exchange Commission.
- (6) Is not and has not been any professional service provider, including legal or financial advisor who obtains fee of more than Baht two million per year from the Company, or the Company's parent company, subsidiary, associated company, major shareholder, or controlling person, and not be a significant shareholder, or a controlling person, or a partner of any of such professional service provider, unless such an independent director has not possessed the characteristics referred to above for at least two years prior to the date on which a permission request is submitted to the Office of the Securities and Exchange Commission.
- (7) Is not a director appointed as a representative of the directors of the Company, a representative of a major shareholder of the Company, or a representative of a shareholder who is a related person of a major shareholder of the Company.

- (8) Does not operate any business having the same nature as the Company's business or in competition with the Company or the Company's subsidiary, or not be a significant partner in a partnership, or a director participating in any management role, an employee, an officer, an advisor obtaining regular salary from, or a shareholder holding more than one percent of the shares with voting rights of other company engaging in any business having the same nature as the Company's business or in competition with the Company or the Company's subsidiary.
- (9) Does not have any other characteristics which may restrict such person from rendering independent opinions about the Company's operation.

#### **Audit Committee**

The composition of the Audit Committee and the qualifications of the members of the Audit Committee are enunciated in the charter of the Audit Committee. Details are as summarized below:

#### (1) Composition

- (a) The Audit Committee shall be appointed by the Board of Directors and shall be entirely comprised of independent directors. The Audit Committee consists a chairman of the Audit Committee and at least two members to a maximum of four members.
- (b) At least one member of the Audit Committee as specified in the above paragraph shall be knowledgeable and experienced in accounting or finance and is able to review the reliability of the financial statements.
- (c) The head of internal audit shall be the secretary to the Audit Committee.
- (2) Qualifications of Audit Committee Members
  - (a) Members of the Audit Committee must be independent directors of the Company.
  - (b) They shall be able to dedicate their time to the performance of duties and demonstrate independence and objectivity in rendering opinions or reporting performance of their assigned duties.
  - (c) They shall possess qualifications per the relevant notifications issued by the Capital Market Supervisory Board.

# **Management Committee**

The composition of the Management Committee and the qualifications of the members of the Management Committee are enunciated in the charter of the Management Committee. Details are as summarized below:

#### (1) Composition

- (a) The Management Committee shall be appointed by the Board of Directors, by the recommendation of the President, from directors and executives whose qualifications meet the eligibility criteria set forth in this charter.
- (b) The President shall serve as the chairman of the Management Committee who shall chair every Management Committee meeting.
- (2) Qualifications of Members of the Management Committee
  - (a) Members of the Management Committee shall meet eligibility criteria and shall not possess prohibited characteristics specified by the public company limited laws and the securities and exchange laws.
  - (b) Members of the Management Committee must be knowledgeable about the Company's business and can sufficiently dedicate their time to the Company, and apply their knowledge and abilities to the Company's benefits.
  - (c) Members of the Management Committee shall demonstrate high level of integrity and business ethics.
  - (d) Members of the Management Committee shall not operate or be engaged as partners or directors of entities operating any business having the same nature as the Company's business or in competition with the Company, regardless of whether such engagement is for their personal benefits or the benefits of others.

## **Risk Management Committee**

The composition of the Risk Management Committee and the qualifications of the members of the Risk Management Committee are enunciated in the charter of the Risk Manage Committee. Details are as summarized below:

- (1) The Risk Management Committee is comprised of the members of the Management Committee and the Managing Directors of Project Companies.
- (2) The Management Committee shall appoint a member of the Risk Management Committee as the chairman of the Risk Management Committee.
- (3) The secretary to the Risk Management Committee shall be appointed by the Risk Management Committee.

# Supervision of Subsidiaries and **Associates**

The Company is a holding company and does not have its full operating activity. The Company has established a policy on subsidiary and associate supervision and management as a mechanism for the supervision of its subsidiaries and associated operating core businesses and has directors and subsidiaries and associated who have been appointed by the Company sign an undertaking letter to certify that they will comply with the policy on subsidiary and associate supervision and management and applicable regulations of the Office of Securities and Exchange Commission.

The policy on subsidiary and associate supervision and management has been formulated with an aim to set out measures and mechanisms that will allow the Company to directly and indirectly oversee and manage the business operations of its subsidiaries and associates, as if they are internal units of the Company, as well as ensure their compliance with the established measures and mechanisms, the Company's policies, the public company limited laws, the Civil and Commercial Code, the securities and exchange laws, relevant laws, including applicable regulations, notifications, rules and criteria set forth by the Capital Market Supervisory Board, the Securities and Exchange Commission, the Office of Securities and Exchange Commission and the Stock Exchange of Thailand in order to protect the Company's interest and investments in such subsidiaries and associates.

Where this policy requires that transactions or activities that are considered material or have impact on the financial position and performance of subsidiaries and associates be approved by the Company's Board of Directors or the Company's shareholder meeting (as applicable), the directors shall convene a Board meeting and/or a shareholder meeting to consider and approve such transactions/activities before the subsidiaries and associates concerned will arrange their board meeting/ shareholder meeting to approve such as transactions/ activities. As such, the Company shall disclose information and properly and fully comply with applicable criteria, conditions, processes and procedures stipulated by the public company limited laws, the Civil and Commercial Code, the securities and exchange laws, relevant laws, including applicable regulations, notifications, rules and criteria set forth by the Capital Market Supervisory Board, the Securities and Exchange Commission, the Office of Securities and Exchange Commission and the Stock Exchange of Thailand (to the extent that there is no contradiction) mutatis mutandis.

In this context, "subsidiaries" and "associates" refer to subsidiaries or associates (as applicable) operating core business and possess qualifications as described in the Capital Market Supervisory Board's Notification No. TorJor. 28/2551 Re: Application for and Approval of Offer for Sale of Newly Issued Shares (Amended) in conjunction with the Securities and Exchange Commission's Notification No. GorJor. 17/2551 Re: Definitions in Notifications on Securities Issuance and Offer (Amended).

## Control over Use of Inside Information

The Company and subsidiaries have formulated policies to prevent against the use of inside information. Directors, executives and employees of the Company and subsidiaries must comply with the policies in addition to the code of conduct that they must acknowledge in writing. They are also required to give commitment that they will strictly adhere to the code of conduct as their operating

framework. Disciplinary punishments against violators have also been defined.

The policies of the Company and subsidiaries governing the prevention and control of the use of inside, non-public information by their directors, executives and employees for personal gains are as outlined below:

- (1) The Company will inform directors and executive officers of the Company, including executives of accounting or finance division at manager level or equivalent and above (according to the definitions prescribed by the Capital Market Supervisory Board and the Stock Exchange of Thailand) about their duties concerning the preparation and submission of reports on their holding of the Company's securities pursuant to Section 59 and the punishments per Section 275 of the Securities and Exchange Act B.E. 2535 (and its amendments), collectively referred to as the Securities and Exchange Act, and the reports on their acquisition or disposal of securities of the Company securities pursuant to Section 246 and the punishments per Section 298 of the Securities and Exchange Act.
- (2) Directors, executive officers, auditors and executives of accounting or finance division at manager level or equivalent and above are required to prepare and disclose reports on the holding of the Company's securities by themselves, their spouse and dependent children in accordance with Section 59 upon their appointment as director or executives and upon changes to the holding. The reports shall be submitted through the Company Secretary to the Office of Securities and Exchange Commission within the applicable timeframe. The Company Secretary is required to present a summary of such securities holding and the changes thereto to the meetings of the Board of Directors every six months.
- (3) Directors, executive officers, and executives of accounting or finance division at manager level or equivalent and above, including employees who have access to material inside information that affects the price movement of securities are prohibited from purchasing, selling, offering to purchase or sell, or inducing other persons to purchase, sell, offer to purchase or sell shares or securities (if any) of the

Company either directly or indirectly before the public release of the Company's financial positions and performance. The Company will submit a written notification to directors, executive officers and executives of accounting or finance division at manager level or equivalent and above, instructing them to refrain from performing the aforesaid acts during the period between at least 30 days in advance of such public release and at least 24 hours after the public release.

- (4) Directors, executive officers, and employees of the Company and subsidiaries are prohibited from using inside, non-public information of the Company and subsidiaries, that they gained in virtue of their positons and affects or may affect the price movement of securities, to purchase, sell, offer to purchase or sell shares or securities (if any) of the Company either directly or indirectly for their personal gains or the benefits of other, as well as from tipping such information to others regardless of whether they gain benefits in return for such information tipping.
- (5) Former and current directors, executive officers and employees of the Company and subsidiaries are prohibited from disclosing inside information or confidential information of the Company and subsidiaries, including confidential information of the business partners of the Company and subsidiaries, that they gained in virtue of their positons, to third parties regardless of whether such disclosure causes damages to the Company, subsidiaries or business partners.
- (6) Directors, executive officers and employees of the Company and subsidiaries shall not disclose inside information of the Company and subsidiaries. They shall not abuse their positions of authority or trust in the Company and/or subsidiaries or use inside information or material information, that they gained in virtue of their positons in the Company and/or subsidiaries and is not yet publicly released, to seek undue gains or tip such information to third parties either directly or indirectly and regardless of whether they gain benefits in return for such information tipping.

- (7) Former and current directors, executive officers and employees of the Company and subsidiaries are accountable for maintaining the confidentiality of the confidential information and/or inside information of the Company and subsidiaries. Directors, executive officers and employees of the Company and subsidiaries are prohibited from using confidential information and/or inside information of the Company and subsidiaries for the benefit of other companies.
- (8) Directors, executive officers and employees of the Company and subsidiaries have the duty to comply with the provisions on the use of inside information as set forth by the Securities and Exchange Act B.E. 2535 and the Public Company Limited Act B.E. 2535, including other applicable rules and regulations.

# **Auditor's Fees**

## **Audit Fee**

The Company paid the audit fee totaling Baht 15.94 million to PricewaterhouseCoopers ABAS Limited (PwC) for the accounting audit of the Company and subsidiaries and the audit of consolidated financial statements for 2017.

Individuals or entities related to the auditors and the audit firm which the auditors work for are not related parties of the Company and subsidiaries pursuant to the Code of Ethics for Professional Accountant issued by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King as relevant to the audit of consolidated and separate financial statements.

### Non-Audit Fee

The Company paid non-audit fee of Baht 13.5 million to PwC for its services in relation to the preparation of financial information and other documents relating to IPO transaction.

Report on Holding of Securities by Directors and Senior Executives of the Company in 2017 (including their spouse and dependent children)

	Name	No. of Share as at December 31, 2017	Remark				
Directo	Directors						
1.	Mr. Harald Link	633,399,700	-				
2.	Miss Caroline Monique Marie Christine Link	28,350,000	-				
3.	Mrs. Preeyanart Soontornwata	6,462,150	-				
4	Mr. Pakorn Thavisin	-	Waived his right to receive the additional shares allotted to directors				
5.	Mr. Anusorn Sangnimnuan	321,200	-				
6.	Mrs. Anchalee Chavanich	121,200	-				
7.	Mr. Somkiat Sirichatchai	121,200	-				
8.	Mrs. Katevalee Napasab	424,200	-				
9.	Mr. Surachai Saibua	212,150	-				
Senior	Executives (Based on the definitions of the	Office of SEC's Notification No. GorJo	r. 17/2551)				
10.	Mr. Sumkan Ratsameebanjongkit	240,950					
11.	Mr. Surasak Towanich	90,950					
12.	Mr. Chote Chusuwan	90,950					
13.	Mr. Somkiet Pongpiyapaiboon	290,950					
14.	Mr. Peradach Patanachan	90,950					
15.	Mr. Nopadej Karnasuta	90,950					
16.	Miss Siriwong Borvornboonrutai	172,200					
17.	Mrs. Porntip Tangpongbundit	269,800					

# **Other Compliance with Corporate Governance Principle**

The Company treats the anti-corruption efforts as a top priority and has the Anti-Corruption Policy which was approved by the Board of Directors of the Company and communicated to employees at all levels including the Company's subsidiaries for their acknowledgment and compliance.

As part of its endeavors to be part of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC), the Company signed the CAC's Declaration of Intent and is currently conducting a self-assessment on anti-corruption and revised its Anti-Corruption Policy for proper alignment in light of the Company's nature of business operation. The self-assessment will then be submitted to the Thai Institute of Directors Association.

# **Internal Control and Risk Management**

B.Grimm Power Public Company Limited ("the Company") and its subsidiaries (the Group) attach importance to the consistently effective internal control and risk management system. The Risk Management Committee has been established to oversee the overall risk management of the Group in accordance with the international standards which are based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO)'s framework. Further, this also contribute to the employees' awareness of internal control and risk management and the stakeholders' confidence that the Group's internal control system adequately and appropriately addresses all activities and contributes to effective business operations. The Company has anchored on the following five components of internal control:

# 1) Control Environment

The Company has clearly defined its goals, vision, objectives, policies and guidelines under the philosophy of "Doing Business with Compassion". The Company's control environment is effective, appropriate and adequate for its business operations which are guided by the corporate governance principle and the code of business ethics. The operations comply with the Corporate Governance Policy which has been established in writing and defines the roles, duties and responsibilities of the Board of Directors and the appropriate organizational structure for future business growth. The Company has also developed operating policies and employee manual. The structures of the organization and committees are appropriate and contribute to the operational effectiveness. Emphasis has been placed on employees' understanding about the issues of fraud risk and conflicts and the whistleblowing program has been implemented as part of the participatory oversight to encourage employees and stakeholders to report suspicions and complaints about illegal conducts, breaches of codes of professional ethics, behaviors of that implicate frauds or misconducts of the Group's personnel, incorrect financial reports, or flaws in the internal control systems.

In 2017, the Company initiated the process for the certification of its status as a member of the Thailand's Private Sector Collective Action Coalition Against Corruption (CAC).

## 2) Risk Assessment

The Company has established the Risk Management Committee which is in charge of formulating the Group's risk management policy and strategy that address, for example, business risk, liquidity risk, operational risk, information technology risk and reputation risk of the Group, in support of the continuous development of effective risk management system. In addition, the Company is attentive to its ability to respond to changes in the economic conditions, politics, laws, environmental and safety regulations as well as its Business Continuity Management (BCM). Therefore, the preparedness system has been developed and the risk management and crisis management plans have been reviewed and refined for optimized effectiveness with a view to ensuring the Company's business continuity in the event of emergencies as well as to avoid disruption and minimize adverse impact. These mechanisms form a solid and sustainable foundation for the Company's capabilities to achieve its established goals.

## 3) Control Activities

The Company controls the operations of the Group through planning and controlling mechanisms such as key performance indicators (KPI), the segregation of duties, responsibilities, approval authority, including line of authority (LOA) at each level as deemed suitable for its business operation. Assets of the Company are safeguarded against loss or misuse. Checks and balances are provided for by specifically-appointed units and committees such as the Internal Control Department and the Risk Management Committee. In addition, the Company Secretariat Department is in charge of ensuring that the operations of the Group and the Board of Directors and the disclosure of information are in accordance with the securities and exchange laws, the SEC's regulations and applicable legal requirements. The Company has the processes for monitoring operations of its subsidiaries and has set the Corporate Governance Policy and the Security, Safety, Occupational Health, Environment and Energy Policy that are enforced across the Group.

## 4) Information and Communication

The Company has developed an information and communication system for the management of People, Technology Processes. The system security is assured through the IT Security Management Policy which is based on international standard. Further, the Company was awarded the ISO/IEC 27001:2013 certification which is an IT security management system standard and its IT security system is supervised by the IT Security Management Committee. IT security knowledge of our personnel has been enhanced through "Knowledge Certificate Skill". With regard to communication and IT system, the Company strengthen its capabilities through the 2N+1 architecture that encompasses a main network system, a backup network system, a data center and dual power supply sources, and standby equipment. Disaster recovery site and alternative site have also been identified and prepared. In terms of work processes, the Company has set up a comprehensive IT security system and processes in accordance with applicable standards.

Internal communication of the Company is also effective. For example, the meetings for daily power plant operation update are held. Executives of relevant departments meet on a weekly basis to discuss and monitor performance, resolve problems (if any), and gain updated information beneficial for the operation and decision making of their departments. In addition, the Company has employed the safe and secure Intranet for internal communication that enables all employees to have access to up-to-date information about policies, regulations/orders and announcements of the Company. Communication with external parties is made through multiple channels including www.bgrimmpower.com which contains information about the Group and can be accessed by shareholders and investors at any time. The security and integrity is protected by a reliable system, Web Deface, all the time.

## 5) Monitoring

The Company has monitored performance and evaluate the internal control system. Actual performance has been regularly compared with the action plan to measure progress against targets. Deviations from the established action plan and standards are analyzed to identify root causes and reported to the executives, the Audit Committee and the Board of Directors on a regular basis.

The Company has appointed Pricewaterhouse Coopers ABAS Limited as its auditor to audit the interim financial information and the 2017 annual financial statements. The auditor reported that no material weaknesses in the internal control system was found.

In 2017, the Board of Directors and the Audit Committee rendered their opinions on the internal control of the Group that the internal control was effective, adequate and appropriate to the business operations, was in line with the Internal Control Adequacy Assessment of the Office of Securities and Exchange Commission, and met the Company's objectives.

# **Head of Internal Audit**

The Audit Committee, at its Meeting No. 1/2016 on June 8, 2016, approved the appointment of Mr. Suchol Wattanasukchai as Head of Internal Audit with EY as an internal audit co-source partner. The Audit Committee deliberated on the professional experience of the Head of Internal Audit, the Internal Audit Department and EY, and opined that all of them possessed suitable and adequate knowledge and experience for the duties. In this regard, the appointment, transfer and employment termination of the Internal Audit Department are subject to approval from the Audit Committee in accordance with the scope of authority, authority, duties and responsibilities of the Company's Audit Committee that was approved by the resolution of the Board of Directors Meeting No. 4/2016 on June 8, 2016.

## **Profile of Head of Internal Audit**



Name: Mr. Suchol Watanasakchai

**Current Position** 

Senior Vice President (Internal Audit)

Age: 57 years

Date of Appointment: June 8, 2016

## Education:

- National Institute of Development Administration (NIDA), Master of Applied Statistics,
   Major: Computer Science
- Rajamangala University of Technology
   Tawan-ok Faculty of Business Administration and Information Technology, Bachelor's Degree in Information System

## Training:

- Internal Control Systems for IPO Companies from the Association of Thai Securities Companies
- Beginning Auditor Tools and Techniques from The Institute of Internal Auditors of Thailand

- Fundamentals for New Auditor from The Institute of Internal Auditors of Thailand
- Clinic IA "Raise the Red Flag: IA Guide to Prevent & Detect Fraud"
- Clinic IA "Sustainable Development"
- Enterprise Risk Management Training for Management
   COSO Framework
- Anti-Corruption: The Practical Guide
- The Habits of Highly Effective (7 Habits)
- Taking Action (Taking the BEST Action for Professional Leader)

Other Positions Currently Held : -None-

Professional Experience in the Past Five Years:

June 2016 - Present

Senior Vice President (Internal Audit)

1996 - 2016

Vice President (Management Information System) of Amata B.Grimm Power Company Limited

1993 - 1996

Manager (Management Information System) of B.Grimm Holding Company Limited

Holding of the Company's Securities by Incumbent (including by spouse and dependent children):

Incumbent : 122,700 shares

Family relationship with directors, other executives or major shareholders of the Company or its subsidiaries

-None-



# **Corporate Social Responsibility**

# 1. Policy Overview

The Company is committed to operate business with responsibility towards the environment and all communities in which we operate in accordance with international best practices. In addition, we emphasize the involvement of the members of the communities and the society with an aim to sustainably develop their quality of life and well-being in alignment with the internationally recognized social responsibility framework. Therefore, we have established our corporate social responsibility as follows:

#### 1.1 Fair Business Practices

The Company is committed to upholding fair business practices to bolster the confidence of all stakeholders in the Company and ultimately to achieve sustainability.

#### Guidelines

- Avoid acts that may give rise to conflicts of interest.
   If conflicts of interest occur, the Company will justly handle such conflicts of interest and fully disclose all important information.
- 2) Promote free competition and avoid cronyism or collusion.
- 3) Do not support practices that are considered an infringement of intellectual properties or rights.
- 4) Establish a management system that can prevent and quickly detect bribery and corruption as well as devise an effective resolution process and handle bribery and corruption, if any, with fairness.
- 5) Promote the awareness of directors, executives and employees about combating corruption, extortion and bribery in all forms.

# 1.2 Respect for Human Rights and Fair Labor Treatment

## Guidelines

- 1) Advocate and respect human rights by regularly ensuring that the Company's businesses are in no way involved with the infringement of human rights.
- 2) Monitor the compliance of the Company's business practices with the human right framework and

encourage the adherence to the international human rights principles by the Company including companies in its group, its joint venture partners and its business partners.

- 3) The Company equally treats all employees without discrimination against them based on place of birth, nationality, gender, age, skin color, religion, physical ability, standing, family status, education or any other bases which are not directly related to their performance of duties.
- 4) The Company allows all employees to fully realize their potentials and offers compensation plans, including salaries, bonuses and allowances, that are appropriate and in line with the Company's regulations and effectively motivate its employees. Employees of the Company are encouraged to develop their knowledge through tertiary education and short and long courses of training.
- 5) All employees of the Company must perform duties with their best abilities, integrity, honesty and ethics and must not directly or indirectly reassign their duties to others unless such act is necessary or contribute to faster fulfilment of such duties where personal expertise is not required.
- 6) The Company's employees shall operate in accordance with the chain of command and take orders and responsibilities given by their supervisors and must not break the chain of command expect where necessity requires otherwise. All employees shall refrain from making criticism of their supervisors and colleagues that could have adverse effects on them or the Company. Employees of the Company shall be open to opinions form their subordinates with conscience, objectivity and rationality.
- 7) The Company's personnel are allowed to fully utilize the Company's resources, including human resources, premises and facilities, for the performance of their functional duties. Use of the Company's resources for other purposes beyond their performance of functional duties and benefit entitlements are prohibited.
- 8) The Company's personnel are expected to behave and dress in an appropriate manner that is considered suitable to their position and local etiquettes in order not to taint the Company's reputation.

- 9) The Company's personnel may refer to their names and job titles in fundraising for charities sponsored by the Company. However, they are not allowed to exploit the Company's names or their job titles in fundraising in their individual capacity regardless of the causes of such fundraising.
- 10) The Company's personnel are expected to cooperate in activities arranged by the Company for the purpose of preserving unity and teamwork as well as other CSR activities of the Company.
- 11) Personnel of the Company are prohibited from performing acts that are considered troublesome, annoying or demotivating to others including acts that arouse hostility or obstruct operations. Verbal and physical sexual harassment of the Company's personnel or third parties including sexual abuse, sexual advances, sexual assaults, indecency and possession or obscene images are prohibited.

# 1.3 Responsibility Towards Customers and Consumers

The Company aims to deliver the highest level of satisfaction to our customers, who are buyers of electricity and/or steam and services from the Company, and consumers, i.e. the end users, by offering fair prices and quality products and responsibly serving our customers and consumers.

## Guidelines

- 1) The Company strives to develop its electricity and/ or steam generation with an aim to offer integrated and quality services that match the demands of customers and consumers. Personnel of the Company shall fully dedicate their efforts to satisfy customers' demands with high quality products and services at reasonable prices and fair conditions to consumers in a timely manner without restricting the rights of consumers
- 2) The Company shall refrain from deception and hype advertising about the quality of electricity and/or steam and services of the Company.
- 3) The Company is committed to upgrade the safety and security standards of its electricity and/or steam production processes and services in recognition of the utmost importance of consumer safety. The Company ensures that warning signs and security and safety examination are in place and continuously arranges campaign and training programs addressing consumer safety topics.

## 1.4 Environmental Protection

The Company gives heed to the safety and health of its personnel including the members of nearby communities. In addition, the Company instill the awareness about quality, safety, occupational health and environment in its employees as a part of their daily life for the benefit of themselves including the communities and the society at large. Efficient consumption of resources and waste minimization are encouraged across the Company.

#### Guidelines

- 1) The Company ranks safety as one of its top priorities and has established requirements and standards governing about quality, safety, occupational health and environment which meeting the minimum legal requirements and the international standards. Personnel of the Company are required to study and strictly comply with applicable laws, requirements and standards governing quality, safety, occupational health and environment.
- 2) The Company controls and prevents losses and damages caused by accidents, fire, occupational injuries and illness, property loss or damage, breach of security systems, incorrect work practices and errors. In addition, the Company promotes workplace safety for its employees and regularly implements safety drills. Executives and employees are accountable for reporting accidents and incidents by following established procedures.
- 3) In operating its electricity and/or steam generation business, the Company has established emergency response and crisis management plan in readiness for potential emergencies such as fire, gas leak, chemical leak or waste leak, including other crises that may cause disruption to the business or harm the Company's reputation or image.
- 4) The Company arranges PR and communication campaigns to promote correct understanding and knowledge among its personnel, employees of contractors, and stakeholders about policies, rules, regulations, operating procedures and cautions relating to quality, safety, occupational health and environment with a view to enabling proper compliance therewith and the safety of health, properties and environment.
- 5) The Company is committed to actively and continuously promoting quality, safety, occupational health and environment as part of its corporate social responsibility aim. The Company is cognizant of the importance of the environment and the safety of stakeholders involved



and thus supports CSR activities that contribute to the environmental protection and the development of the quality of life of community residents in accordance with the sustainable development principles.

6) Work processes that are prone to safety risks or do not meet requirements and standards governing quality, safety, occupational health and environment or may cause serious environmental impact shall be suspended and raised to the attention of co-workers, supervisors and relevant units for corrective actions or solution planning. Such work processes shall not be furthered in all cases.

## 1.5 Community and Society Development

As a corporate citizen that does not disassociate itself from the society, the Company has the responsibility to develop and contribute to the communities and the society at large in pursuit of its sustainable growth in tandem with the social development and growth. It is the Company's duty and policy to contribute to the community and social activities, focusing on the development of the society, communities and environment, the nurture of religions, the environmental preservation, the educational support for the youth, and the development of underprivileged communities into strong and self-reliant communities.

#### Guidelines

1) The Company aims to foster understanding and communicate about the actual status and facts about the Company's operations including its responsibility towards the communities, the society and the environment without concealing disclosable facts. The Company demonstrates

cooperation in disclosing information to investors, shareholders and the interested persons in a timely manner.

- 2) The Company is committed to actively and continuously promoting quality, safety, occupational health and environment as part of its corporate social responsibility aim. The Company is cognizant of the importance of the environment and the safety of stakeholders involved and thus supports CSR activities that contribute to the environmental protection and the development of the quality of life of community residents in accordance with the sustainable development principles.
- 3) The Company carefully considers options of natural resource utilization with an aim to minimize adverse impact on the society, the environment and the quality of life of people. In addition, the Company encourages the reduction of energy and resource consumption.
- 4) The Company continuously raises awareness about the responsibility towards the society and the environment among its employees at all levels and attaches importance to doing business with partners that share the same aspiration about the social and environmental responsibility with the Company. In addition, the Company is a leading advocate of energy efficiency and conservation for the benefit of future generation.
- 5) The Company intends to consistently allocate a portion of its profits to the activities for the communities, the society and the environment whereby such activities must actually contribute to the betterment of the communities, the society and the environment. If the option of donation is adopted, the Company will check the information of

the donees to ensure that the donations are efficiently and effectively deployed for charitable activities that yield concrete benefits. In addition, evidence of donations shall be made available.

# 1.6 Innovation and Dissemination of Innovation from CSR Activities

The Company has applied the principle of corporate social responsibility to its incubation of business innovations that benefit to the business and the society and sharpen the competitiveness.

#### Guidelines

- 1) The Company explores its current processes to identify risks and adverse impact on the society and the environment and seek solutions to minimizing the impact. The Company also thoroughly and comprehensively studies, considers and analyzes its work processes to build opportunities for innovation development and discoveries.
- 2) The Company shares information about innovation and discoveries that are beneficial to the society and the environment with an aim to encourage replication among other businesses and entrepreneurs.
- 3) The Company ceaselessly analyzes solutions and develops innovation to create opportunities, develop new products and achieve growth and profitability in a sustainable manner.

## 1.7 Corporate Governance

The Company aligns its management mechanism with the principle of corporate governance to promote transparency, equality and fairness to foster confidence and trust of shareholders, investors, stakeholders and all constituents.

### Guidelines

The Corporate Governance Policy of the Company shall be complied with based on the Corporate Governance Code for Listed Companies developed by the Stock Exchange of Thailand which encompasses five sections, i.e. rights of shareholders, equitable treatment of shareholders, roles of stakeholders, disclosure and transparency, and Board responsibility.

## 1.8 Social and Environmental Report

The Company shall disclosure information about its compliance with the social responsibility guidelines for the benefit of all stakeholders.

#### Guidelines

- 1) The Company prepare social and environmental reports elaborate on its activities in relation to business operation, environment, safety and the society,
- Information prepared by the Company is correct and disseminated through various channels for convenient access thereto by stakeholders.

# 2. Corporate Social Activities and Environmental Activities

Since 1993, the Company has been active in the support of all levels of education, culture, sports, disabled persons, environment, communities and religions as an integral part of the Thai society. The Company has also focused on improving the well-being of the communities surrounding its power plants, especially through community relations, educational support and environmental protection activities, etc.

### 2.1 Community Relation

As most of the Company's employees are the residents of nearby communities, its power plants became part of the community way of life. Therefore, it is important for the Company to live harmoniously with its neighbors and nearby communities, to communicate with each other, and to help out where possible.

The Company has organized a number of community meetings throughout the year and invited community members for information events and public debates. The Company opens doors for site visits and shares knowledge about sources for energy, how it generates and distributes electricity and how it contributes to the improvement of the well-being of surrounding communities.

The Company's donations support a variety of local needs such as donations to schools to fund their computer repair, scholarship program, solar ovens or library renovation. The Company also contributes to the communities through the community development funds. Its activities are directed to improve the quality of life of families in nearby communities.

As a member of the community, the Company takes an active part in everyday life of its neighboring communities, often through the volunteer programs of the Company's employees. This includes the blood donation activity, the support for schools under the Royal Thai



Army's network. The Company has also arranged religious and traditional activities to celebrate occasions such as Songkran Festival, Elderly Day and Children's Day.

## 2.2 Educational Support

## German Thai Dual Excellence Education:

The Company is a strong supporter of the dual vocational education system, which originated in Germany and has proven to be a key driver of the national economic competitiveness through its development of highly specialized workers. Generally, the Company selects vocational students from nearby technical colleges and offers them with extensive on-the-job training in parallel with their formal education.

The Company is also one of the founding corporate partners of the German-Thai Dual Excellence Education program, which was launched in 2013 by the German-Thai Chamber of Commerce and the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH in order to promote dual vocation program across Thailand and the quality excellence of the program.

The Company has collaborated with Panyapiwat Institute of Management to further strengthen the dual vocation program in computer engineering and mechanical engineering. The Company hopes to bring up future staff members from among our vocational students and also to contribute to a coming generation of independent craftsman-entrepreneurs in Thailand.

## Little Scientists' House Project Thailand:

The Company recognizes the importance of upgrading the quality of the educational systems and standards at all education levels. Its participation on the Little Scientists' House Project Thailand underlines the Company's strong determination to promote the passion for self-development and the love of learning among the youth for the brighter future of themselves and the nation. The Company supports the scientific learning among children aged 3-6 through scientific experiments. The Little Scientists' House Project Thailand was initiated in response to the international PISA test rankings which revealed that the scientific knowledge and skills of Thai children are below the average and the Thailand's shortage of scientists and engineers to drive Thailand's growth and development. Researches suggest that the best ages for building positive attitude toward scientific learning and developing scientific knowledge and process in kids are 3-6 years when their cognitive and memory development spurts. The project receives great support from the public and private sectors and is highly beneficial to science and technology teaching development for elementary school students.



The Little Scientists' House Project Thailand was created under the initiative of HRH Princess Maha Chakri Sirindhorn, during her 2009 Germany visit, to replicate the success of "Haus der kleinen Forscher", a public-private cooperation that aims to foster the passion for science among the youth and has been deployed to more than 10,000 kindergartens to date.

In addition to teachers who are the key driver of the project's success, interested persons who are qualified are allowed to join the project as "scientist or engineer mentors" to assist teachers participating in this project. Besides its roles as a donor and project sponsor, B.Grimm serves as a local networkers for Chon Buri, Rayong and Nong Chok, collaborating with 132 schools (based on data as of 2017) out of 200 schools attending this pilot project. Local networkers serve as coordinators liaising and transferring knowledge through training programs to teachers of participating schools to promote their understanding about the purpose and approaches of the project. The local network under the responsibility of B.Grimm Group is driven by B.Grimm Group and Amata B.Grimm Power in association with PTT Chemical group in Rayong and Link Manufacturing in Nong Chok which is a company in B.Grimm Group.

The Company also supports the first hands-on 360° scientific learning center in Thailand where the young learners can put their textbook knowledges into practices and gain hands-on experience from experiments and touch-and-learn activities. These activities enable the youth to clearly understand scientific processes though group learning in which they can share their knowledge and opinions which will enable them to design their own

learning process, express themselves and listen to others. This also serves as a pedagogical tool that teachers can further develop and apply to classroom curriculums and core curriculums. The Company also arranges field trips for students in schools in the vicinity of its power plants to visit Nanmeebooks Hands-on Science Center, an educational facility with 25 different learning stations. In this regard, "B.Grimm Power City" is a learning station showing the sources of electricity and the benefits of electricity to the life of urban residents.

## 2.3 Environmental Conservation

The Company places great emphasis on the environmental conservation and deploys highly efficient plant technologies to maximize yields through combined gas steam cycles. The Company also collaborates with its customers in energy-saving efforts.

The Company tightly controls and reduces gas emission, waste and noise levels as well as conducts comprehensive inspections around the power plants and surrounding communities through a continuous emission monitoring system (CEMS) and stack sampling to detect the level of gas emissions.

The quality of water in nearby areas is controlled and maintained through the Company's water management system. The Company's chemical specialists conduct intensive monitoring every week and the Company coordinates with external specialists for monthly and half-year monitoring. In addition, water treatment specialists are stationed at the project sites all the time for timely response to emergencies, if any.

Waste from our office and production processes are hygienically disposed of by way of burning at incineration plants or by way of feeding to garbage power plants. Valuable waste is sold to recycling plants and hazardous waste is disposed of at licensed disposal facilities under controlled conditions. As heavy machineries such as gas turbines also cause noise, the Company embeds noise enclosures around machine operating areas.

In response to the royal initiatives of His Majesty King Bhumibol Adulyadej and Her Majesty Queen Sirikit to counter the rapid pace of Thailand's deforestation, the Company has initiated a massive reforestation project and come together every year with community members and local students to plant trees.

# 3. Anti-Corruption

The Company and its subsidiaries operate business in observance of the principles of integrity, transparency, fairness and corporate governance. The Company and its subsidiaries do not tolerate all forms of corruption, whether direct or indirect, and have established the Anti-Corruption Policy as an operating framework that all personnel of the Company and its subsidiaries must strictly abide by. Cognizant of the importance of the systematic corruption eradication which calls for the active cooperation from the private sector to promote fair and equal competition, the Company signed up the Declaration of Intent for the Thailand's Private Sector Collective Action Coalition Against Corruption (CAC). In this regard, the Thai Institute of Directors Association (Thai IOD) approved the Company's CAC membership on 25 November 2016.

The Company's Anti-Corruption Policy is as outlined below:

- (1) Personnel of the Company shall not initiate or be involved in all forms of corruption, whether directly or indirectly.
- (2) Personnel of the Company shall exercise careful discretion on matters relating to giving and receiving gifts, assets or benefits and comply with the established policy concerning gifting and entertainment.
- (3) Appropriate and effective internal control system and risk management shall be established and regularly implemented to combat corruption. Corruption risk associated with business operations shall be reviewed and assessed at least once 1 per year.



- (4) Mechanisms for transparent and accurate financial reporting in accordance with internationally accepted accounting standards shall be established.
- (5) Personnel recruitment processes shall reflect the commitment to anti-corruption.
- (6) Whistle-blowing channels must be made available for personnel to report suspicions and voice their suggestions and complaints, and measures for protecting whistleblowers must be defined.
- (7) Compliance with anti-corruption laws of all countries in which the Company and its subsidiaries operate must be demonstrated.
- (8) Violation and non-conformity to this policy, whether director or indirect, shall be subject to disciplinary action procedures of the Company and the legal punishments.
- (9) The Company has instructed employees to study the Anti-Corruption for their correct understanding and comply with the policy in every step of their work processes. Conducts that are considered in breach of this policy shall be reported to supervisors or responsible functional units or persons and shall be recorded in writing. Personnel are required to give their commitment to strict observance of the policy as a principle and guideline for their operation. Disciplinary punishments against violators have also been defined.



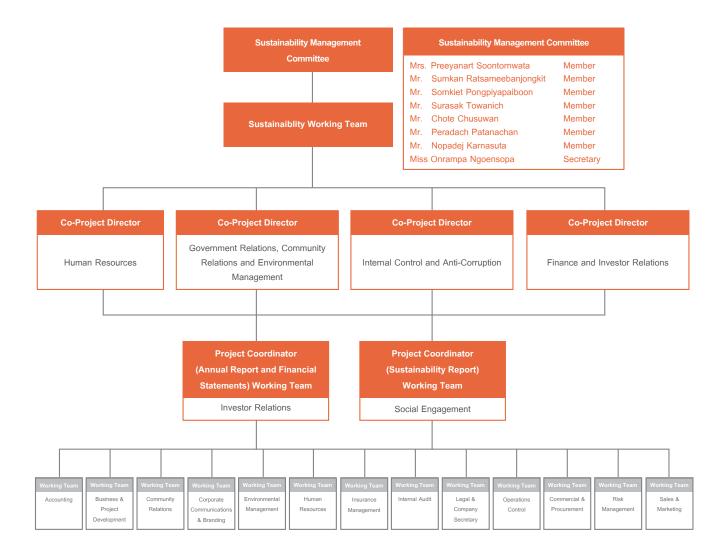
# Sustainable Development

Sustainable development is one of the Company's top priorities. In 2017, the Company defined its sustainability framework and aligned its operations to international guidelines for sustainable development which addressed the economic, social and environmental dimensions. Highlights of the Company's activities and achievements in relation to sutainability were elaborated in the "2017

Sustainability Report of B.Grimm Power Public Company Limited" which has been developed in line with the G4 Sustability Reporting Guidelines of the Global Reporting Initiative (GRI). nvironment and take care of the local communities.

## **Sustainability Management**

For the continuity of the sustainability management, the Company has appointed the Sustainability Management Committee, which is comprised of senior executive officers of the Company, and the Sustainability Working Team, which is comprised of representatives from all departments.



Their duties and roles are as follows:

## **Sustainability Management Committee**

- 1) Set and review the Company's sustainability goals, policies and directions on an annual basis.
- Establish stakeholder treatment measures and practices that are material to sustainability to assure the stakeholders of the Company's social responsibility and positive influence on the society.
- Validate the sustainability framework and the materiality of the organization's value chain and collaborate with the stakeholders of the organization.
- 4) Support and monitor the implementation of the sustainable development strategies and policies jointly with the project directors, the Sustainability Working Team, and the project coordinators.

## **Project Directors**

- Develop and define the framework and materiality
  of the organization's value chain, collaborate
  with the stakeholders of the organization
  and propose these matters to the Executive
  Committee for prioritization and validation.
- 2) Formulate sustainable development strategies and policies jointly with the project directors, the Sustainability Committee, the Sustainability Working Team, and the project coordinators.
- Provide consultation and/or advice and support the operations of the Sustainability Committee, the working teams representing different departments, and the project coordinators to ensure timely actions.
- 4) Review action plans, operating guidelines and performance of the sustainable development initiatives that affect the organization's stakeholders in collaboration with departments to ensure that the action plans, operating guidelines and performance are appropriately managed.

## **Sustainability Working Team**

 Develop and define the sustainability framework and the materiality of the organization's value chain, collaborate with the stakeholders of the organization and propose these matters to the Executive Committee for prioritization and validation.

- Formulate sustainable development strategies and policies jointly with the project directors, the Sustainability Committee, and the project coordinators.
- 3) Be involved in meetings with relevant executives or employees and work with departments on the development of the organization's action plans and guidelines for sustainable development that reflect the Company's awareness and decisions about the sustainable development and bolster the confidence of the organization's stakeholders.
- 4) Coordinate and prepare the sustainability performance reports of their departments and submit the reports to the project coordinators in a timely manner.

## **Project Coordinators**

- Coordinate with and support the working teams or data owners and/or relevant employees for matters that are related to the sustainable development of the organization.
- Make meeting appointments, set meeting agendas, take minutes of meetings related to the sustainability development of the organization, and communicate the resolutions passed by such meetings to all members of the working teams.
- 3) Facilitate and monitor sustainable development performance of the organization jointly with the working teams or data owners. Meet with the working teams, the project directors, and the Sustainability Management Committee of the organization to address the development of the sustainability framework, the materiality of the organization's value chain, and the action plans and guidelines for sustainable development of the organization to bolster the confidence of the organization's stakeholders.
- 4) Support and assist the project directors in identifying action plans and time frames, monitor performance, and consolidate the sustainable development performance of departments in order to prepare the organization's sustainability development report.

(Please refer to the Company's Sustainability Report for further information.)

# **Related Party Transactions**

# **Related Parties and Relationship**

In 2016 and 2017, we entered into transactions with individuals and entities being its related parties and the Company reviewed these transactions with an aim to ensuring that they were reasonable and in accordance with the rules stipulated by the Stock Exchange of Thailand and the Capital Market Supervisory Board. Details about related-party transactions are disclosed in the notes to financial statements for the year ended December 31, 2017 of the Company. Related-party transactions are based on market prices or, where market prices are not available, agreed prices specified in contracts. Relationships between the Company and its related parties are as shown below.

Related Parties	Relationship as at December 31, 2017	Business
Hamon B.Grimm Company Limited ("Hamon B.Grimm")	<ul> <li>Has a common director with the Company, namely Mr. Harald Link</li> <li>Has an executive who is the Company's director, i.e. Miss Caroline Monique Marie Christine Link who is the Company's director is an executive of Hamon B.Grimm</li> <li>Has a common major shareholder, namely Mr. Harald Link</li> </ul>	Construction and distribution of parts and equipment for power plant machinery
B.Grimm Dr. Gerhard Link Building Company Limited ("B.Grimm Gerhard Building")	<ul> <li>Has common directors with the Company, namely Mr. Harald Link, Miss Caroline Monique Marie Christine Link and Mrs. Preeyanart Soontornwata</li> <li>Has an executive who is the Company's director, i.e. Miss Caroline Monique Marie Christine Link who is the Company's director is an executive of B.Grimm Gerhard Building</li> <li>Has a common major shareholder, namely Mr. Harald Link</li> </ul>	Office space rental and service
B.Grimm Trading Corporation Company Limited ("B.Grimm Trading")	<ul> <li>Has common directors with the Company, namely Mr. Harald Link and Mrs. Preeyanart Soontornwata</li> <li>Has an executive who is the Company's director, i.e. Miss Caroline Monique Marie Christine Link who is the Company's director is an executive of B.Grimm Trading</li> <li>Has a common major shareholder, namely Mr. Harald Link</li> </ul>	Distribution of parts, electrical equipment and fire hydrants
B.Grimm Alma Link Building Company Limited ("B.Grimm Alma Building")	<ul> <li>Has common directors with the Company, namely Mr. Harald Link, Miss Caroline Monique Marie Christine Link and Mrs. Preeyanart Soontornwata</li> <li>Has a common major shareholder, namely Mr. Harald Link.</li> </ul>	Real estate and parking space rental

Related Parties	Relationship as at December 31, 2017	Business
B.Grimm Alma Link Building Services Company Limited ("B.Grimm Alma Building Services")	<ul> <li>Has common directors with the Company, namely Mr. Harald Link, Miss Caroline Monique Marie Christine Link and Mrs. Preeyanart Soontornwata</li> <li>Has a common major shareholder, namely Mr. Harald Link</li> </ul>	Utility service and land property rental
KSB Pumps Company Limited ("KSB Pumps")	Has a common major shareholder, namely Mr. Harald Link	Import and distribution of pumps, valves, and their equipment and parts
Merck Limited ("Merck")	<ul> <li>Has common directors with the Company, namely Mr. Harald Link and Miss Caroline Monique Marie Christine Link.</li> <li>Has a common major shareholder, namely Mr. Harald Link.</li> </ul>	Retail distribution of pharmaceutical products, medical supplies, medical products, and chemical products
B.Grimm International Service Company Limited ("B.Grimm Inter Service")	<ul> <li>Has common directors with the Company, namely Mr. Harald Link, Miss Caroline Monique Marie Christine Link and Mrs. Preeyanart Soontornwata</li> <li>Has a common major shareholder, namely Mr. Harald Link</li> </ul>	Real property rental and advisory service
Hemaraj Land and Development Public Company Limited	Has a common director with the Company, namely Mrs. Anchalee Chawanich	Industrial estate
Mr. Harald Link	A director and shareholder of the Company	

# Types and Nature of Related Party Transactions of the Company and its Subsidiaries

Related party transactions of the Company and its subsidiaries for the year ended December 31, 2016 and for the year ended December 31, 2017, classified by type and nature, are as follows:

# Transactions that will continue to exist in the future

1. Use of machinery maintenance, repair and procurement services

	Transac (Ba				
Related Party	Year Ended December 31, 2016	Year Ended December 31, 2017	Rationale and Reasonableness		
<ul><li>1. Hamon B.Grimm</li><li>Expenses</li><li>Trade payable</li></ul>	823,288 880,918	336,000 -None-	We entered into purchase agreements with Hamon B.Grimm for power plant machinery and equipment such as compressors, fans fill sheets and Addax coupling drives as spare parts because Hamon B.Grimm was the exclusive importer of such machinery and equipment. The prices of such machinery and equipment including the payment terms are in line with general commercial terms of the machinery and equipment distribution business.		
<ul><li>2. B.Grimm Trading</li><li>Expenses</li><li>Inventories</li><li>Trade payable</li></ul>	6,061,896 -None- 1,024,632	19,400 53,922 -None-	EPC contractors of the Company opted to use parts and materials, such as wear rings or O-rings as pump seals in the power plant construction and procured such parts and materials from B.Grimm Trading. Therefore, parts and materials for maintenance activities of the power plants are also procured from B.Grimm Trading. The prices of the parts and materials including the payment terms are in line with general commercial terms of the part and material distribution business.		
<ul><li>3. KSB Pumps</li><li>Expenses</li><li>Other revenue</li><li>Inventories</li><li>Trade payable</li></ul>	361,213 50,600 -None-	418,281 -None- 81,100 76,730	Previously, EPC contractors of the Company purchased pumps from KSB Pumps for the power plant construction. Therefore, parts and equipment for maintenance activities of the power plants are also procured from KSB Pumps. The prices and the payment terms are in line with general commercial terms of the part and material distribution business.		
<ul><li>4. Merck</li><li>• Expenses</li><li>• Trade payable</li></ul>	114,600 12,005	89,710 24,032	We purchased chemical products such as sodium hydroxide buffer solution used in the operation of power plant machinery from Merck. These chemical products are used in the raw water treatment process to adjust the pH to the desired value. The prices and the payment terms are in line with general commercial terms of this business.		

	Transact (Ba		
Related Party	Year Ended December 31, 2016	Year Ended December 31, 2017	Rationale and Reasonableness
<ul><li>5. Hemaraj Land and Development</li><li>Expenses</li><li>Trade payable</li></ul>	-None-	404,184 337,504	BPWHA1's power plant operations are based in WHA Industrial Estate which is formerly known as "Hemaraj Chonburi Industria Estate". These are common utility expenses and are charged to all tenants in the industrial estate. Therefore, these transactions are considered necessary and reasonable.

# 2. Real estate purchase, and rental service

	Transaction Size (Baht)						
Related Party	Year Ended December 31, 2016			Year Ended December 31, 2017			Rationale and Reasonableness
	Expense	Trade Payable	Deposit	Expense	Trade Payable	Deposit	
B.Grimm     Gerhard     Building	27,191,537	486,943	6,010,394	32,461,284	538,637	6,969,714	We entered into a rental and service agreement with B.Grimm Gerhard Building for 3-year office space rental. The prices and the payment terms of this transaction are in line with general commercial terms of the real estate rental business.
2. B.Grimm Inter Service	59,400	-None-	4,860	-None-	-None-	1,421,550	ABP entered into a 3-year rental agreement with B.Grimm Inter Service for document storage space in view that the proximity of the location to the Company will lead to convenience in document storage and retrieval. The prices and the payment terms of this transaction are in line with general commercial terms of the real estate rental business.

# 3. Land purchase

	1	<b>Fransaction</b>	Size (Baht	t)		
Related Party	Year Ended December 31, 2016		Year Ended December 31, 2017		Rationale and Reasonableness	
	Asset	Account Payable	Asset	Account Payable		
1. B.Grimm Alma Building	-None-	-None-	36,000,000	-None-	The Company has a policy to expand its solar power plant business and thus bid for the 2017 ground-mounted solar farm projects for governmental agencies and agricultural cooperatives in accordance with the power purchase regulations of the Energy Regulatory Commission ("the projects"). The Company was selected as a project sponsor for the co-development of 4 power generation programs with the War Veterans Organization of Thailand ("WVO") pursuant to the VWO's Letter No. GorHor 5141/1326 dated August 3, 2017. This includes the namely the VWO's project with an installed capacity of 3.58 MW in Khlong Luang Phaeng Sub-district of Muang Chachoengsoa District, Chachoengsoa Province. To fulfill the project's conditions, the Company proceeded with the acquisition of the site for the project and viewed that the land property owned by B.Grimm Alma Building qualified for use as the site of the power plant project. In addition, the Company can directly purchase the land with no price competition with other business operators which may have caused the land to be overpriced. Therefore, the Company purchased the land from B.Grimm Alma Building to satisfy the conditions applicable to the project. The land was transferred to WVO on August 30, 2017.  The Company views that the land purchase is necessary in light of the above reasons and does not constitute the transfer of interest to the Company and its related parties. In addition, the Company is of the opinion that the selling price of the land is on an arm's length basis and offers an internal rate of return that is in line with the Company's Investment Policy. Also, the price of the land was appraised by an independent appraiser and is considered a fair price.	

# 4. Services from Affiliate

	1	<b>Fransaction</b>	Size (Baht	)		
Related Party	Year Ended December 31, 2016		Year Ended December 31, 2017		Rationale and Reasonableness	
	Expense	Account Payable	Expense	Account Payable		
B.Grimm  Gerhard Building	-None-	-None-	835	-None-	The Company has begun to manage its solar farm projects and thus expenses from the documentation of VAT registration for its subsidiaries in connection with solar farm projects. This transaction is thus considered necessary and reasonable.	

# Transaction that will not exist in the future

# 1. Loan agreement from a director

	Transaction	Size (Baht)		
Related Party	Year Ended December 31, 2016	Year Ended December 31, 2017	Rationale and Reasonableness	
1. Mr. Harald Link	Name	4 200 000 000	The Company entered into a short-term loan agreement from a director and major shareholder	
<ul> <li>Loan - Opening net book value</li> </ul>	-None-	1,360,000,000	of the Company in the amount of Baht 1,360 million. The interest rate applicable to the loan	
<ul> <li>Increase         <ul> <li>(decrease)</li> <li>during the year</li> </ul> </li> </ul>		(1,360,000,000)	is MLR-1% p.a. which is within the range of the Company's finance costs. The purpose of the loan is to increase liquidity to the Company	
Loan - Closing     net book value		-None-	and the interest payment and the principal repayment will be made when being demanded.	
Finance costs		41,952,055	The Company intends to no longer seek loans from its related parties in the future.	
Accured interest		-None-		

# **Measures and Approval Processes** for Related Party Transactions

By the resolution of the Board of Directors' Meeting No. 4/2016 which was held on June 8, 2016, the measures and approval processes for related-party transactions between the Company/its subsidiaries and parties who have potential conflicts of interest and connected interest or may have potential conflicts of interest with the Company were established. The Company abides by the securities and exchange laws and the directives of the Capital Market Supervisory Board and the Stock Exchange of Thailand. In this regard, related parties having connected interest shall not be involved in the consideration and approval of such transactions with a view to ensuring that such transactions do not give rise to the transfer of interest between the Company or its shareholders, but are executed in the best interest of all shareholders. The Company also complies with the rules and requirements governing the disclosure of related-party transactions in the notes to the audited financial statements and the Annual Registration Form (Form 56-1) of the Company.

For related-transactions that are by law subject to approval from the Board of Directors' meetings or the shareholder meetings, the Company engages the Audit Committee in the meetings to consider and render opinions on the necessity and rationale of such transactions with a view to ensuring that the transactions are in the best interest of the Company. Execution of transactions with general commercial terms and transactions that deviates from general commercial terms shall be governed by the following principles.

Transactions with general commercial terms

The Board of Directors granted approval in principle for the management team's authority to approve transactions with general commercial terms between the Company/its subsidiaries and their directors, executives, and related parties, provided that the transactions have commercial terms that a person of ordinary prudence would agree to with any unrelated counterparty under similar circumstances where independent bargaining power is exercised without any influence from his/her status as a director, an executive or a related party (as applicable).

A report summarizing these transactions shall be presented to the Board of Directors' meetings that are subsequent to the execution of such transactions.

Transactions that deviate from general commercial terms

Transactions that deviate from general commercial terms shall be subject to review and opinions of the Audit Committee concerning their necessity and the reasonableness of their prices. As such, the Audit Committee ensures that the terms of such transactions in line with the business norms of a particular industry and/or compares with the prices quoted by unrelated parties and/or market prices and/or ensures that the prices or terms are on an arm's length basis and/or demonstrates that the prices and terms of such transactions are reasonable or fair before proposing the transactions to the Board of Directors or shareholder meetings (as applicable) for approval.

In this connection, the securities and exchange laws and the regulations, notifications and directives of the Capital Market Supervisory Board and the Stock Exchange of Thailand, and the requirements for related-party transaction disclosure shall be complied with.

If the related-party transactions that may arise are outside the Audit Committee's areas of expertise, the Company will engage independent experts or the Company's auditors in rendering opinions on such transactions in support of decision-making by the Audit Committee, the Board of Directors or shareholders (as applicable) to ensure that such transactions are in the best interest of the Company. The Company discloses information about related-party transactions in the Annual Registration Statement (Form 56-1) and the notes to the audited financial statements of the Company.

# **Policy on Future Related Party Transactions**

For future related-party transactions, the Company will adhere to the securities and exchange laws and the regulations, notifications, directives or requirements of the Capital Market Supervisory Board, the Office of Securities and Exchange Commission, and the Stock Exchange of Thailand, including the requirements for the disclosure of related-party transactions of the Company or its subsidiaries according to the accounting standards determined by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King.

Such transactions shall not give rise to the transfer of interest between the Company or its shareholders, but must be in the best interest of the Company and all shareholders.

# Future Trend of Related Party Transactions

The Company anticipates that transactions relating to the machinery maintenance and repair, the purchase of machinery parts and materials used in the power plant operation, and the insurance of power plants will continue to exist in the future in support of the repair and maintenance of power plants for enhanced operational efficiency and risk management. The Company will comply with the procurement procedures endorsed by the Board of Directors on June 8, 2016.

The Company forecasts that general commercial transactions such as the purchase of products, payroll services to affiliates, meeting room rental service, office space rental, catering service, and life insurance policies will continue into the future. The Company will ensure that the prices and payment terms are in line with general commercial terms.

In addition, the Group may undergo a restructuring in the future for alignment with the Group's business plan. The Group will ensure that the pricing and payment terms of investments and divestments are appropriate and in accordance with the relevant criteria and laws. However, the transactions relating to financial support for affiliates will not continue into the future.

# Management's Discussion and Analysis

The management's discussion and analysis (MD&A) as described below is based on the audited consolidated financial statements for the year ended DeceMillion Bahter 31, 2016 and the year ended DeceMillion Bahter 31, 2017 and should be read in conjunction with the consolidated financial statements and the notes to the consolidated financial statements. The Group's financial statements have been prepared in accordance with the Thai Financial Reporting Standards (TFRS) unless otherwise specified.

# Significant Events in 2017



# **Initial Public Offering (IPO)**

On July 17, 2017, the Company was paid the IPO proceeds totaling Baht 10,429 million, of which Baht 9,125 million was share premium, from the offering of 651,800,000 shares at the offering price of Baht 16 per share and the par value of Baht 2 per share. The ordinary shares of the Company were fist traded on the Stock Exchange of Thailand on July 19, 2017. The share issuance costs of Baht 393 million were deducted from the share premium account. The Company registered its capital increase with the Ministry of Commerce on July 17, 2017.

On August 21, 2017, the Company received the additional payment of Baht 1,042 million, of which Baht 911 million was share premium, from the over-allotment of 65,100,000 shares at the offering price of Baht 16 per share and the par value of Baht 2 per share. The Company registered the paid-up capital with the Ministry of Commerce on August 21, 2017.

## **Bond Issuance of Project Companies**

On April 21, 2017, Amata B.Grimm Power SPV 1 Company Limited ("ABPSPV1"), which is a subsidiary of the Company, issued 11 tranches of guaranteed bonds in an aggregate amount of Baht 11,500 million. The bonds are guaranteed by the Company's subsidiaries, namely Amata B.Grimm Power 3 Company Limited, Amata B.Grimm Power (Rayong) 1 Company Limited, and Amata B.Grimm Power (Rayong) 2 Company Limited. The terms of the bonds range from 3 to 15 years and the interest rates range from 2.7% - 4.8% p.a.



# **Commercial Operation of XXHP**

XXHP, the two hydro power projects located in Champasak province in the Lao People's Democratic Republic, has an installed capacity of 20.1 MW, and sells electricity to Électricité du Laos Du Laos (EDL) under a 25-year PPA. The COD of the project meets the scheduled commercial operation date specified in the PPA made with EDL, and the construction cost is in line with the budget approved by the lenders.

# **Credit Facilities with Asian Development** Bank (ADB)

On June 16, 2017, the Company entered into a facility agreement with ADB which acts as trustee of the Canadian Climate Fund for a concessional loan facility in an aggregate amount of up to USD 20 million. The purpose of the concessional loan facility is to finance the Company's renewable energy projects in the Philippines, Lao PDR, Myanmar, CaMillion Bahtodia, Indonesia and Vietnam.

# **Financial Performance Analysis**

# **Key Financial Highlight**

	2016 Million Baht	2017 Million Baht	% Change YOY
Sales and service income	27,747	31,482	13.5%
EBITDA	7,494	8,725	16.4%
Net profit	2,316	3,594	55.2%
Normalized net profit (NNP)*	2,090	2,918	39.6%
NNP - Owner of the parent	1,166	1,727	48.1%
EBITDA margin (%)	27.0%	27.7%	
NNP margin (%)	7.5%	9.3%	
% NNP – Owner of the parent (%)	55.8%	59.2%	

<sup>&</sup>lt;sup>1</sup> EBITDA represents profit (loss) for the period before finance costs, income tax (expense) income, depreciation and amortization and inventory write-off (including share of profit (loss) of associates and joint ventures but excluding gain (loss) on exchange rate and non-recurring other income).

## Sales and Service Income

 Sales and service income increased 13.5% YOY from Baht 27,747 million in 2016 to Baht 31,482 million in 2017, primarily driven by an increase in electricity sales of the Group's power plants, namely BPWHA1 in Hemaraj Industrial Estate which has been in commercial operation since NoveMillion Bahter 1, 2016 and ABP5 in Amata Nakorn Industrial Estate which has been in commercial operation since June 1, 2016.

### **EBITDA**

- EBITDA increased 16.4% YOY from Baht 7,494 million in 2016 to Baht 8,725 million in 2017. The increase is in line with the income and EBITDA margin growth.
- EBITDA margin improved to 27.7% in 2017, primarily due to the higher efficiency of the new power plants that became commercially operational, the reduction of operating cost, and an increase in Ft during the year.

## **Normalized Net Profit (NNP)**

- NNP increased 39.6% YOY from Baht 2,090 million in 2016 to Baht 2,918 million in 2017, primarily due to the higher operating profit margin and lower finance costs resulting from loan repayment after the IPO.
- NNP margin improved to 9.3% in 2017 from 7.5% in 2016, primarily due to higher operating profit margin and lower finance cost.
- NNP attributable to owner of the parent was Baht 1,727 million in 2017, accounting for 59.2% of NNP.

<sup>&</sup>lt;sup>2</sup> Normalized net profit = Net profit - Unrealized gain / (loss) from FX - Non-recurring income / (expense)

# **Income Structure**

	2016 Million Baht	2017 Million Baht	% Change YOY
Electricity sales			
Sales to EGAT	16,933	19,354	14.3%
Sales to industrial users - Thailand	8,489	9,394	10.7%
Sales to industrial users - Vietnam	1,217	1,189	-2.3%
Sales to PEA	44	65	50.0%
Sales to EDL	0	107	n/a
Total electricity sales	26,683	30,109	12.8%
Steam sales	539	529	-1.9%
Other sales and services income	524	843	61.0%
Total sales and services income <sup>1</sup>	27,747	31,482	13.5%

<sup>&</sup>lt;sup>1</sup> Total Sales and Service income as shown in the table may not reconcile with the summation of each sales item due to the rounding to million Baht

# **Electricity and Steam Sales Volume**

	2016 GWh	2017 GWh	% Change YOY
Electricity sales volume to EGAT	5,805	6,706	15.5%
Electricity sales volume to industrial users - Thailand			
Amata Nakorn Industrial Estate	1,520	1,551	2.0%
Amata City Industrial Estate	327	345	5.4%
Laem Chabang Industrial Estate	669	688	2.9%
Hemaraj Industrial Estate	0	221	n/a
Bangkadi Industrial Park	118	145	23.0%
Sales volume to industrial users - Thailand	2,634	2,949	12.0%
Sales volume to industrial users - Vietnam	466	483	3.7%

	2016 Ton	2017 Ton	% Change YOY
Steam sales volume			
Amata Nakorn Industrial Estate	124,744	132,244	6.0%
Amata City Industrial Estate	154,749	164,450	6.3%
Laem Chabang Industrial Estate	229,636	214,979	-6.4%
Steam sales volume	509,130	511,673	0.5%

# **Electricity Sales to EGAT**

• Electricity sales to EGAT increased 14.3% YOY from Baht 16,933 million in 2016 to Baht 19,354 million in 2017. The volume of electricity sold to EGAT increased 15.5% YOY from 5,805 GWh in 2016 to 6,706 GWh in 2017, primarily due to the commercial operation of the new plants, namely BPWHA1 and ABP5, as mentioned above, despite a decrease in electricity selling price per unit to EGAT because the energy payment a component of the EGAT electricity tariff, is indexed to the natural gas price which is lower in 2017.

## **Electricity Sales to Industrial Users in Thailand**

• Electricity sales to industrial users in Thailand increased 10.7% YOY from Baht 8,489 million in 2016 to Baht 9,394 million in 2017. The volume of electricity sold to industrial users in Thailand increased 12.0% YOY from 2,634 GWh in 2016 to 2,949 GWh in 2017, primarily due to: 1) the inclusion of new industrial customers of ABP5, BIP2 and BPWHA1, and 2) higher demand from existing industrial customers in Amata City Industrial Estate and Laem Chabang Industrial Estate, despite a decrease in electricity selling price per unit to industrial customers in Thailand, primarily due to the movement of natural gas price.

# **Electricity Sales to Industrial Users in Vietnam**

• Electricity sales to industrial users in Vietnam decreased 2.3% YOY from Baht 1,217 million in 2016 to Baht 1,189 million in 2017. The volume of electricity sold to industrial users in Vietnam increased 3.7% YOY from 466 GWh in 2016 to 483 GWh in 2017, primarily due to higher demand from existing industrial customers, despite a decease in electricity selling price per unit to industrial customers in Vietnam, primarily due to a decrease in the prevailing retail tariff charged by the subsidiary of EVN which the Company's electricity selling prices are set at a premium to.

#### Steam Sales to Industrial Users in Thailand

 Steam sales to industrial users in Thailand decreased 1.9% YOY from Baht 539 million in 2016 to Baht 529 million in 2017 due to a decrase in steam selling price per unit to industrial customers in Thailand, primarily due to a decrease of natural gas price on which the steam prices are generally based.

## **Electricity Sales to EDL**

 Electricity sales to EDL was recorded at Baht 107 million in 2017 after XXHP, which is the Group's first hydro power plant project, started its commercial operation on July 30, 2017.

## **Other Sales and Services Income**

 Other sales and services income increased 61.0% from Baht 524 million in 2016 to Baht 843 million in 2017, primarily due a record of construction revenue which is recognized based on the percentage of completion of the XXHP and Nam Che hydro power plants in Lao PDR.

#### **Cost Structure**

	2016 Million Baht	2017 Million Baht	% Change YOY
Cost of sales and services			
Natural gas	16,285	18,128	11.3%
Cost of electricity - Vietnam	1,084	1,061	-2.1%
O&M	1,739	1,761	1.2%
Other cost of sales and services	638	1,193	87.0%
Total cost of sales and services	19,746	22,143	12.1%
SG&A	939	1,104	17.6%
Depreciation	2,475	2,758	11.5%
Total expenses	23,160	26,005	12.3%

### **Natural Gas**

• Natural gas costs increased 11.3% YOY from Baht 16,825 million in 2016 to Baht 18,128 million in 2017, primarily due to the higher natural gas consumption from the above-mentioned new power plants that have started their commercial operations. This was partially offset by a decrease in the average effective price of natural gas which is tied to the weighted average price of the mass of natural gas from PTT's pool gas.

# **Cost of Electricity in Vietnam**

 Cost of electricity purchased from subsidiaries of EVN decreased 2.1% YOY from Baht 1,084 million in 2016 to Baht 1,061 million in 2017, in line with a decrease in the selling price of electricity sold to industrial users in Vietnam.

## O&M

O&M costs increased 1.2% YOY from Baht 1,739 million in 2016 to Baht 1,761 million in 2017, primarily due to additional O&M costs from the commercial operation of the new power plants stated above.

## **Other Cost of Sales and Services**

 Other cost of sales and service increased 87.0% YOY from Baht 638 million in 2016 to Baht 1,193 million in 2017, mainly due to the record of construction cost which is recognized based on the percentage of completion of the XXHP and Nam Che hydro power plants in Lao PDR.

### SG&A

 Selling, general and administrative expenses increased 17.6% YOY from Baht 939 million to Baht 1,104 million in 2017, mainly due to higher personnel expenses and operating expenses of the power plants in commercial operation as stated above, coupled with the expenses from the special remuneration scheme for the employees of the Company and its subsidiaries to motivate, reward and retain talents in the long run, and IPO expenses.

# **Non-Operating Items**

	2016 Million Baht	2017 Million Baht	% Change YOY
Other revenues	172	187	8.9%
Share of profit (loss) from associates and joint ventures	261	256	-2.0%
Gain (loss) on exchange rate	85	(38)	-145.0%

### Other revenues

 Other revenues increased 8.9% YOY from Baht 172 million in 2016 to Baht 187 million in 2017, primarily due to higher interest income.

# Share of Profit (Loss) from Associates and Joint Ventures

 Share of profit from associates and joint ventures decreased 2.0% YOY from Baht 261 million in 2016 to Baht 256 million in 2017, primarily attributable to profits from an associate, namely ABPIF, and joint ventures, namely BGYSP and BGSENA.

# Gain (Loss) on Exchange Rate

The Company recorded a loss on exchange rate of Baht 38 million in 2017, primarily due to unrealized loss on exchange rate from accounts payable.

## **Finance Cost and Tax**

	2016 Million Baht	2017 Million Baht	% Change YOY
Finance cost			
Interest expense	2,183	2,291	5.0%
Interest expense from ABPIF	594	546	-8.0%
Unrealized loss (gain) on exchange rate	(229)	(1,113)	387.1%
Other finance cost	16	328	1998.1%
Total finance cost	2,564	2,052	-20.0%
Tax expense (income)			
Tax on profits for the period	194	230	18.6%
Deferred tax expense (income)	31	5	-84.5%
Tax expense (income)	225	235	4.2%

## **Finance Cost**

- A 387.1% increase YOY in unrealized gain on exchange rate from financing activities relating to USD-denominated borrowings from Baht 229 million in 2016 to Baht 1,113 million in 2017 due to the appreciation of THB against USD at the end of the accounting period; and
  - » An 8.0% decrease YOY in interest expense from ABPIF from Baht 594 million in 2016 to Baht 546 million in 2017 based on the benefits transferred from the business operation of ABP1 and ABP2.
  - » Offset by a 5.0% increase YOY in interest expenses from borrowing from Baht 2,183 million in 2016 to Baht 2,291 million in 2017, primarily due to higher interest expenses from ABP5, BGPSK and BPWHA1 that have been in commercial operation since 2016. The increase was offset by a decrease in interest expenses from the loan repayment of Baht 5,960 million in the third quarter of 2017 and the lower interest rates from the bond issuance of Baht 11,482 million for ABP3, ABPR1 and ABPR2.

Other finance cost of Baht 328 million in 2017 was mainly from the bond issuance of ABP3, ABPR1 and ABPR2 which led to a write-off of deferred fee and loan interest as well as the payment of prepayment fee.

## **Tax Expense**

· Income tax expenses increased 4.2% YOY from Baht 225 million in 2016 to Baht 235 million in 2017, primarily due to higher income tax on account of an increase of taxable profit.

# **Normalized Net Profit (NNP)**

	2016 Million Baht	2017 Million Baht	% Change YOY
Net profit for the period	2,316	3,594	55.2%
Add unrealized gain on exchange rate	(226)	(1,049)	364.1%
Add non-recurring expenses	0	373	n/a
NNP	2,090	2,918	39.6%
Less non-controlling interest	(924)	(1,191)	28.9%
NNP - Owner of the parent	1,166	1,727	48.1%
NNP per share in 2017 (Baht per share)		0.66	
No. of shares in calculation (Million shares)		2,607	

# **NNP**

- NNP increased 39.6% YOY from Baht 2,090 million in 2016 to Baht 2,918 million in 2017, mainly due to:
  - » Unrealized gain on exchange rate of Baht 1,049 million due to the appreciation of THB at the end of the accounting period; and
- » Non-recurring expenses of Baht 373 million from costs relating to the bond issuance of ABP3, ABPR1 and ABPR2, the expenses from inventory write-off, the IPO expenses, and the expenses from the special remuneration scheme for the employees of the Company and its subsidiaries to motivate, reward and retain talents in the long run.

# **Analysis of Financial Position**

## **Assets**

	Dec 31, 16 Million Baht	Dec 31, 17 Million Baht	Change %
Cash, cash equivalent and short-term investments	10,186	19,176	88.3%
Trade and other receivable - Net	4,262	4,670	9.6%
Other current assets	2,167	1,992	-8.1%
Total current assets	16,615	25,838	55.5%
Plant, property and equipment - Net	46,994	51,470	9.5%
Intangible assets - Net	6,601	7,204	9.1%
Other non-current assets	5,837	4,729	-19.0%
Total non-current assets	59,432	63,403	6.7%
Total assets	76,047	89,241	17.4%

- Total assets increased Baht 13,194 million or 17.4% from Baht 76.047 million as of DeceMillion Bahter 31. 2016 to Baht 89,241 million as of DeceMillion Bahter 31, 2017, primarily due to:
  - » An increase of Baht 8,990 million or 88.3% in cash, cash equivalent and short-term investments mainly from the IPO proceeds.
  - » An increase of Baht 408 million or 9.6% in net trade and other accounts receivable mainly driven by revenue from new power plants, namely BPWHA1 and ABP5, that have begun their commercial operation as stated above.
- » An increase of Baht 4,476 million or 9.5% in net plant, property and equipment mainly from the construction of the ABPR3, ABPR4 and ABPR5 power plants and the acquisition of land for solar farm projects.
- » An increase of Baht 603 million or 9.1% in net intangible assets mainly from the construction of XXHP and Nam Che hydro power plants in Lao PDR.
- » A decrease of Baht 1,108 million or 19.0% in other non-current assets mainly from lower land purchase deposits associated with the acquisition of land properties for solar farm projects.

# **Liabilities and Owners' Equity**

	Dec 31, 16 Million Baht	Dec 31, 17 Million Baht	Change%
Interest-bearing debts	55,205	53,856	-2.4%
Borrowing from related parties (ABPIF)	4,548	4,085	-10.2%
Other current liabilities	3,896	4,739	21.6%
Other non-current liabilities	864	<u>817</u>	-5.4%
Total liabilities	64,513	63,497	-1.6%
Equity attributable to owners of the parent	5,900	18,653	216.1%
Non-controlling interest	<u>5,634</u>	7,091	25.9%
Total owners' equity	11,534	25,744	123.2%

- Total liabilities decreased Baht 1,015 million or 1.6% from Baht 64,512 million as of DeceMillion Bahter 31, 2016 to Baht 63.497 million as of DeceMillion Bahter 31, 2017, primarily due to:
  - » A decrease of Baht 1,349 million or 2.4% mainly from the repayment of loans from banks and related parties, totaling Baht 5,960 million, offset by an increase in bank loans for the power plants that are under construction, namely ABPR3, ABPR4 and ABPR5.
- » A decrease of Baht 463 million or 10.2% in borrowing from a related party (ABPIF) mainly due to the debt settlement as specified in the claim assignment agreements made by ABP1, ABP2 and ABPIF.
- An increase of Baht 843 million or 21.6% in other current liabilities mainly from dividends payable associated with non-controlling interest and higher account payables associated with natural gas expenses due for payment in early January 2018.
- » A decrease of Baht 47 million or 5.4% in other non-current liabilities mainly from accrued expenses of long-term service agreements that gradually decreased.

- Total owners' equity increased Baht 14,210 million or 123.2% from Baht 11,534 million as of DeceMillion Bahter 31, 2016 to Baht 25,744 million as of DeceMillion Bahter 31, 2017, primarily due to:
  - » An increase of Baht 12,753 million or 216.1% in the equity attributable to the owners of the parent, mainly from IPO proceeds and an increased in retained earnings of subsidiaries.
- » An increase of Baht 1,457 million or 25.9% in non-controlling interest mainly from higher retained earnings from the power plants that are in commercial operation and the capital increase by other shareholders in the Company's subsidiaries.

# **Analysis of Cash Flow Statement**

As of DeceMillion Bahter 31, 2017, cash and cash equivalent amounted to Baht 18,209 million, an increase of Baht 9,887 million from the end of 2016, divided into:

	(Million Baht)
Net cash from operating activities	7,505
Net cash from (used in) investing activities	(4,804)
Net cash from financing activities	7,310
Gain (loss) on exchange rate	(124)
Net increase in cash and cash equivalent	9,887

- Net cash from operating activities in 2017 amounted to Baht 7,505 million and was mainly attributed to cash generated by operating activities of the Company and subsidiaries.
- Net cash used in investing activities in 2017 amounted to Baht 4,804 million and was mainly attributed to the construction costs of ABPR3, ABPR4, ABPR5, XXHP and Nam Che power plants, and the acquisition of land.
- Net cash from financing activities in 2017 amounted to Baht 7,310 million mainly attributed to net cash from the IPO proceeds after deduction of loan from banks and related parties and the decrease in borrowings from a related party (ABPIF) and interest expenses.

### **Key Financial Ratios**

### For the Year Ended DeceMillion Bahter 31

	2015	2016	2017
Liquidity Ratio			
Current ratio (times)	1.6	2.3	2.7
Quick ratio <sup>(1)</sup> (times)	1.4	2.2	2.6
Cashflow liquidity ratio (times)	0.6	1.0	0.8
Account receivable turnover <sup>(2)</sup> (times)	7.7	7.8	7.6
Average collection period (days)	46.9	46.4	47.3
Account payable turnover <sup>(3)</sup> (times)	6.7	6.8	9.8
Account payable days (days)	53.4	53.1	36.6
Profitability Ratio			
Gross profit margin (percent)	15.7	20.5	21.4
EBITDA margin <sup>(4)</sup> (percent)	20.5	27.0	27.7
Cash to profit margin (percent)	1.6	1.5	1.4
NNP margin <sup>(5)</sup> (percent)	5.3	7.5	9.3
Efficiency Ratio			
Return on equity (percent) <sup>(5)</sup>	23.6	27.0	14.1
Return on assets (percent) <sup>(6)</sup>	2.3	3.0	3.5
Asset turnover (time)	0.4	0.4	0.4
Financial Policy Ratio			
Debt to equity ratio (times)	7.9	5.6	2.5
Interest Bearing Debt to equity ratio <sup>(7)</sup> (times)	6.3	4.8	2.1
Net debt to equity ratio (8) (9) (times)	5.5	4.0	1.4
Interest coverage ratio (times) <sup>(10)</sup>	2.5	2.5	2.6
Commitment coverage ratio (Cash basis) (times)	0.2	0.3	0.3

- Remark: (1) Inclusive of restricted cash less than 1 year.
  - (2) Inclusive of accrued income.
  - (3) Inclusive of accrued expenses.
  - (4) EBITDA and NNP is not a measure of financial performance under Thai Financial Reporting Standards (TFRS).
  - (5) Return on equity is calculated as profit attributable to owners of parent divided by the aveage of equity attributable to owners of the parent.
  - Return on total assets is calculated as profit for the year divided by the average of total assets.
  - (7) Interest bearing debt is calculated from interest bearing debt divided by total equity. Interest bearing debt as of DeceMillion Bahter 31, 2017 includes (i) short term borrowings from financial institutions, (ii) short-term borrowings from a related party, (iii) short-term borrowings from a third party, (iv) long-term borrowings from financial institutions, net and (v) debentures.
  - (8) Net debt is interest bearing debt less cash and cash equivalents.
  - (9) Under the terms and conditions of debentures issued by B.Grimm Power, B.Grimm Power must maintain Net debt to equity ratio not to exceed 6:1
  - (10) Interest coverage ratio includes interest expense from ABPIF.

### Report of the Board of Directors' Responsibility for Financial Reporting

The Board of Directors places emphasis on its duties and responsibilities for the oversight of the Company's business in accordance with the Corporate Governance Policy and for ensuring that the financial statements and financial information that appear in the Annual Report are accurate, complete and adequately disclosed. The financial statements have been prepared in full accordance with the Thai Financial Reporting Standards with careful judgment. An effective internal control system has been established and maintained to provide reasonable assurance regarding the reliability of the financial statements, the effective safeguarding and protection of assets, the non-existence of frauds or irregularities, and the best interest of the Company. In addition, applicable laws, rules and regulations have been complied with. The Audit Committee has reported its performance to the Board of Directors and the Audit Committee's opinions in this respect have been included in the Audit Committee's Report which is a part of this Annual Report.

The Board of Directors is of the opinion that the Company's overall internal control system is satisfactory and can provide reasonable assurance regarding the reliability of the consolidated financial statements and the separate financial statement for the year ended December 31, 2017. The Company's auditor has audited the financial statements in accordance with the auditing standard and has rendered an opinion that the financial statements presented fairly in all material respects the Company's financial position, results of operation, and cash flows in conformity with the financial reporting standards.

(Mr. Harald Link)

W/.)

Chairman

(Mrs. Preeyanart Soontornwata)

President

### Independent Auditor's Report

### To the shareholders and the Board of Directors of B.Grimm Power Public Company Limited

### My opinion

In my opinion, the consolidated financial statements of B.Grimm Power Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial statements of the Company present fairly, in all material respects, the consolidated and separate financial position of the Group and of the Company as at 31 December 2017, and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

### What I have audited

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2017;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include a summary of significant accounting policies.

### **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 Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements that are 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. I determine one key audit matter: share-based payments. The matter was 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.

### Key audit matter

### Share-based payments

Refer to the Note 4 'Critical accounting estimates and judgement' and the Note 35 'Share-based payments'.

In May 2017, the Group put in place a 'Special Remuneration Scheme' for its directors and employees where participating employees will be granted with the right to use their remuneration to subscribe for initial public offering shares (IPO Shares) at the IPO Share price, provided that they enter into an agreement with B. Grimm Power or its subsidiaries to continue their employment for at least next four calendar years (the lock-up period). If the employees resign before the lock-up period, they will be forced to sell all of their shares and return the proceed from sales to the Group. The accounting treatment of the scheme falls in the scope of TFRS 2 - 'Share-based payments'.

I focused on this area because the details of the scheme are complex. Determining the appropriate accounting treatment requires various judgements to be made, including the likelihood of the employees continuing to work with the Group until the scheme's lockup period ends, as well as the need to determine the grant date and vesting date.

In addition, the shares' fair valuation method involves significant management judgement about future business results and the discount rates used in future cash flow forecasts.

I assessed the management's consideration that the Special Remuneration Scheme for its directors and employees should be accounted for applying TFRS 2

During this assessment, I discussed the assumptions with management and challenged whether they are realistic under present and historical circumstances. I reviewed the scheme's conditions seeking any inconsistences with the management's analysis. I did not note any significant issues.

In testing the fair valuation method, I engaged an auditor expert to review the valuation of the IPO shares computed by the Group's advisors. The auditor expert's works included reviewing the appropriateness and reasonableness of the methodology used in the valuation, the estimation of the discount rate and discount factor, and the model's logic and calculations, comparing with market practice in a comparable industry.

I also evaluated the reasonableness of key assumptions used in calculating the fair value by comparing to the relative contracts, the Group's historical data, market data in a comparable industry and the business plan of the Group. I noted no significant exceptions.

I verified the supporting details for the share-based payment, including the personal information of employees and the number of employees who joined the scheme, and tested the calculation. I did not find any material inconsistency with the supporting evidences.

Based on procedures performed, I found that the accounting treatment is appropriate and the fair value of shares is within an acceptable range.

### Other information

The directors are 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 the audit committee.

### Responsibilities of the directors for the consolidated and separate financial statements

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as the directors determine 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, the directors are responsible for assessing the Group 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 the directors either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities for overseeing the Group 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 scepticism 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 and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' 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 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 the audit committee 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 the audit committee 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 the audit committee, 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.

PricewaterhouseCoopers ABAS Ltd.

Kajornkiet Aroonpirodkul

Certified Public Accountant (Thailand) No. 3445

Bangkok

28 February 2018

### **Statements of Financial Position**

As at 31 December 2017

		Consolidated		Separate		
		financial st	atements	financial sta	atements	
	•	2017	2016	2017	2016	
	Notes	Baht	Baht	Baht	Baht	
Assets						
Current assets						
Cash and cash equivalents	7	18,209,461,277	8,322,125,151	7,168,721,667	1,068,995,162	
Restricted cash within one year	8	620,863,539	703,539,144	-	-	
Short-term investments	9	346,038,864	1,160,514,758	-	300,057,180	
Trade and other receivables, net	10	4,669,942,095	4,262,304,981	1,690,296,448	1,533,621,691	
Short-term loans to related parties	34.5	207,000,000	268,000,000	5,087,755,820	5,330,000,000	
Spare parts and supplies, net	11	877,917,698	818,663,661	-	-	
Other current assets	12	906,235,130	1,079,668,094	27,401,275	20,517,813	
Total current assets		25,837,458,603	16,614,815,789	13,974,175,210	8,253,191,846	
Non-current assets						
Restricted cash over than one year	8	236,871,148	255,797,659	_	-	
•	8 34.6	236,871,148	255,797,659	- 1,137,947,500	-	
Long-term loan to a related party		236,871,148	255,797,659 - -	- 1,137,947,500 7,752,863,824	- - 7,159,770,682	
Long-term loan to a related party Investments in subsidiaries	34.6	236,871,148 - - 1,358,033,401	255,797,659 - - - 1,504,329,090		7,159,770,682	
Restricted cash over than one year Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures	34.6 13	-	-		-	
Long-term loan to a related party Investments in subsidiaries Investments in associate	34.6 13 14 (a)	- 1,358,033,401	- 1,504,329,090	7,752,863,824	7,159,770,682 - 972,642,900	
Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures Investment property	34.6 13 14 (a) 14 (b)	1,358,033,401 1,069,543,864	1,504,329,090 1,049,333,153	7,752,863,824	-	
Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures	34.6 13 14 (a) 14 (b) 15	1,358,033,401 1,069,543,864 4,902,251	1,504,329,090 1,049,333,153 4,902,251	7,752,863,824 - 972,661,032 -	972,642,900 - 17,780,191	
Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures Investment property Property, plant and equipment, net	34.6 13 14 (a) 14 (b) 15 16	1,358,033,401 1,069,543,864 4,902,251 51,469,851,660	1,504,329,090 1,049,333,153 4,902,251 46,993,796,124	7,752,863,824 - 972,661,032 - 25,198,052	972,642,900 - 17,780,191	
Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures Investment property Property, plant and equipment, net Intangible assets, net	34.6 13 14 (a) 14 (b) 15 16	1,358,033,401 1,069,543,864 4,902,251 51,469,851,660 7,203,803,094	1,504,329,090 1,049,333,153 4,902,251 46,993,796,124 6,601,153,334	7,752,863,824 - 972,661,032 - 25,198,052	972,642,900 -	
Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures Investment property Property, plant and equipment, net Intangible assets, net Deposit for land purchase	34.6 13 14 (a) 14 (b) 15 16 17 36.4 (i)	1,358,033,401 1,069,543,864 4,902,251 51,469,851,660 7,203,803,094 1,369,560,000	1,504,329,090 1,049,333,153 4,902,251 46,993,796,124 6,601,153,334 2,570,860,000	7,752,863,824 - 972,661,032 - 25,198,052 61,769,199	972,642,900 - 17,780,191 29,189,618	
Long-term loan to a related party Investments in subsidiaries Investments in associate Investments in joint ventures Investment property Property, plant and equipment, net Intangible assets, net Deposit for land purchase Deferred tax assets	34.6 13 14 (a) 14 (b) 15 16 17 36.4 (i)	1,358,033,401 1,069,543,864 4,902,251 51,469,851,660 7,203,803,094 1,369,560,000 100,851,780	1,504,329,090 1,049,333,153 4,902,251 46,993,796,124 6,601,153,334 2,570,860,000 90,676,642	7,752,863,824 972,661,032 - 25,198,052 61,769,199 - 1,784,146	972,642,900 - 17,780,191 29,189,618 - 926,103	

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

### **Statements of Financial Position (Cont'd)**

As at 31 December 2017

		Consoli	dated	Sepai	rate
		financial st	atements	financial st	atements
	-	2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Liabilities and equity					
Current liabilities					
Short-term borrowings from financial					
institutions	21	-	195,773,690	-	-
Trade and other payables	20	4,491,897,573	3,614,577,600	466,372,395	192,078,096
Short-term borrowings from third party		38,844,076	40,885,101	38,844,076	40,885,101
Current portion of long-term borrowings					
from financial institutions, net	21	1,844,656,257	2,480,913,811	198,863,589	556,188,281
Current portion of debentures, net	22	2,298,072,883	-	2,298,072,883	-
Current portion of long-term borrowings					
from a related party	34.8	527,000,000	462,500,000	-	-
Accrued income tax		67,663,602	54,103,025	-	-
Other current liabilities	-	179,227,711	227,326,640	4,883,744	20,062,827
Total current liabilities	-	9,447,362,102	7,076,079,867	3,007,036,687	809,214,305
Non-current liabilities					
Long-term borrowings from					
financial institutions, net	21	34,996,477,479	46,998,098,292	1,710,879,421	6,146,113,636
Debentures, net	22	14,677,765,205	5,489,078,064	3,195,916,977	5,489,078,064
Long-term borrowings from a related party	34.8	3,558,000,000	4,085,000,000	-	-
Deferred tax liabilities	18	85,552,156	75,483,749	-	-
Provision for decommissioning costs		233,858,867	226,644,238	-	-
Employee benefit obligations	23	175,435,372	156,488,086	8,920,730	4,630,517
Other non-current liabilities	-	322,608,215	405,604,801		-
Total non-current liabilities		54,049,697,294	57,436,397,230	4,915,717,128	11,639,822,217
Total liabilities		63,497,059,396	64,512,477,097	7,922,753,815	12,449,036,522

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

### **Statements of Financial Position (Cont'd)**

As at 31 December 2017

		Consoli	dated	Separ	ate
		financial st	atements	financial st	atements
	•	2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Liabilities and equity (Cont'd)					
Equity					
Share capital	24				
Authorised share capital					
2,700,000,000 ordinary shares					
at par value of Baht 2 each	:	5,400,000,000	5,400,000,000	5,400,000,000	5,400,000,000
Issued and paid-up share capital					
2,606,900,000 ordinary shares,					
fully paid-up of Baht 2 each					
(2016: 1,890,000,000 ordinary shares,					
fully paid-up of Baht 2 each)		5,213,800,000	3,780,000,000	5,213,800,000	3,780,000,000
Share premium on ordinary shares	24	9,644,039,948	-	9,644,039,948	-
Reserved shares for employee benefits					
under share-based payments scheme	24	(169,355,200)	-	(79,616,000)	-
Other reserve - share-based payments	35	36,926,838	-	20,862,675	-
Retained earnings					
Appropriated - legal reserve	25	196,385,486	137,796,590	196,385,486	137,796,590
Unappropriated		4,005,015,258	2,057,853,799	1,059,245,109	67,016,089
Other components of equity	•	(273,559,509)	(75,488,059)		
Equity attributable to owners of the parent		18,653,252,821	5,900,162,330	16,054,717,218	3,984,812,679
Non-controlling interests		7,090,524,731	5,633,912,453	<u>-</u> .	-
Total equity		25,743,777,552	11,534,074,783	16,054,717,218	3,984,812,679
Total liabilities and equity		89,240,836,948	76,046,551,880	23,977,471,033	16,433,849,201

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

### **Statements of Comprehensive Income**

For the year ended 31 December 2017

		Consol		Separa	
		financial s		financial sta	
	Notes	2017 Baht	2016 Baht	2017 Baht	2016 Bah
Sales and services income	26	30,651,056,235	27,232,261,728	172,955,050	322,801,392
Construction revenue under					
concession agreements		831,119,432	514,604,523		
Total revenue from sales and services		31,482,175,667	27,746,866,251	172,955,050	322,801,392
Cost of sales and services	28	(24,012,893,487)	(21,631,653,132)	(58,632,075)	(25,098,388)
Construction cost under concession agreements		(729,552,037)	(428,838,139)	<u>-</u>	
Total costs of sales and services		(24,742,445,524)	(22,060,491,271)	(58,632,075)	(25,098,388)
Gross profit		6,739,730,143	5,686,374,980	114,322,975	297,703,004
Other income	27	187,020,649	171,724,716	1,769,964,872	743,968,092
Administrative expenses	28	(1,263,075,295)	(1,099,954,481)	(186,709,752)	(98,660,955
Gain (loss) on exchange rate		(38,383,880)	85,254,817	(1,898,905)	(5,403,569
Finance costs	29	(2,052,693,178)	(2,563,406,928)	(524,759,317)	(430,055,170
Share of profit from associate					
and joint ventures	14	255,751,851	261,017,401	-	
Profit before income tax		3,828,350,290	2,541,010,505	1,170,919,873	507,551,402
ncome tax	30	(234,500,367)	(225,141,263)	858,043	152,725
Profit for the year		3,593,849,923	2,315,869,242	1,171,777,916	507,704,127
Other comprehensive income (expense):					
tems that will be reclassified					
subsequently to profit or loss					
Currency translation difference		(236,871,137)	5,035,547	<u>-</u>	
Total comprehensive income for the year		3,356,978,786	2,320,904,789	1,171,777,916	507,704,127
Profit attributable to:					
Owners of the parent		2,126,710,355	1,380,249,849	1,171,777,916	507,704,127
Non-controlling interests		1,467,139,568	935,619,393	<u> </u>	
		3,593,849,923	2,315,869,242	1,171,777,916	507,704,127
Fotal comprehensive income attributable to:					
Owners of the parent		1,928,656,346	1,385,478,628	1,171,777,916	507,704,127
Non-controlling interests		1,428,322,440	935,426,161	-	
		3,356,978,786	2,320,904,789	1,171,777,916	507,704,127
Earnings per share					
	24	0.00	0.00	0.50	0.0
Basic earnings per share	31	0.96	0.93	0.53	0.34

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

### Statement of Changes in Equity

For the year ended 31 December 2017

					Consolidate	Consolidated financial statements	ents			
	-			Attributable	Attributable to owners of the parent	arent				
	_				Other co	Other components of equity	ty			
					Other					
					comprehensive					
					income					
				!	(exbeuses)					
					Currency	Changes in				
					translation	parent's				
		Issued and	Retained	earnings	differences	ownership	Total other	Total		
		dn-paid	Appropriated		of financial	interests	components	owners	Non-controlling	
	Notes	share capital Baht	- legal reserve Baht	Unappropriated Baht	statements Baht	in subsidiaries Baht	of equity Baht	of the parent Baht	interests Baht	Total equity Baht
Opening balance at 1 January 2016		1,578,140,000	112,411,384	1,138,823,156	(6,464,542)	(78,646,958)	(85,111,500)	2,744,263,040	4,345,796,866	7,090,059,906
Changes in equity for the year 2016										
Additional paid-up share capital Additional paid-up share capital	24	2,201,860,000	•	,	•	•	•	2,201,860,000	•	2,201,860,000
of subsidiaries		•	1	•	ı	•	ı	ı	826,865,319	826,865,319
Legal reserve	25	ı	25,385,206	(25,385,206)	1	1	ı	ı	1	1
Dividends	32	•	1	(435,834,000)	1	ı	ı	(435,834,000)	(469,781,231)	(905,615,231)
Changes in parent's ownership interests										
in subsidiaries		•	•	•	1	4,394,662	4,394,662	4,394,662	(4,394,662)	1
Total comprehensive income for the year	•	'	<u> </u>	1,380,249,849	5,228,779	'	5,228,779	1,385,478,628	935,426,161	2,320,904,789
Closing balance at 31 December 2016		3,780,000,000	137,796,590	2,057,853,799	(1,235,763)	(74,252,296)	(75,488,059)	5,900,162,330	5,633,912,453	11,534,074,783

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

B.Grimm Power Public Company Limited

## Statement of Changes in Equity (Cont'd)

For the year ended 31 December 2017

							Consolidated fir	Consolidated financial statements					
						Attributable to c	Attributable to owners of the parent						
								Other co	Other components of equity	uity			
				Reserved				Other					
				shares for				comprehensive					
				employee				exbense					
				benefits				Currency	Changes in				
			Share	under				translation	parent's				
		Issued and	premium on	share-based	Other reserve	Retained earnings	earnings	differences	ownership	Total other	Total		
		dn-paid-nb	ordinary	payments	- share-based	Appropriated		of financial	interests	components	owners	Non-controlling	
		share capital	shares	scheme	payments	- legal reserve	Unappropriated	statements	in subsidiaries	of equity	of the parent	interests	Total equity
	Notes	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
Opening balance at 1 January 2017		3,780,000,000		1	ı	137,796,590	2,057,853,799	(1,235,763)	(74,252,296)	(75,488,059)	5,900,162,330	5,633,912,453	11,534,074,783
Changes in equity for the year 2017													
Issue of shares	24	1,433,800,000	9,644,039,948	•	1	•	•	•	•	•	11,077,839,948	1	11,077,839,948
Reserved shares for employee benefits													
under share-based payments scheme	24	•	•	(169,355,200)	•	•	1	1	•	•	(169,355,200)	•	(169,355,200)
Share-based payments	35	•	•	1	36,926,838	•		1	•	•	36,926,838	•	36,926,838
Additional paid-up share capital													
of subsidiaries		•	•	1	1	•	•	1	•	•	1	905,400,884	905,400,884
Legal reserve	25	•	•	1	•	58,588,896	(58,588,896)	1	•	•	•	•	
Dividends	32	'	•	'	'	'	(120,960,000)	1	'	•	(120,960,000)	(877,128,487)	(998,088,487)
Changes in parent's ownership interests													
in subsidiaries		•	•	1	•	'	1	1	(17,441)	(17,441)	(17,441)	17,441	
Total comprehensive income for the year		-	'		'	'	2,126,710,355	(198,054,009)	'	(198,054,009)	1,928,656,346	1,428,322,440	3,356,978,786
Closing balance at 31 December 2017		5,213,800,000	9,644,039,948	(169,355,200)	36,926,838	196,385,486	4,005,015,258	(199,289,772)	(74,269,737)	(273,559,509)	18,653,252,821	7,090,524,731	25,743,777,552
							!!					11	

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

**B.Grimm Power Public Company Limited** 

## Statement of Changes in Equity (Cont'd)

For the year ended 31 December 2017

				Separate fi	Separate financial information			
					I	Retained earnings	arnings	
			Share	Reserved shares				
		Issued and paid-up	premium on ordinary	for employee benefits under share-based	Other reserve - share-based	Appropriated		Total
	40 N	share capital	shares	payments scheme	payments	- legal reserve	Unappropriated	equity
		מוו			מוני			0
Opening balance at 1 January 2016		1,578,140,000	•	ı		112,411,384	20,531,168	1,711,082,552
Changes in equity for the year 2016								
Additional paid-up share capital	24	2,201,860,000	•	•	1	1	•	2,201,860,000
Legal reserve	25	•	•	•	•	25,385,206	(25,385,206)	1
Dividends	32	1	•	1	i	•	(435,834,000)	(435,834,000)
Total comprehensive income for the year					'	'	507,704,127	507,704,127
Closing balance at 31 December 2016		3.780.000.000	•	1	ı	137,796,590	67.016.089	3.984.812.679
	II							
Opening balance at 1 January 2017		3,780,000,000	,		•	137,796,590	67,016,089	3,984,812,679
Changes in equity for the year 2017								
Issue of shares	24	1,433,800,000	9,644,039,948	•	1	1	•	11,077,839,948
Reserved shares for employee benefits								
under share-based payments scheme	24	•	•	(79,616,000)	1	•	•	(79,616,000)
Share-based payments	35	•	•	•	20,862,675	•	•	20,862,675
Legal reserve	25	•	•	•	1	58,588,896	(58,588,896)	1
Dividends	32		•	•	1	1	(120,960,000)	(120,960,000)
Total comprehensive income for the year	ı		1				1,171,777,916	1,171,777,916
Closing balance at 31 December 2017	•	5,213,800,000	9,644,039,948	(79,616,000)	20,862,675	196,385,486	1,059,245,109	16,054,717,218
	J							

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

### **Statements of Cash Flows**

For the year ended 31 December 2017

		Consolid	lated	Separa	ite
		financial sta	tements	financial sta	tements
	-	2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Cash flows from operating activities					
Net profit before income tax for the year		3,828,350,290	2,541,010,505	1,170,919,873	507,551,402
Adjustments for:					
- Depreciation and amortisation	28	2,758,020,421	2,474,764,738	10,985,886	5,371,873
- Amortisation of deferred financing fees	29	204,171,231	46,430,955	29,852,889	8,393,991
- Allowance for slow moving spare parts and supplies		49,162,059	-	-	-
- Loss (gain) on disposal of fixed assets		(1,995,749)	3,122,183	-	-
- Interest income	27	(106,298,959)	(77,185,104)	(225,257,452)	(87,453,821)
- Interest expenses		2,880,313,412	2,776,295,063	496,947,453	449,648,733
- Employee benefit expenses	23	19,173,598	22,783,500	820,175	763,625
- Share-based payments to employee	35	36,926,838	-	9,669,859	-
- Unrealised currency translation (gain) loss		(1,048,730,831)	(225,974,532)	48,025,584	4,186,383
- Dividends income	27	-	-	(1,544,218,013)	(656,496,326)
- Share of profit from associate and					
joint ventures	14	(255,751,851)	(261,017,401)	-	-
- Construction revenue under					
concession agreements		(831,119,432)	(514,604,523)	-	-
Changes in operating assets and liabilities:					
Decrease (increase) in operating assets					
- Trade and other receivables		1,985,068,816	163,125,331	(69,071,180)	(25,210,919)
- Spare parts and supplies		(82,745,625)	10,195,505	-	-
- Other current assets		149,341,938	68,280,203	1,751,990	(1,933,577)
- Other non-current assets		(58,787,666)	11,094,481	(50,724,206)	100,000
Increase (decrease) in operating liabilities					
- Trade and other payables		(1,789,497,516)	(255,553,190)	67,234,501	919,668
- Other current liabilities		(49,443,125)	(36,625,110)	(15,179,085)	(61,627,844)
- Employee benefits obligations	23	-	(2,400,000)	-	-
- Other non-current liabilities	_	(81,878,818)	128,706,033		
Cash generated from (used in) operating activities		7,604,279,031	6,872,448,637	(68,241,726)	144,213,188
- Interest received		139,050,637	97,819,813	52,881,278	67,851,659
- Income tax paid	-	(237,900,902)	(198,626,039)	(8,635,453)	(7,653,994)
Net cash generated from (used in) operating activities		7,505,428,766	6,771,642,411	(23,995,901)	204,410,853

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

### **Statements of Cash Flows (Cont'd)**

For the year ended 31 December 2017

Cash flows from investing activities Decrease (increase) in restricted cash Cash received (paid) for short-term investments Repayments received from short-term loans to related parties	Notes	financial st 2017 Baht	2016	financial sta	atements 2016
Decrease (increase) in restricted cash Cash received (paid) for short-term investments Repayments received from short-term loans to	Notes			2017	2016
Decrease (increase) in restricted cash Cash received (paid) for short-term investments Repayments received from short-term loans to	Notes	Baht			2010
Decrease (increase) in restricted cash Cash received (paid) for short-term investments Repayments received from short-term loans to			Baht	Baht	Baht
Cash received (paid) for short-term investments Repayments received from short-term loans to					
Repayments received from short-term loans to		101,602,116	(261,625,670)	-	-
		814,475,894	(193,911,514)	300,057,180	(300,057,180)
related parties					
related parties		61,000,000	30,600,000	4,861,052,430	748,800,000
Payments for short-term loans to related parties		-	-	(4,618,808,250)	(4,997,000,000)
Payments for long-term loans to related parties	34.6	-	-	(32,800,000)	-
Payments for investment in subsidiaries,					
net of cash acquired		-	(10,697,430)	-	-
Payments for additional investment in subsidiaries	13	-	-	(574,240,216)	(2,517,191,010)
Proceed from disposal of investment in associate		-	90,001,000	-	90,001,000
Proceeds from capital reduction of an associate	14 (a)	138,604,562	134,846,343	-	-
Payments for additional investment in joint ventures	14 (b)	-	(39,905,120)	-	(39,905,120)
Payments for capital contribution under					
employee benefits scheme of subsidiaries		-	-	(19,371,620)	-
Payments for purchase of property, plant and equipment		(6,245,792,495)	(9,292,815,502)	(12,631,818)	(10,212,776)
Payments for purchase of intangible assets		(25,916,742)	(710,135,829)	(34,733,993)	(18,201,789)
Proceeds from disposals of property, plant and equipment		3,913,021	2,133,112	-	
Refund of deposit for land		1,820,052,430	-	-	
Payments for deposit for land purchase		(1,557,500,000)	(2,570,860,000)	-	
Dividends received		216,202,806	105,823,540	700,298,162	656,496,326
Advance payments for project development	_	(130,539,289)	(338,674,412)	-	
Net cash generated from (used in) investing activities	-	(4,803,897,697)	(13,055,221,482)	568,821,875	(6,387,270,549)
Cash flows from financing activities					
Proceeds from issuance of shares and					
additional paid-up capital	24	11,301,044,800	2,201,860,000	11,390,784,000	2,201,860,000
Cash paid for shares issuance costs	24	(392,560,052)	_,,,,,,,,,,	(392,560,052)	_,,_,
Proceeds from additional paid-up capital of subsidiaries		778,512,425	724,897,355	-	
Proceeds from short-term borrowings from		,,	,,		
financial institutions		267,000,000	534,773,690	_	
Proceeds from long-term borrowings from		,,,,,,,,,	, ,,,,,,,		
financial institutions	21	5,814,161,469	10,952,370,885	_	1,842,100,000
Proceeds from issuance of debentures	22	11,500,000,000	5,500,000,000	_	5,500,000,000
Repayments to short-term borrowings from		, , ,	.,,,		.,,,
financial institutions		(462,773,690)	(427,000,000)	_	_
Repayments to long-term borrowings from		( - , -,,	( ,===,===,		
financial institutions	21	(17,297,663,709)	(5,710,513,714)	(4,800,000,000)	(2,159,916,000)
Proceed from short-term borrowings from a related party		1,360,000,000	-	1,360,000,000	(=,:::,:::,:::,:::,:::,:::,:::,:::,::::,::::
Repayment to short-term borrowings from a related party		(1,360,000,000)	_	(1,360,000,000)	_
Repayments to long-term borrowings from		(1,222,222,222)		(1,000,000,000)	
a related party	34.8	(462,500,000)	(450,000,000)	_	_
Payments for deferred financing fees		(36,538,500)	(43,394,206)	(17,500,000)	(11,983,340)
Dividends paid to shareholders		(120,960,000)	(435,834,000)	(120,960,000)	(435,834,000)
Dividends paid to one-controlling interests		(397,473,850)	(469,781,231)	(.25,500,000)	(.55,551,500)
nterest paid		(3,179,890,651)	(2,814,887,000)	(504,863,417)	(408,617,235)
Net cash generated from financing activities	-	7,310,358,242	9,562,491,779	5,554,900,531	6,527,609,425

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

### **Statements of Cash Flows (Cont'd)**

For the year ended 31 December 2017

		Consolid	dated	Separa	ate
		financial sta	itements	financial sta	tements
	=	2017	2016	2017	2016
	Notes	Baht	Baht	Baht	Baht
Net increase in cash and cash equivalents		10,011,889,311	3,278,912,708	6,099,726,505	344,749,729
Cash and cash equivalents at beginning of the year		8,322,125,151	5,038,601,828	1,068,995,162	724,245,433
Exchange gain (loss) on cash and cash equivalents	-	(124,553,185)	4,610,615		
Cash and cash equivalents at end of the year	=	18,209,461,277	8,322,125,151	7,168,721,667	1,068,995,162
Supplementary information :					
Non-cash items					
- Payables arising from purchases of property, plant					
and equipment and intangible assets		189,168,789	335,752,046	5,524,883	1,907,365
- Provision arising from decommissioning cost		7,214,629	226,644,238	-	-
- Intangible assets from consession agreements		831,119,432	514,604,523	-	-
- Transfer amount due from a related party to					
long-term loan to a related party	34.6	-	-	1,105,147,500	-
- Change of status from other long-term investment					
to investment in a subsidiary		-	5,000,000	-	-
- Transfer advances for shares subscription to					
investment in subsidiaries	13	-	-	-	32,500,000
- Payable arising from investing in subsidiaries	13	-	-	499,850	117,233,156
- Transfer advances for project development					
to intangible assets		-	562,059,915	-	-
- Capital contribution under employee benefits					
scheme of subsidiaries		-	-	13,757,759	-
- Transfer property, plant and equipment to					
spare parts and supplies	16	22,493,281	10,155,716	-	-
- Borrowing costs capitalised to power plant under					
construction	16	262,055,241	270,499,955	-	-
- Transfer land deposit to property, plant					
and equipment		938,747,570	-	-	-
- Transfer land to land use right	16	256,666,744	-	-	-
- Accrued dividend income	10	27,047,674	-	843,919,851	-

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

### **Notes to the Consolidated and Separate Financial Statements**

For the year ended 31 December 2017

### 1 General information

B.Grimm Power Public Company Limited ("the Company") is a public limited company which is listed on the Stock Exchange of Thailand and is incorporated and domiciled in Thailand. The address of the Company's registered office is 5, Krungthepkreetha Road, Huamark, Bangkapi, Bangkok 10240 Thailand.

The Company registered the change of the Company's status to a public company limited, in accordance with the Public Limited Companies Act B.E. 2535, on 9 September 2016. The Company's shares are traded in the Stock Exchange of Thailand commencing 19 July 2017.

For reporting purposes, the Company and its subsidiaries are referred to as "the Group".

The principal business operations of the Group is the generation and distribution of electricity for the government sectors and Industrial Users both in Thailand and overseas.

These Group consolidated financial statements were authorised for issue by the Board of Directors on 28 February 2018.

### 2 Accounting policies

The principal accounting policies applied in the preparation of these consolidated and separate financial statements are set out below:

### 2.1 Basis of preparation

The consolidated and separate financial statements have been prepared in accordance with Thai generally accepted accounting principles under the Accounting Act B.E. 2543, being those Thai Financial Reporting Standards issued under the Accounting Profession Act B.E. 2547, and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act.

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting polices below.

The preparation of financial statements in conformity with Thai generally accepted accounting principles requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

An English version of the consolidated and separate financial statements have been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

### 2.2 Revised financial reporting standards, and related interpretations

2.2.1 Revised financial reporting standards and interpretations are effective on 1 January 2017 which have significant changes and are relevant to the Group:

TAS 27 (revised 2016)
TAS 28 (revised 2016)
TAS 38 (revised 2016)
TFRS 11 (revised 2016)
Separate financial statements
Investments in associates and joint ventures
Intangible assets
Joint arrangements

TAS 27 (revised 2016), the amendments allow an entity a policy choice to account for investments in subsidiaries, joint ventures and associates in its separate financial statements using the equity method as described in TAS 28 (revise 2016) in addition to measurement at cost or at fair value (when announced) previously allowed. The election can be made independently for each category of investment (subsidiaries, joint ventures and associates). Entities wishing to change to the equity method must do so retrospectively.

TAS 28 (revised 2016), the significant change is the amendments allow an entity which is not an investment entity, but has an interest in an associate or joint venture which is an investment entity, a policy choice when applying the equity method of accounting. The entity may choose to retain the fair value measurement applied by the investment entity associate or joint venture, or to unwind the fair value measurement and perform a consolidation at the level of the investment entity associate or joint venture.

TAS 38 (revised 2016), the amendments include a rebuttable presumption that the amortisation of intangible assets based on revenue is inappropriate. This presumption can be overcome if either the intangible asset is expressed as a measure of revenue (i.e. where a measure of revenue is the limiting factor on the value that can be derived from the asset), or it can be shown that revenue and the consumption of economic benefits generated by the asset are highly correlated.

TFRS 11 (revised 2016), the amendments clarify that 1) the accounting for the acquisition of an interest in a joint operation where the activities of the operation constitute a business. They require an investor to apply the principles of business combination accounting and 2) existing interests in the joint operation are not remeasured on acquisition of an additional interest, provided joint control is maintained.

The Group does not have significant impacts from applying the above revised financial reporting standards.

### 2.2 Revised financial reporting standards, and related interpretations (Cont'd)

2.2.2 Revised financial reporting standards are effective for annual periods beginning on or after 1 January 2018, which have significant changes and are relevant to the Group. The Group has not yet adopted these revised standards.

TAS 7 (revised 2017) Statement of Cash Flows

TAS 12 (revised 2017) Income taxes

TFRS 12 (revised 2017) Disclosure of interests in other entities

TAS 7 (revised 2017), the amendments require additional disclosure of changes in liabilities arising from financing activities. This includes changes arising from cash and non-cash.

TAS 12 (revised 2017), the amendments clarify the accounting for deferred tax where an asset is measured at fair value and that fair value is below the asset's tax base. Specifically, the amendments confirm that:

- A temporary difference exists whenever the carrying amount of an asset is less than its tax base at the end of the reporting period.
- An entity can assume that it will recover an amount higher than the carrying amount of an asset to estimate its future taxable profit.
- Where the tax law restricts the source of taxable profits against which particular types
  of deferred tax assets can be recovered, the recoverability of the deferred tax assets
  can only be assessed in combination with other deferred tax assets of the same type.
- Tax deductions resulting from the reversal of deferred tax assets are excluded from the estimated future taxable profits.

TFRS 12 (revised 2017), the amendments clarify that the disclosure requirements of TFRS 12 apply to interests in entities that are classified as held for sale in the scope of TFRS 5 (revised 2017), except for the summarised financial information.

The Group's management assessed and considered that the above revised standards will not have a material impact on the Group except for disclosure.

### 2.3 Group Accounting - investments in subsidiaries and associates and interests in joint ventures

### (1) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group 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. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The Group applies the acquisition method to account for business combinations except business combination under common control. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measured are recognised in profit or loss.

Any contingent consideration to be transferred by the Group is regcognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognise and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in profit or loss.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

### 2.3 Group Accounting - investments in subsidiaries and associates and interests in joint ventures (Cont'd)

### (2) Transactions with non-controlling interests

The Group treats transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

### (3) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities.

### (4) Business combination under common control

The Group accounts for business combination under common control by measuring acquired assets and liabilities of the acquire in the proportion of interests under common control at the carrying values of the acquiree presented in the highest level of the consolidation prior to the business combination under common control at the acquisition date. The Group retrospectively adjusted the business combination under common control transactions as if the combination occurred from the beginning of period of which the financial statements in the previous period are comparatively presented in accordance with the guidance of business combination under common control as issued by the Federation of Accounting Professions.

Costs of business combination under common control are the aggregated amount of fair value of assets transferred, liabilities incurred and equity instruments issued by the acquirer at the date of which the exchange in control occurs. Other costs directly attribute to business combination under common control, such as professional fees of legal advisors and other advisors, registration fees, and costs relating to preparation of information for shareholders, are capitalised as an investment in the separate financial statements while immediately recognised as expenses in the consolidated financial statements in the period of which the business combination occurs.

The difference between costs of business combination under common control and the acquirer's interests in the carrying value of the acquiree is presented as "Surplus arising from business combination under common control" in equity and is derecognised when the investment is disposed (transfer to retained earnings).

### (5) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting in consolidated financial statements.

### 2.3 Group Accounting - investments in subsidiaries and associates and interests in joint ventures (Cont'd)

### (6) Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

### Joint venture

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Interests in joint ventures are accounted for using the equity method.

### (7) Accounting under equity method

Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investment in associates includes goodwill identifies on acquisition.

If the ownership interest in associates and joint ventures is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in an associates and joint ventures is recognise in profit or loss.

The Group's share of its associates and joint ventures' post-acquisition profits or losses is recognised in the profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures, together with any long-term interests that, in substance, form part of the entity's net investment in the associates or joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

The Group determines at each reporting date whether there is any objective evidence that the investments in the associates and joint ventures are impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the investments and its carrying value and recognises the amount adjacent to share of profit (loss) of associates and joint ventures in profit or loss.

Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates and joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

### (8) Separate financial statement

In the separate financial statements, investments in subsidiaries, associates and joint ventures are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments in cost of investment. Cost also includes direct attributable costs of investment.

### 2.4 Foreign currency translation

### (a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Thai Baht, which is the Company's functional and the Group's presentation currency.

### (b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss is recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in profit and loss, any exchange component of that gain or loss is recognised in profit and loss.

### (c) Group companies

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- Income and expenses for each statement of comprehensive income are translated at average exchange rates; and
- All resulting exchange differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

### 2.5 Cash and cash equivalents

In the consolidated and separate statements of cash flows, cash and cash equivalents includes cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less and bank overdrafts. In the consolidated and separate statements of financial position, bank overdrafts are shown within borrowings in current liabilities.

### 2.6 Trade accounts receivable

Trade accounts receivable are carried at the original invoice amount and subsequently measured at the remaining amount less any allowance for doubtful receivables based on a review of all outstanding amounts at the year-end. The amount of the allowance is the difference between the carrying amount of the receivable and the amount expected to be collectible. Bad debts are written-off during the year in which they are identified and recognised in profit or loss within administrative expenses.

### 2.7 Spare parts and supplies

### 2.7.1 Fuel

Fuel represents natural gas. Costs are calculated based on the moving average basis.

### 2.7.2 Spare parts and supplies

Spare parts and supplies are stated at the lower of cost or net realisable value. Costs are calculated based on the moving average basis. The cost of purchase comprises both the purchase price and costs directly attributable to the acquisition of the spare parts and supplies, such as import duties and transportation charges, less all attributable discounts. Allowance is made, where necessary, for slow-moving spare parts and supplies.

### 2.8 Investment Property

Land that is not occupied by the Group, is classified as investment property.

Investment property is measured initially at its cost, including related transaction costs.

Land is not depreciated.

Subsequent expenditure is capitalised to the asset's carrying amount only when it is probable that future economic benefits associated with the expenditure will flow to the Group and the cost of the item can be measured reliably.

### 2.9 Property, plant and equipment

All property, plant and equipment are stated at historical cost less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Spare parts that are categorised as "specific spare parts" which are used for specific equipment of the power plant, and "common spare parts" which are used for general use. Spare parts that have useful life of over one year are classified as property, plant and equipment and are depreciated using the straight-line method over the estimated useful life once they are in ready-to-use condition for its purpose determined by the management.

Land is not depreciated. Depreciation on other assets is calculated using the straight line method to allocate their cost to their residual values over their estimated useful lives, as follows:

Land improvement	5 - 25 years
Power plant, substation, transmission system and equipment	5 - 25 years
Office equipment, furniture and computer	3 - 5 years
Building and structure	5 - 25 years
Motor vehicles	5 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The asset's carrying amount is written-down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains or losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised in profit or loss.

### 2.10 Service concession arrangements

Service concession arrangements are arrangements between government (the grantor) and a private sector entity (an operator) which involve the operator constructing the infrastructure used to provide the public service or upgrading it and operating and maintaining that infrastructure for a specified period of time. The operator is paid for its services over the period of the arrangement. The grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price and the grantor control-through ownership, beneficial entitlement or otherwise - any significant residual interest in the infrastructure at the end of the term of the arrangement.

If the Group as the operator provides construction or upgrade services, revenue and costs relating to construction or upgrade services shall be accounted for based on the stage of completion on the construction contract. The consideration received or receivable by the operator shall be recognised at its fair value of a financial asset or an intangible asset.

The Group shall recognise a financial asset to extent that it has an unconditional contractual right to receive cash or another financial asset from or at the direction of the grantor for the construction services and recognise an intangible asset to the extent that it receives a right (a licence) to charge users of the public service. A right to charge users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service. If the operator is paid for the construction services partly by a financial asset and partly by an intangible asset it is necessary to account separately for each component of the operator's consideration. Revenue and costs relating to operation services shall be recognised when service is provided by reference to the contract term.

Contractual obligations to maintain or restore infrastructure, except for any upgrade element shall be recognised and measured at the best estimate of the expenditure that would be required to settle the present obligation at the end of the reporting period.

### 2.11 Intangible assets

### 2.11.1 Right to use assets

Right to use assets consists of

(a) Right to use gas pipeline

Cost of gas piping of which the right was transferred to gas supplier according to the gas purchase agreement is classified as intangible assets on right transferring date and amortised using the straight-line basis over the period of gas purchase agreement.

(b) Right to use substations

Cost of substation of which the right was transferred to PEA according to the power purchase agreement is classified as intangible assets on right transferring date and amortised using the straight-line basis over the period of power purchase agreement.

### 2.11 Intangible assets (Cont'd)

### 2.11.2 Right in operation and maintenance contracts

The right in operation and maintenance contracts arising on acquisition of subsidiary is amortised using the straight-line basis over the periods of the operation and maintenance contracts of which 21 years.

### 2.11.3 Rights from service concession arrangements

Rights from service concession arrangements is the right from service concession arrangements to generation and distribution of electricity with the Laos government as described in the accounting policies in Note 2.10. Rights from service concession arrangements are amortised using the straight-line method over the period of purchase agreement attached to the concession agreement and recorded as expense in profit and loss.

### 2.11.4 Deferred power plant costs

Deferred power plant cost includes the necessary and relevant expenditures on acquiring relevant licences for the power plant's operation and costs incurred on development projects that are recognised as intangible assets when it is probable that the project will be a success and only if the cost can be measured reliably. Other development expenditure is recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Deferred power plant costs have been capitalised and amortised using the straight-line basis over the period of power purchase agreement starting from the commercial operation date.

### 2.11.5 Land use right

Land use right is the cost incurred to obtain right over land for installation of power plant, substation, transmission system, and electricity posts. The cost is capitalised and amortised using the straight-line method over the useful lives of power plant, generally over 25 years.

### 2.11.6 Right in power purchase agreements

Right in power purchase agreement acquired in business combination are initially recognised at fair value at the acquisition date. Right in power purchase agreement will be amortised using the straight-line basis over the period of power purchase agreements, power supply agreements and stream supply agreements to customers with period from 1 year to 25 years.

The amount paid to obtain right in power purchase agreement is capitalised as intangible assets and amortised using the straight-line basis over the period of power purchase agreements.

### 2.11.7 Computer software

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful lives 3 - 10 years.

### 2.12 Impairment of assets

Assets that have an indefinite useful life for example goodwill, are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

### 2.13 Leases - where the Group is the lessee

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

### 2.14 Borrowings

Borrowings are recognised initially at the fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognised in profit or loss over the period of the borrowings using the effective yield method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent that there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of reporting date.

### (a) Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

### 2.15 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case the tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period in the countries where the Company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements.

However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit nor loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred income tax is provided on temporary differences arising from investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

### 2.16 Employee Benefits

### 2.16.1 Post-employment

The Group operates various retirement benefits schemes. The Group has both defined benefit and defined contribution plans.

### 2.16.1.1 Defined contribution

A defined contribution plan is a retirement plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. The Group pays contributions to a separate fund which is managed by an external fund manager in accordance with the provident fund Act. B.E. 2530. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

### 2.16.1.2 Retirement benefits

A defined benefit plan is a retirement plan that is not a defined contribution plan. Typically defined benefit plans define an amount of retirement benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognised in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period, together with adjustments for unrecognised past-service costs. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yield of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in profit or loss.

### 2.16.2 Long service awards

The entitlement to these benefits is usually conditional on the employees remaining in service and completion of minimum 10 years services and consecutively paid every 5 years after. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as is used for retirement benefit plans. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. These obligations are valued regularly by independent qualified actuary.

### 2.16 Employee Benefits (Cont'd)

### 2.16.3 Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

### 2.17 Share-based payment

The Group measures equity - settled, share-based compensation plans for employees by reference to the fair value of the equity instrument granted at the grant date. The expense is recognised corresponding to increase in equity, over the period that the employee become conditionally entitled to the awards. The amount recognised as an expense is adjusted to reflect the actual amount of awards for which the related service and non-market vesting conditions are expected to be met.

Share-based payment expense is charged to the statement of comprehensive income corresponding to the increase in "Other reserve - share-based payments" in equity over the periods in which the service conditions are fulfilled. The amount of shares, which has been allocated for share-based compensation plans for employees, will be presented deducting in equity as "Reserved shares for employee benefits under share-based payment scheme". Once the employee service condition is met, this reserved amount will be offsetting with "Other reserve - share-based payments" in equity.

The grant by the Company of common shares over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value of equity instrument, is recognised over the vesting period as an increase to investment in subsidiaries, in separate financial statement undertakings, with a corresponding credit to equity.

### 2.18 Provisions

### 2.18.1 General provisions

Provisions are recognised when: the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

Provisions exclude the provisions for employee benefits. The accounting policy for employee benefit obligations are mentioned in Note 2.16.

### 2.18 Provisions (Cont'd)

### 2.18.2 Provision for decommissioning costs

The Group recognises provision for decommissioning costs, which are provided at the onset of completion of the project, for the estimate of the eventual costs that relate to the removal of the power plants. The recognised provision for decommissioning costs are calculated based on many assumptions such as future removal costs abandonment time and future inflation rate and discounted to present value at the discount rate estimated by the management. These costs are included as part of the power plants.

### 2.19 Share capital

Ordinary shares and non-redeemable preference shares with discretionary dividends are classified as equity. Other shares including mandatory redeemable preference shares are classified as liabilities.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

### 2.20 Revenue recognition

Sales under the power purchase agreement ("PPA") comprise Capacity Payments and Energy Payments. Capacity payments are recognised according to the terms set out in the PPA. Energy payments are calculated based on actual electricity delivered. Sales under the Electricity and Steam Sales/Purchase Agreements with industrial users are recognised on delivery of electricity and steam and customer's acceptance. Sales are shown net of sales taxes and discounts.

Revenue from rendering services is recognised on the basis of services rendered

Construction revenue under concession agreement is recognised using the percentage of completion method, which is measured through relationship between the contract costs incurred for work performed to date and the estimated total costs of the contract. Revenue excludes value added tax.

Interest income is recognised using the effective interest method.

Dividend income is recognised when the shareholder's right to receive payment is established.

### 2.21 Dividend distribution

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are approved by the Company's shareholders.

### 2.22 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as "the Board of Directors" that makes strategic decisions.

### 3 Financial risk management

### 3.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Risk management is carried out by a central treasury department (Group Treasury) under policies approved by the Board of Directors. The Group Treasury identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units.

### 3.1.1 Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to US dollars. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

The Group use forward contracts and cross-currency swap contracts to hedge their exposure to foreign currency risk in connection with measurement currency. The Group Treasury is responsible for hedging the net position in each currency by using currency borrowings and external forward currency contracts.

### 3.1.2 Interest rate risk

Risk on interest rates is derived from fluctuation of market interest rate in the future which affect upon operation result and cash flows. The Group uses interest rate swaps to hedge future interest payments.

### 3.1.3 Credit risk

The Group has no significant concentrations of credit risk relating to its cash and investments. The Group places its cash and investments with high quality financial institutions. The Group's policy is designed to limit exposure with any one institution and to invest its excess cash in low risk investment accounts. The Group has not experienced any losses on such accounts. For trade receivables, the Group's sales are made to state-owned enterprises and industrial users under the terms and conditions of the long-term power purchase agreements and the long-term Electricity and Steam Sales and Purchase Agreements.

### 3.1.4 Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities, and the ability to close out market positions. Due to the dynamic nature of the underlying business, the Group Treasury aims at maintaining flexibility in funding by keeping committed credit lines available.

### 3 Financial risk management (Cont'd)

### 3.2 Accounting for derivative financial instruments and hedging activities

The Group is party to derivative financial instruments, which mainly comprise foreign currency forward contracts and interest rate swap agreements. Such instruments are not recognised in the financial statements on inception.

Foreign currency forward contracts protect the Group from movements in exchange rates by establishing the rate at which a foreign currency asset will be realised or a foreign currency liability settled. Any increase or decrease in the amount required to realise the asset or settle the liability is offset by a corresponding movement in the value of the forward exchange contract. The gains and losses on the derivative instruments and the underlying financial asset or liability are therefore offset for present in notes to financial statements and are not recognised in the financial statements. The fee incurred in establishing each agreement is amortised over the contract period, if any.

Interest rate swap agreements protect the Group from movements in interest rates. Any differential to be paid or received on an interest rate swap agreement is recognised as a component of interest revenue or expense over the period of the agreement. Gains and losses on early termination of interest rate swaps or on repayment of the borrowing are taken to profit or loss.

Disclosures about derivative financial instruments to which the Group is a party are provided in Note 33.

### 3.3 Fair value estimation

The Group estimates fair value for available for investment property, long-term borrowings from financial institutions and financial instruments. The different levels of fair value estimation have been defined as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3: Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The Group discloses the fair value measurement of above items in related notes to financial statement.

### 4 Critical accounting estimates and judgements

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

### 4.1 Critical accounting estimates and assumptions

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

### 4 Critical accounting estimates and judgements (Cont'd)

### 4.1 Critical accounting estimates and assumptions (Cont'd)

### (a) Power plant, equipment and intangible assets

Management determines the estimated useful lives and residual values for the power plant, equipment and intangible assets of which are mainly considered by technical ability and economic useful lives. The management will revise the depreciation charge where useful lives and residual values are significantly different to previously estimated, or it will write off or write down technically obsolete or assets that have been abandoned or sold.

### (b) Retirement benefits

The present value of the employee benefit obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for employee benefit obligations include the discount rate. Any changes in these assumptions will have an impact on the carrying amount of employee benefit obligations.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the employee benefit obligations. In determining the appropriate discount rate, the Group considers the market yield of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related employee benefit liability.

Additional information of other key assumptions for retirement benefits obligations other is disclosed in Note 23.

### (c) Share-based payment

The Group measures equity - settled, share-based compensation plans for employees by reference to the fair value of the equity instrument granted at the grant date. The expense is recognised corresponding to the increase in equity, over the period that the employee becomes conditionally entitled to the awards. The employee expense which has been recognised depends on the assumptions used in the equity's fair valuation and an assumption regarding the probability that participants are continuously employed by the Group until the end of the vesting period. The variability of those assumptions would affect to employee expense recognised in each year.

Management determines the appropriateness of the assumptions used in the equity's fair valuation and assumption regarding the probability that participants are continuously employed by the Group until the end of the vesting period.

### 4.2 Critical judgements in applying the entity's accounting policies

### (a) Joint arrangements

The Company holds 49% and 55% of the voting rights of its joint arrangement. The Group has joint control over this arrangement as under the contractual agreements, unanimous consent is required from all parties to the agreements for all relevant activities.

The Group's joint arrangement is structured as a limited company and provides the Group and the parties to the agreements with rights to the net assets of the limited company under the arrangements. Therefore, this arrangement is classified as a joint venture.

### 5 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares, or sell assets to reduce debt.

### 6 Segment information

The Group has two reportable segments report which are comprised of electricity generation and other businesses.

- (1) Electricity generation: This segment is engaged in the generation and distribution of electricity for the government sectors and industrial users both in Thailand and overseas.
- (2) Other businesses: This segment is engaged in holding companies, maintenance and operating services for power plants, and power plant infrastructure fund.

The board of directors primarily uses a measure of segment profit before tax, which is derived on a basis consistent with the measurement of profit for the years in the consolidated financial statements.

	dated financial st	ncial statements	
For the year ended 31 December 2017	Electricity generation Baht	Other businesses Baht	Total Baht
Segment revenues <u>Less</u> Revenue from inter-segment	32,504,265,649 (1,034,297,318)	760,948,667 (748,741,331)	33,265,214,316 (1,783,038,649)
Revenues from external customers	31,469,968,331	12,207,336	31,482,175,667
Operating profit (loss) Interest income Finance costs Share of profit from associate and joint ventures	6,284,912,980 66,830,732 (1,325,437,530)	(765,920,322) 39,468,227 (727,255,648) 255,751,851	5,518,992,658 106,298,959 (2,052,693,178) 255,751,851
Profit (loss) before income tax Income tax	5,026,306,182 (242,460,544)	(1,197,955,892) 7,960,177	3,828,350,290 (234,500,367)
Net profit (loss)	4,783,845,638	(1,189,995,715)	3,593,849,923
Depreciation and amortisation	2,729,416,911	28,603,510	2,758,020,421
Segment fixed assets Investment in associate and joint ventures Unallocated assets	51,378,373,911	91,477,749	51,469,851,660 2,427,577,265 35,343,408,023
Consolidated total assets		_	89,240,836,948
Consolidated total liabilities		=	63,497,059,396

### 6 Segment information (Cont'd)

	Consolidated financial statements			
For the year ended 31 December 2016	Electricity generation Baht	Other businesses Baht	Total Baht	
Segment revenues <u>Less</u> Revenue from inter-segment	28,840,414,110 (1,102,899,929)		29,705,675,426 (1,958,809,175)	
Revenues from external customers	27,737,514,181	9,352,070	27,746,866,251	
Operating profit (loss) Interest income Finance costs Share of profit from associate and joint ventures	5,298,788,640 47,369,456 (2,203,113,029)	(532,573,712) 29,815,648 (360,293,899) 261,017,401		
Profit (loss) before income tax Income tax	3,143,045,067 (270,103,770)	(602,034,562) 44,962,507	2,541,010,505 (225,141,263)	
Net profit (loss)	2,872,941,297	(557,072,055)	2,315,869,242	
Depreciation and amortisation	2,449,989,779	24,774,959	2,474,764,738	
Segment fixed assets Investment in associate and joint ventures Unallocated assets	46,914,417,340	79,378,784	46,993,796,124 2,553,662,243 26,499,093,513	
Consolidated total assets			76,046,551,880	
Consolidated total liabilities			64,512,477,097	

### **Geographical segments**

In presenting geographical information, revenue is based on the geographical location of customers and assets are based on the geographical location of the assets.

### **Geographical information**

	Total rev	Total revenue		Total assets	
	2017	2016	2017	2016	
	Baht '000	Baht '000	Baht '000	Baht '000	
Thailand	29,354,955	26,014,847	85,189,512	72,104,098	
Laos	938,059	514,605	3,623,409	3,476,228	
Vietnam	1,189,162	1,217,414	427,916	466,226	
	31,482,176	27,746,866	89,240,837	76,046,552	

### Major customer

Revenue from one customer of the Group's electricity generation represents approximately Baht 19,354.19 million (2016: Baht 16,932.91 million) of the Group's total revenue.

### 7 Cash and cash equivalents

	Consoli financial st		Sepa financial s	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cash on hand Cash deposits at banks Short-term investments due	3,276,174 17,236,697,301	3,290,909 7,519,790,057	10,000 7,167,169,717	10,000 1,068,985,162
within 3 months	969,487,802	799,044,185	1,541,950	
	18,209,461,277	8,322,125,151	7,168,721,667	1,068,995,162

The interest rates on deposits at banks were ranging from 0.25% to 5.20% per annum (2016: 0.40% to 5.00% per annum).

### 8 Restricted cash

	Consol financial st	
	2017 Baht	2016 Baht
<b>Current</b> Benefits from the electricity generation under		
the Revenue Sharing Agreements	588,828,315	639,557,433
Bank deposits	32,035,224	63,981,711
	620,863,539	703,539,144
Non-current Cash reserved for Amata B.Grimm Power Power Plant		
Infrastructure Fund's fees	236,871,148	255,797,659
	857,734,687	959,336,803

The subsidiaries have restricted cash in accordance with the Revenue Sharing Agreements as a security for the repayment of all current and future liabilities to Amata B.Grimm Power Power Plant Infrastructure Fund.

As at 31 December 2017, bank deposits of Baht 32.04 million (2016: Baht 63.98 million) were pledged as collateral against bank guarantees. The bank deposits bear interest at the rates ranging from 0.37% to 4.00% per annum (2016: 0.40% to 4.00% per annum).

### 9 Short-term investments

Short-term investments represent fixed bank deposits with maturity ranged between 4 months to 6 months. The interest rates on these deposits were 1.00% to 1.60% per annum (2016: 0.25% to 1.84% per annum).

### 10 Trade and other receivables, net

		ed financial ments	Separate state	financial ments
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Trade receivables - third parties - related parties (Note 34.3)	2,336,012,011 375,742	2,066,004,164 4,704,413	20,704,500	95,605,850
Total trade receivables	2,336,387,753	2,070,708,577	20,704,500	95,605,850
Accrued income Accrued interest income	1,993,265,403	1,864,009,567	-	-
<ul><li>third parties</li><li>related parties (Note 34.3)</li></ul>	1,690,526 59,548	11,212,987 -	232,168,549	59,792,374
Prepaid insurance	120,135,787	129,951,320	81,159	-
Prepaid expenses Deferred employee benefits	55,733,206	58,353,260	6,442,339	7,939,023
expense	23,040,266	-	6,875,942	-
Advances for project development	13,666,433	26,128,030	393,047,460	99,984,520
Advances to employees Dividends receivable - related	3,642,816	11,060,279	160,560	4,039,635
parties (Note 34.3)	27,047,674	-	843,919,851	-
Other receivables - related parties	07.075.404	04.000.000	405 540 000	4 000 007 444
(Note 34.3)	27,975,121	24,628,008	185,516,322	1,238,907,414
Others, net	67,297,562	66,252,953	1,379,766	27,352,875
Total trade and other receivables, net	4,669,942,095	4,262,304,981	1,690,296,448	1,533,621,691

#### Advances for project development

Advances for project development are the advances that the Company or subsidiaries paid for development of future projects of the Group. The advances will be charged to project companies once those companies are incorporated.

The Group has significant advances for project development as follows:

- On 19 November 2015, the Company entered the Joint Development Agreement with other parties in Lao PDR and in Thailand to develop Sekong 4 Power project in Lao PDR. All parties agreed to form a special-purpose entity to develop finance, construct, procure, operate and maintain to successfully implement the project, in accordance to the terms and conditions specified in the agreements. The total advances for Sekong 4 Power project as at 31 December 2017 is Baht 61.88 million (2016: Baht 50.46 million) presented under trade and other receivables in separate financial statements and presented under other non-current assets in consolidated financial statements as they will be transferred to non-current assets of the Group.
- During 2017, the Company transferred land of Baht 259.35 million to a government agency in exchange for land use rights to operate 4 solar power plant projects. The rights will be transferred to subsidiaries that own the solar power plant projects. These subsidiaries will be billed accordingly. The rights are classified as advances for project development presented under trade and other receivables in the separate financial statements and classified as land use rights presented under intangible assets in the consolidated financial statements.

# 10 Trade and other receivables, net (Cont'd)

Outstanding trade receivables - third parties as at 31 December can be analysed as follows:

	Consol financial s	
	2017 Baht	2016 Baht
Up to 3 months 3 - 6 months 6 - 12 months Over 12 months	2,336,012,011 - - -	2,065,807,954 423 52,451 143,336
	2,336,012,011	2,066,004,164

Outstanding trade receivables - related parties as at 31 December can be analysed as follows:

	Consolio financial sta		Separ financial st	
	2017	2016	2017	2016
	Baht	Baht	Baht	Baht
Up to 3 months 3 - 6 months 6 - 12 months	375,742	4,704,413	7,222,500	95,605,850
	-	-	-	-
	-	-	13,482,000	-
	375,742	4,704,413	20,704,500	95,605,850

11 Spare parts and supplies, net

	Consol financial st	
	2017 Baht	2016 Baht
Fuel Spare parts and supplies	513,848 925,295,864	5,694,918 822,547,763
	925,809,712	828,242,681
Less Allowance for slow-moving	(47,892,014)	(9,579,020)
	877,917,698	818,663,661

### 12 Other current assets

	Conso financial s	lidated tatements	Sepai financial st	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Withholding tax receivables Refundable value added tax Undue input value added tax Refundable import duty Others	48,086,055 848,861,727 7,426,365 - 1,860,983	86,311,904 960,142,682 9,207,280 19,896,635 4,109,593	8,635,453 18,391,042 374,780 -	18,584,235 1,933,578 - - -
	906,235,130	1,079,668,094	27,401,275	20,517,813

13 Investments in subsidiaries

The Group had the following subsidiaries at 31 December:

	Place of business/ Country of		Proportion of ordinary shares directly held by parent (%)	of res by	Effective proportion of ordinary shares held by the group (%)	ortion hares group	Effective proportion of ordinary shares held by non-controlling interests (%)	rtion of is held olling %)
Name of entity	incorporation	Nature of business	2017	2016	2017	2016	2017	2016
Amata B.Grimm Power Limited	Thailand	Investing in electric power business	51.20	51.20	51.20	51.20	48.80	48.80
with subsidiaries as follows:								
- Amata B.Grimm Power Holding Limited	Thailand	Investing in electric power business	1	ı	51.19	51.19	48.81	48.81
- Amata B.Grimm Power 1 Limited	Thailand	Electricity generating		1	50.69	50.69	49.31	49.31
- Amata B.Grimm Power 2 Limited	Thailand	Electricity generating	1	1	51.20	51.20	48.80	48.80
- Amata B.Grimm Power 3 Limited	Thailand	Electricity generating	30.00	30.00	60.72	60.72	39.28	39.28
- Amata B.Grimm Power 4 Limited	Thailand	Electricity generating	29.88	29.88	55.48	55.48	44.52	44.52
- Amata B.Grimm Power 5 Limited	Thailand	Electricity generating (Commenced operation in 2016)	29.88	29.88	55.48	55.48	44.52	44.52
- Amata B.Grimm Power (Rayong) 1 Limited	Thailand	Electricity generating	30.00	30.00	61.74	61.74	38.26	38.26
- Amata B.Grimm Power (Rayong) 2 Limited	Thailand	Electricity generating	30.00	30.00	61.74	61.74	38.26	38.26

13 Investments in subsidiaries (Cont'd)

The Group had the following subsidiaries at 31 December: (Cont'd)

	Place of business/ Country of		Proportion of ordinary shares directly held by parent (%)		Effective proportion of ordinary shares held by the group (%)	oortion shares group	Effective proportion of ordinary shares held by non-controlling interests (%)	ortion of ss held olling %)
Name of entity	incorporation	Nature of business	2017	2016	2017	2016	2017	2016
- Amata B.Grimm Power (Rayong) 3 Limited	Thailand	Electricity generating (Construction in progress)	29.88	29.88	55.48	55.48	44.52	44.52
- Amata B.Grimm Power (Rayong) 4 Limited	Thailand	Electricity generating (Construction in progress)	29.88	29.88	55.48	55.48	44.52	44.52
- Amata B.Grimm Power (Rayong) 5 Limited	Thailand	Electricity generating (Construction in progress)	29.88	29.88	55.48	55.48	44.52	44.52
- Amata Power (Bien Hoa) Limited	Vietnam	Electricity generating		1	30.72	30.72	69.28	69.28
- Amata Power (Rayong) Limited	Thailand	Electricity generating (dormant)		1	51.19	51.19	48.81	48.81
- Amata B.Grimm Power Service Limited	Thailand	Operation and maintenance service (dormant)	ı	ı	51.19	51.19	48.81	48.81
- Amata B. Grimm Power SPV 1 Limited (formerly "Amata B.Grimm Power Service (Rayong) Limited")	Thailand	Debentures Issuing	•	ı	61.40	51.19	38.60	48.81

13 Investments in subsidiaries (Cont'd)

The Group had the following subsidiaries at 31 December: (Cont'd)

	Place of business/ Country of		Proportion of ordinary shares directly held by parent (%)	on of thares eld by (%)	Effective proportion of ordinary shares held by the group (%)	portion shares group	Effective proportion of ordinary shares held by non-controlling interests (%)	ortion of es held rolling (%)
Name of entity	incorporation	Nature of business	2017	2016	2017	2016	2017	2016
B.Grimm Power Holding (Laem Chabang) Limited	Thailand	Investing in electric power business	26.66	99.97	29.97	99.97	0.03	0.03
with subsidiaries as follows:								
- B.Grimm Power (Laem Chabang) 1 Limited	Thailand	Electricity generating		1	96.66	96.66	0.04	0.04
- B.Grimm Power (Laem Chabang) 2 Limited	Thailand	Electricity generating	•	1	96.66	96.66	0.04	0.04
- B.Grimm Power Service (Laem Chabang) Limited	Thailand	Operation and maintenance service (dormant)		1	96.96	96.96	0.04	0.04
B.Grimm Power (Lao) Company Limited	Lao PDR	Investing in electric power business	100.00	100.00	100.00	100.00	ı	1
with subsidiaries as follows:								
- XeNamnoy and XeKatam Hydropower Company Limited	Lao PDR	Electricity generating from hydropower (Commenced operation in 2017)	ı	1	70.00	70.00	30.00	30.00
- Nam Che 1 Hydropower Company Limited	Lao PDR	Electricity generating from hydropower (Construction in progress)	ı	1	72.00	72.00	28.00	28.00
- Nam Khao Hydropower Company Limited	Lao PDR	Electricity generating from hydropower (has not yet commenced its normal operation)		ı	72.00	72.00	28.00	28.00

13 Investments in subsidiaries (Cont'd)

The Group had the following subsidiaries at 31 December: (Cont'd)

	Place of business/ Country of		Proportion of ordinary shares directly held by parent (%)	n of nares Id by %)	Effective proportion of ordinary shares held by the group (%)	portion shares group	Effective proportion of ordinary shares held by non-controlling interests (%)	ortion of es held olling %)
Name of entity	incorporation	Nature of business	2017	2016	2017	2016	2017	2016
B.Grimm BIP Power 1 Limited	Thailand	Electricity generating	74.00	74.00	74.00	74.00	26.00	26.00
B.Grimm BIP Power 2 Limited	Thailand	Electricity generating (Commenced operation in 2016)	74.00	74.00	74.00	74.00	26.00	26.00
B.Grimm Power (WHA) 1 Limited (formerly "Bowin Clean Energy Limited")	Thailand	Electricity generating (Commenced operation in 2016)	74.99	74.99	74.99	74.99	25.01	25.01
B.Grimm Power (Bowin) 2 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	100.00	100.00	100.00	100.00		1
B.Grimm Power (Ratchaburi) 1 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	100.00	100.00	100.00	100.00	1	ı
B.Grimm Power (Ratchaburi) 2 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	100.00	100.00	100.00	100.00	1	ı
B.Grimm Oriental Renewable Power 1 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	91.31	91.31	99.97	99.97	0.03	0.03

13 Investments in subsidiaries (Cont'd)

The Group had the following subsidiaries at 31 December: (Cont'd)

	Place of business/ Country of		Proportion of ordinary shares directly held by parent (%)	ordinary r held by %)	Effective proportion of ordinary shares held by the group (%)	ortion of res held up (%)	Effective proportion of ordinary shares held by non-controlling interests (%)	ortion of s held by illing (%)
Name of entity	incorporation	Nature of business	2017	2016	2017	2016	2017	2016
B.Grimm Oriental Renewable Power 2 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	91.31	91.31	99.97	99.97	0.03	0.03
B.Grimm Oriental Renewable Power 3 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	91.31	91.31	99.97	99.97	0.03	0.03
B.Grimm Oriental Renewable Power 4 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	91.31	91.31	99.97	99.97	0.03	0.03
Thai Wind Power (Mukdahan) Limited	Thailand	Investing in electric power business	70.00	70.00	70.00	70.00	30.00	30.00
B.Grimm Solar Power 1 Limited with subsidiaries as follows:	Thailand	Investing in electric power business	100.00	100.00	100.00	100.00	ı	1
- B.Grimm Solar Power (Bamnet Narong) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	ı	•	51.00	ı	49.00	ı
- B.Grimm Solar Power (Cha Am) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	ı	•	51.00	ı	49.00	ı
- B.Grimm Solar Power (Chai Badan) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	ı	•	51.00	ı	49.00	ı
- B.Grimm Solar Power (Chon Daen) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	1	1	51.00	ı	49.00	ı
- B.Grimm Solar Power (Nikhom Kham Soi) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)		1	66.96	1	0.01	1

13 Investments in subsidiaries (Cont'd)

The Group had the following subsidiaries at 31 December: (Cont'd)

	Place of business/ Country of		Proportion of ordinary shares directly held by parent (%)	ordinary y held by %)	Effective proportion of ordinary shares held by the group (%)	rtion of s held (%)	Effective proportion of ordinary shares held by non-controlling interests (%)	tion of held by ing %)
Name of entity	incorporation	Nature of business	2017	2016	2017	2016	2017	2016
- B.Grimm Solar Power (Sap Yai) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)		1	51.00		49.00	1
- B.Grimm Solar Power (Si Boon Rueang) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	1	•	51.00	•	49.00	•
- B.Grimm Solar Power (Wanon Niwat) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	ı	•	51.00	1	49.00	•
- B.Grimm Solar Power (Yang Talat) Limited	Thailand	Electricity generating from solar power (has not yet commenced its normal operation)	1	•	51.00	•	49.00	•
B.Grimm Solar Power (Sakaeo) 1 Limited	Thailand	Electricity generating from solar power (Commenced operation in 2016)	99.97	26.96	99.97	99.97	0.03	0.03
B.Grimm Power Service Limited	Thailand	Operation and maintenance service	100.00	100.00	100.00	100.00	ı	1
Bothong Wind Farm Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	74.00	74.00	92.20	92.20	7.80	7.80
B.Grimm Power (Chonburi) 1 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	99.97	1	99.97	1	0.03	ľ
B.Grimm Power (Chonburi) 2 Limited	Thailand	Electricity generating (has not yet commenced its normal operation)	99.97	'	99.97	1	0.03	1

All subsidiary undertakings are included in the consolidation. The proportions of the voting rights in the subsidiary undertakings held directly by the parent company do not differ from the proportions of ordinary shares held. The parent company further does not have any shareholdings in the preference shares of subsidiary undertaking included in the Group.

The total non-controlling interest as at 31 December 2017 is Baht 7,090,524,731 (2016: Baht 5,633,912,453) of which Baht 5,167,397,368 belongs to Amata B. Grimm Power Limited (2016: Baht 4,332,006,634). The non-controlling interest in respect of the others is not material.

As at 31 December 2017, under the terms and conditions of long-term credit facility agreements of subsidiaries, the Group pledged all ordinary shares of 13 subsidiaries as collateral for its long-term borrowings (2016: 16 subsidiaries).

Summarised financial information on a subsidiary with material non-controlling interests

Set out below are the summarised financial information for a subsidiary that has non-controlling interests that are material to the Group.

Summarised statements of financial position as at 31 December:

	Amata B.Grimm (Consolidated fina	
	2017	2016
	Baht	Baht
Current:		
Assets	12,629,000,550	9,636,060,853
Liabilities	(4,813,918,920)	(4,153,158,231)
Total current net assets	7,815,081,630	5,482,902,622
Non-current:		
Assets	38,956,898,768	34,908,261,636
Liabilities	(34,951,314,706)	(30,552,128,871)
Total non-current net assets	4,005,584,062	4,356,132,765
Net assets	11,820,665,692	9,839,035,387

Summarised statements of comprehensive income for the year ended 31 December:

	Amata B.Grimm l (Consolidated finan	
	2017 Baht	2016 Baht
Revenue Other income Profit before income tax Income tax Post-tax profit from continuing operations Other comprehensive expense Total comprehensive income	20,349,101,844 75,229,645 2,781,585,223 (161,618,919) 2,619,966,304 (56,029,380) 2,563,936,924	19,554,473,171 146,907,580 1,956,474,631 (129,217,160) 1,827,257,471 (278,915) 1,826,978,556
Total comprehensive income allocated to non-controlling interests Dividends paid to non-controlling interests	897,060,905 541,886,968	510,425,300 342,407,557

Summarised financial information on a subsidiary with material non-controlling interests (Cont'd)

Summarised statements of cash flows for the year ended 31 December:

	Amata B.Grimm (Consolidated finar	
	2017 Baht	2016 Baht
Cash flow from operating activities Cash generated from operations Interest paid Income tax paid	5,081,233,906 (1,891,675,729) (151,357,564)	3,595,888,535 (1,648,584,882) (111,533,170)
Net cash generated from operating activities	3,038,200,613	1,835,770,483
Net cash used in investing activities	(4,863,521,681)	(4,722,033,956)
Net cash generated from financing activities	5,075,872,991	3,463,312,072
Net increase in cash and cash equivalents Cash and cash equivalents at beginning of the year Exchange (loss) gain on cash and cash equivalents	3,250,551,923 4,230,965,458 (49,538,950)	577,048,599 3,653,892,662 24,197
Cash and cash equivalents at end of the year	7,431,978,431	4,230,965,458

The amounts disclosed for the subsidiary are before inter-company eliminations.

The movements of investments in subsidiaries during the year ended 31 December are as follows:

		arate statements
	2017 Baht	2016 Baht
Opening net book balance Additional investments during the year Capital contribution under employee benefits scheme of	7,159,770,682 574,740,066	4,492,846,516 2,666,924,166
subsidiaries	18,353,076	<u>-</u>
Closing net book balance	7,752,863,824	7,159,770,682

The significant movements of investments in subsidiaries are as follows:

### 2017

### Amata B.Grimm Power (Rayong) 3 Limited ("ABPR3")

ABPR3 called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling Baht 257.31 million.

#### Amata B.Grimm Power (Rayong) 4 Limited ("ABPR4")

ABPR4 called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling Baht 238.48 million.

### Amata B.Grimm Power (Rayong) 5 Limited ("ABPR5")

ABPR5 called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling Baht 78.45 million.

### B.Grimm Power (Chonburi) 1 Limited ("BPC1")

The Company invested in 9,997 ordinary shares of BPC1, a newly established company at Baht 25 per share, totalling Baht 0.25 million, representing 99.97% of shareholding.

#### B.Grimm Power (Chonburi) 2 Limited ("BPC2")

The Company invested in 9,997 ordinary shares of BPC2, a newly established company at Baht 25 per share, totalling Baht 0.25 million, representing 99.97% of shareholding.

# Amata B.Grimm Power SPV 1 Limited ("ABPSPV1") (formerly "Amata B.Grimm Power Service (Rayong) Limited")

Amata B.Grimm Power Limited, which is a direct subsidiary of the Company, sold 99.99% interest in ABPSPV1 to Amata B.Grimm Power 3 Limited, Amata B.Grimm Power (Rayong) 1 Limited and Amata B.Grimm Power (Rayong) 2 Limited at the portion of 33.33% each. As a result, the effective proportion of ordinary shares held by the Group in ABPSPV1 increased from 51.19% to 61.40%.

### **B.Grimm Solar Power 1 Limited ("BGSP1")**

The subsidiary invested in ordinary shares of 9 newly-established companies detailed as follows:

Name of entity	Shares	Paid-up amount per share (Baht)	Total investment amount (Baht million)	The proportion of investment (%)
B.Grimm Solar Power (Bamnet Narong) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Cha Am) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Chai Badan) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Chon Daen) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Nikhom Kham Soi) Limited	99,997	35	3.50	99.99
B.Grimm Solar Power (Sap Yai) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Sriboonruang) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Wanon Niwat) Limited	509,997	35	17.85	51.00
B.Grimm Solar Power (Yang Talat) Limited	509,997	35	17.85	51.00

The significant movements of investments in subsidiaries are as follows: (Cont'd)

#### 2016

#### Amata B.Grimm Power 5 Limited ("ABP5")

ABPR5 called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling Baht 282.42 million.

#### **B.Grimm BIP Power 2 Limited ("BIP2")**

BIP2 called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling Baht 649.35 million.

### Amata B.Grimm Power (Rayong) 5 Limited ("ABPR5")

On 17 March 2016, the Extraordinary General Meeting of Shareholders of ABPR5 had approved to additionally call for share capital from existing shareholders in the total amount of Baht 15 per share. The company paid-up the cash for 99,997 shares at Baht 15 per share, totalling Baht 1.5 million. On the same date, the shareholders had approved to increase authorised share capital from Baht 10 million to Baht 350 million by issuing new ordinary shares of 3.4 million shares with a par value of Baht 100 per share. The Company invested in 945,976 shares at the paid-up value of Baht 40 per share, totalling Baht 37.84 million and on 29 February 2016, the Company purchased 1 ordinary share from another shareholder, totalling Baht 40. As a result, direct ownership interest of the Company in ABPR5 was decreased from 100% to 29.88%. However, the Company does not lose control over ABPR5 since ABPR5 is also invested at 50% by Amata B.Grimm Power Limited, a subsidiary. The carrying amounts of shareholders of the parent and non-controlling interests were adjusted to reflect change in controlling interest. The Group recognised gain from dilution amounting to Baht 4.39 million directly in the equity attributed to the shareholders of the parent in the consolidated financial statements.

### B.Grimm Power (WHA) 1 Limited ("WHA1") (formerly "Bowin Clean Energy Limited")

WHA1 called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling Baht 835.01 million.

# B.Grimm Power (Lao) Company Limited ("BGPL")

BGPL called for additional paid-up share capital and the Company paid for additional investment to maintain the same portion as original investment, totalling US Dollar 13.4 million equivalent to Baht 472.09 million.

The significant movements of investments in subsidiaries are as follows: (Cont'd)

**2016** (Cont'd)

### B.Grimm Solar Power (Sakaeo) 1 Limited ("Sakaeo 1")

On 8 April 2016, the Board of Directors Meeting of Sakaeo 1 approved to increase authorised share capital from Baht 1 million to Baht 152.5 million by issuing new ordinary shares of 1,515,000 shares with a par value of Baht 100 per share. The company paid-up the cash for 1,515,000 shares at Baht 100 per share, totalling Baht 151.5 million.

#### **B.Grimm Solar Power 1 Limited ("BGSP 1")**

On 3 October 2016, BGSP 1 called for additional paid-up share capital. The Company paid for additional paid-up share capital in the same portion as its original investment, totalling Baht 74.99 million.

### **Bothong Wind Farm Limited ("BTWF")**

During 2014, Thai Wind Power (Mukdaharn) Company Limited, a subsidiary acquired 26% of Bothong Wind Farm Company Limited ("BTWF") for total of Baht 5 million. At that time, the subsidiary still had no significant influence or control power over BTWF since BTWF had not achieved the condition of obtaining power purchase agreement; therefore, the investment was classified as general investment.

Subsequently, the Company entered into a Memorandum of Understanding ("MOU") with BTWF. This MOU granted the Company itself or any subsidiaries under the Group, the right to purchase all shares of BTWF in the amount of Baht 50 million with the condition that BTWF shall obtain the power purchase agreement, otherwise, the MOU will be cancelled.

On 20 November 2015 and 30 December 2015, the Company paid Baht 12.50 million and Baht 20 million respectively, as an advance payment for purchase of the remaining 74% of ordinary shares of BTWF. According to the MOU, the shares will be transferred to the Company upon the last payment of Baht 12.50 million. As of 31 December 2015, the shares were not transferred and the Company still had no significant influence or control power over BTWF.

On 8 January 2016, the Company paid the remaining payment for the 74% investment of ordinary shares of BTWF totalling Baht 12.50 million and agreed with former shareholders to pay for their debts with BTWF totalling Baht 117.23 million. After the completion of investment payment, the Company gained control power over BTWF at effective proportion of ordinary shares of 92.20%.

Consideration at 8 January 2016	
·	Baht '000
Total consideration (cash)	50,000
Recognised amounts of identifiable assets acquired and liabilities assumed	
Cash and cash equivalents Trade and other receivables, net Other current assets Property, plant and equipment, net Other non-current assets Trade and other payables	1,803 22 280 3,849 1,600 (923)
Net fair value Right in power purchase agreement	6,631 43,369
Total identifiable net assets	50,000

The significant movements of investments in subsidiaries are as follows: (Cont'd)

2016 (Cont'd)

B.Grimm Oriental Renewable Power 1 Limited, B.Grimm Oriental Renewable Power 2 Limited, B.Grimm Oriental Renewable Power 3 Limited and B.Grimm Oriental Renewable Power 4 Limited ("BORP1", "BORP2", "BORP3" and "BORP4")

During 2016, the Group purchased ordinary shares of BORP1, BORP2, BOPR3 and BOPR4, each of 866 shares at paid-up value of Baht 25 per share, totaling Baht 21,650. As a result, the Group's interest in such entity has increased to 99.97% (including indirect holding).

### 14 Investment in associate and interests in joint ventures

The amounts recognised in the statements of financial position are as follows:

		Consolidated financial statements		rate atements
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Associate Joint ventures	1,358,033,401 1,069,543,864	1,504,329,090 1,049,333,153	972,661,032	972,642,900
The share of profit recognised in the	statements of c	omprehensive inc	come are as follo	ows:
		Consolidated financial stateme		
			2017 Baht	2016 Baht
Associate Joint ventures			149,344,893 106,406,958	163,530,007 97,487,394

### (a) Investment in associate

Nature of investment in associate as at 31 December:

	Place of business/ Country of	% owne inte	rship	Nature of the	Measurement
Name of entity	incorporation	2017	2016	relationship	method
Amata B.Grimm Power Power Plant Infrastructure Fund	Thailand	29.97	29.97	Note1	Equity method

Note 1: Amata B.Grimm Power Power Plant Infrastructure Fund is an infrastructure fund. The Company indirectly held the investment units through Amata B.Grimm Power Limited, a subsidiary.

There are no contingent liabilities relating to the Group's interest in the associate.

# (a) Investment in associate (Cont'd)

### Summarised financial information for a material associate

Summarised statement of financial information:

	Amata B.Grimm Power Power Plant Infrastructure Fund		
	2017	2016	
	Baht	Baht	
Current Assets			
Cash and cash equivalents	90,504,643	65,492,307	
Other current assets	370,443,612	419,504,626	
Total current assets	460,948,255	484,996,933	
Non-current Assets	4,085,000,000	4,547,500,000	
Current liabilities			
Other current liabilities	16,515,346	14,921,143	
Total current liabilities	16,515,346	14,921,143	
Net assets	4,529,432,909	5,017,575,790	

Summarised statement of comprehensive income:

	Amata B.Grimm Plant Infrastro	
	2017 Baht	2016 Baht
Interest income Other income Total revenue	546,211,620 194,828 546,406,448	593,605,363 69,503 593,674,866
Total expenses	(48,089,329)	(48,026,464)
Total comprehensive income	498,317,119	545,648,402
Dividends received from associate	523,980,000	353,100,000

The information above reflects the amounts presented in the financial statements of the associate (not the Group's share of those amounts) and is adjusted for differences in accounting policies between the Group's and the associate's.

# (a) Investment in associate (Cont'd)

### Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in associate for the year ended 31 December:

	Amata B.Grimm Power Power Plant Infrastructure Fund		
	2017	2016	
	Baht	Baht	
Opening net assets Total comprehensive income Capital reduction of associate Dividends	5,017,575,790 498,317,119 (462,480,000) (523,980,000)	5,274,967,388 545,648,402 (449,940,000) (353,100,000)	
Closing net assets	4,529,432,909	5,017,575,790	
Interest in associate (29.97%) Difference on purchase price of investment units	1,357,464,249 569,152	1,503,759,938 569,152	
Carrying value	1,358,033,401	1,504,329,090	

The movements of Investment in associate during the year ended 31 December, are as follows:

	Conso financial s	
	2017 Baht	2016 Baht
Opening net book balance Share of profit from associate Capital reduction of associate Dividends received	1,504,329,090 149,344,893 (138,604,562) (157,036,020)	1,581,468,966 163,530,007 (134,846,343) (105,823,540)
Closing net book balance	1,358,033,401	1,504,329,090

#### (b) Interests in joint ventures

The joint ventures listed below have ordinary shares which are directly held by the Group.

Nature of investment in joint ventures as at 31 December:

Name of entity	Place of Business/ Country of incorporation		rest 2016	Nature of the business	Measurement method
B.Grimm Sena Solar Power Limited	Thailand	49.00	49.00	Investing in business of generation and distribution of electricity from solar power	Equity method
which has subsidiaries as following: - Solarwa Company Limited - TPS Commercial Company Limited				, , , , , , , , , , , , , , , , , , ,	
B.Grimm Yanhee Solar Power Limited	Thailand	49.00	49.00	Operating in business of generation and distribution of electricity from	Equity method
B.Grimm Power (Poipet) Co.,Ltd	Cambodia	55.00	-	solar power Operating in business of distribution of electricity	Equity method

The significant movements of interests in joints ventures are described below:

#### 2017

On 20 November 2017, B.Grimm Power (Poipet) Co.,Ltd ("BGPPP") was established in Cambodia to operate in the business of electricity distribution in an industrial estate area. BGPPP has registered share capital of US Dollar 1,000 and the Company owns 55% interest in BGPPP.

#### 2016

During 2016, the Company paid for additional paid-up of Baht 32 per share for 1,247,035 shares of B.Grimm Yanhee Solar Power Limited ("BGYSP"), totalling Baht 39.91 million. There was no change in ownership interest of the Company in BGYSP.

The Group's joint ventures are private companies and there are no quoted market prices available for their shares.

### (b) Interests in joint ventures (Cont'd)

# Commitments and contingent liabilities in respect of joint ventures:

The Group has the following commitments relating to its joint ventures.

	Consolidated a financial st	•
	2017 Baht	2016 Baht
Commitment under non-cancellable operating leases Capital commitments	154,460,888 16,905,603	145,458,870 17,130,400

The movements of interests in joint ventures during the year ended 31 December, are as follows:

	Conso financial s	lidated tatements	Sepa financial st	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening net book balance Addition of interests Dividends Share of profit from	1,049,333,153 18,132 (86,214,460)	911,940,639 39,905,120 -	972,642,900 18,132 -	932,737,780 39,905,120 -
joint ventures Exchange differences	106,406,958 81	97,487,394	- -	- -
Closing net book balance	1,069,543,864	1,049,333,153	972,661,032	972,642,900

15 Investment property

investment property	Consolidated financial statements Land Baht
As at 31 December 2016 Cost	4,902,251
Net book amount	4,902,251
Fair value	7,537,500
As at 31 December 2017	
Cost	4,902,251
Net book amount	4,902,251
Fair value	8,291,250

The investment property of the Group is land held for a currently undetermined future use. The Group has not determined whether it will be held as owner-occupied property or for short-term capital appreciation.

At 31 December 2017, fair value of investment property was Baht 8,291,250 which was appraised by comparing the selling price of comparable land that in term of physical conditions and location with the investment property of the Group and has been made nearly to the date of valuation.

The fair value of the investment property is based on sales comparison approach using significant observable inputs. The fair value is within level 2 of the fair value hierarchy.

16 Property, plant and equipment, net

				Consolida	Consolidated financial statements	ements			
	Land Baht	Land improvement Baht	Power plant, transmission system and equipment Baht	Office equipment, furniture and computer Baht	Building and structure Baht	Motor vehicles Baht	Construction in progress Baht	Spare parts Baht	Total Baht
At 1 January 2016 Cost Less Accumulated depreciation Less Provision for impairment	1,106,084,367	105,145,901 (32,056,278)	39,891,622,907 (11,863,372,473) (140,249)	278,310,713 (136,089,589)	503,679,354 (161,555,604)	41,413,407 (31,415,397)	11,809,278,169	267,935,915	54,003,470,733 (12,224,489,341) (140,249)
Net book amount	1,106,084,367	73,089,623	28,028,110,185	142,221,124	342,123,750	9,998,010	11,809,278,169	267,935,915	41,778,841,143
For the year ended 31 December 2016 Opening net book amount Additions Acquisition of subsidiary (Note 13) Disposals/ write-off, net Transfer in (out) Exchange differences Depreciation charge	1,106,084,367 165,838,640 - 85,592,000	73,089,623 25,678,525 - (47,602,866) - (3,455,387)	28,028,110,185 341,475,383 (33,116) 13,278,431,272 (66,332) (2,207,582,866)	142,221,124 40,386,645 2 (13,115) (52,241,516) 253,950 (24,324,621)	342,123,750 5,968,905 - (1) 162,201,002 - (25,442,235)	9,998,010 12,071,306 (1,361,047) 88,983 (5,455,225)	11,809,278,169 6,890,594,791 3,848,016 (3,848,016) (13,499,823,459) 331,796	267,935,915 - - 73,443,567	41,778,841,143 7,482,014,195 3,848,018 (5,255,295) 608,397 (2,266,260,334)
Closing net book amount	1,357,515,007	47,709,895	39,440,334,526	106,282,469	484,851,421	15,342,027	5,200,381,297	341,379,482	46,993,796,124
At 31 December 2016 Cost Less Accumulated depreciation Less Provision for impairment	1,357,515,007	57,053,512 (9,343,617)	53,483,130,470 (14,042,655,695) (140,249)	229,595,817 (123,313,348)	672,408,534 (187,557,113)	47,044,124 (31,702,097)	5,200,381,297	341,379,482	61,388,508,243 (14,394,571,870) (140,249)
Net book amount	1,357,515,007	47,709,895	39,440,334,526	106,282,469	484,851,421	15,342,027	5,200,381,297	341,379,482	46,993,796,124

16 Property, plant and equipment, net (Cont'd)

				Consolid	Consolidated financial statements	tements			
	Land Baht	Land improvement Baht	Power plant, transmission system and equipment Baht	Office equipment, furniture and computer Baht	Building and structure Baht	Motor vehicles Baht	Construction in progress Baht	Spare parts Baht	Total Baht
For the year ended 31 December 2017 Opening net book amount Additions Disposals/ write-off, net Transfer in (out) Transfer land to land use right Impairment charge Exchange differences	1,357,515,007 1,176,007,570 387,400 (256,666,744)	47,709,895 2,359,935 5,766,515	39,440,334,526 110,003,797 (1) 92,805,267 - (12,865,838)	106,282,469 50,655,851 (41,685) 47,263 (421,323)	484,851,421 3,997,393 18,826,872 - (50,435)	15,342,027 16,453,146 (1,875,637) - - (1,128,337)	5,200,381,297 5,909,742,960 (110,934,432) (2,931,148)	341,379,482 9,150,156 (22,493,281) (10,849,064)	46,993,796,124 7,278,370,808 (1,917,323) (15,594,396) (256,666,744) (10,849,064) (17,397,081)
Depreciation charge  Closing net book amount	2,277,243,233	(5,146,102)	(2,429,174,762) 37,201,102,989	(31,149,603)	(28,758,093) 478,867,158	(5,662,104)	10,996,258,677	317,187,293	(2,499,890,664) 51,469,851,660
At 31 December 2017 Cost Less Accumulated depreciation Less Provision for impairment	2,277,243,233	65,179,962 (14,489,719)	53,631,793,309 (16,430,550,071) (140,249)	278,848,066 (153,475,094)	695,178,944 (216,311,786)	56,357,011 (33,227,916) -	10,996,258,677	328,036,357 - (10,849,064)	68,328,895,559 (16,848,054,586) (10,989,313)
Net book amount	2,277,243,233	50,690,243	37,201,102,989	125,372,972	478,867,158	23,129,095	10,996,258,677	317,187,293	51,469,851,660

### 16 Property, plant and equipment, net (Cont'd)

	Separat	te financial state	ments
	Office equipment, furniture and computer Baht	Construction In progress Baht	Total Baht
At 1 January 2016 Cost Less Accumulated depreciation	6,640,250 (1,400,357)	3,174,550 -	9,814,800 (1,400,357)
Net book amount	5,239,893	3,174,550	8,414,443
For the year ended 31 December 2016 Opening net book amount Additions Transfer in (out) Depreciation charge	5,239,893 12,120,141 3,174,550 (2,754,393)	3,174,550 - (3,174,550)	8,414,443 12,120,141 - (2,754,393)
Closing net book amount	17,780,191		17,780,191
At 31 December 2016 Cost Less Accumulated depreciation	21,934,941 (4,154,750)	- 	21,934,941 (4,154,750)
Net book amount	17,780,191	<u> </u>	17,780,191
For the year ended 31 December 2017 Opening net book amount Additions Depreciation charge	17,780,191 11,241,525 (3,823,664)	- - -	17,780,191 11,241,525 (3,823,664)
Closing net book amount	25,198,052		25,198,052
At 31 December 2017 Cost Less Accumulated depreciation	33,176,466 (7,978,414) 25,198,052	<u> </u>	33,176,466 (7,978,414) 25,198,052
Net book amount	23, 190,032		25,190,052

Depreciation was charged to the statements of comprehensive income as follows:

		lidated statements	Sepa financial s	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cost of sales Administrative expenses	2,470,065,993 29,824,671	2,239,592,137 26,668,197	3,823,664	2,754,393
	2,499,890,664	2,266,260,334	3,823,664	2,754,393

Bank borrowings are secured with properties to the value of Baht 38,091,246,730 (2016: Baht 44,887,598,861) (Note 21).

Borrowing costs of Baht 262,055,241 (2016: Baht 270,499,955), arising from financing specifically for the construction of power plants were capitalised to power plant under construction in the consolidated financial statements. The interest capitalisation rates were between 2.71% to 2.79% per annum (2016: between 3.12% to 5.95% per annum), representing the actual borrowing cost of the borrowings for the projects.

Intangible assets, net

				Consolid	Consolidated financial statements	ements			
	Right to use assets Baht	Deferred power plant costs Baht	Land use right Baht	Right in Power Purchase Agreement Baht	Rights from service concession arrangements	Right in Operation and Maintenance Contracts Baht	Computer Software Baht	Intangible assets in progress Baht	Total Baht
At 1 January 2016 Cost Less Accumulated amortisation	124,763,955 (52,380,669)	2,701,661,544 (99,119,941)	322,433,676 (19,174,299)	1,155,990,250 (206,958,072)	1,116,930,733	21,670,050	37,092,026 (13,285,455)	1,200,800	5,481,743,034 (402,839,036)
Net book amount	72,383,286	2,602,541,603	303,259,377	949,032,178	1,116,930,733	9,749,450	23,806,571	1,200,800	5,078,903,998
For the year ended 31 December 2016 Opening net book amount Additions Transfer in (out) Exchange differences Amortisation charge	72,383,286 9,866,020 15,000,000 16,819 (6,381,129)	2,602,541,603 100,814,839 (87,365,945) - (51,621,721)	303,259,377 74,971,423 71,832,065 (12,040,124)	949,032,178 986,840,928 - 13,018,781 (131,274,007)	1,116,930,733 514,604,523 - 1,250,773	9,749,450	23,806,571 21,136,327 1,734,680 (974) (5,625,009)	1,200,800 8,234,748 (1,200,800)	5,078,903,998 1,716,468,808 - 14,284,932 (208,504,404)
Closing net book amount	90,884,996	2,564,368,776	438,022,274	1,817,617,880	1,632,786,029	8,187,036	41,051,595	8,234,748	6,601,153,334
At 31 December 2016 Cost Less Accumulated amortisation	172,103,642 (81,218,646)	2,715,078,427 (150,709,651)	469,104,035 (31,081,761)	2,155,849,959 (338,232,079)	1,632,786,029	21,670,050 (13,483,014)	67,431,611 (26,380,016)	8,234,748	7,242,258,501 (641,105,167)
Net book amount	90,884,996	2,564,368,776	438,022,274	1,817,617,880	1,632,786,029	8,187,036	41,051,595	8,234,748	6,601,153,334

17 Intangible assets, net (Cont'd)

				Consolid	Consolidated financial statements	ements			
	Right to use assets	Deferred power plant costs Baht	Land use right Baht	Right in Power Purchase Agreement Baht	Rights from service concession arrangements	Right in Operation and Maintenance Contracts Baht	Computer Software Baht	Intangible assets in progress Baht	Total Baht
For the year ended 31 December 2017 Opening net book amount	90,884,996	2,564,368,776	438,022,274	1,817,617,880	1,632,786,029	8,187,036	41,051,595	8,234,748	6,601,153,334
Disposals/write-off, net	3,115,798		13,005,933	000,000,6	831,119,432	1 1	35,929,822 (51)	20,434,939	908,605,924
Transfer in (out) Transfer land to land use right	(587,287)	49,535,220	(23,463,296) 256,666,744	(49,535,220)			3,801,216	(3,801,216)	(24,050,583) 256,666,744
Exchange differences Amortisation charge	(3,528,156)	(1,834,774)	(308,718)	(101,081,499)	(173,350,741)	- (1.562.414)	(338,629)		(280,442,517)
Closing net book amount	79,908,719	2,539,629,829	672,002,056	1,553,524,885	2,258,254,524	6,624,622	886,989,988	24,868,471	7,203,803,094
At 31 December 2017  Cost  Less Accumulated amortisation	169,743,065 (89,834,346)	2,763,592,312 (223,962,483)	712,755,974 (40,753,918)	2,009,293,666 (455,768,781)	2,289,358,328 (31,103,804)	21,670,050 (15,045,428)	105,392,610 (36,402,622)	24,868,471	8,096,674,475 (892,871,381)
Net book amount	79,908,719	2,539,629,829	672,002,056	1,553,524,885	2,258,254,524	6,624,622	68,989,988	24,868,471	7,203,803,094

# 17 Intangible assets, net (Cont'd)

	Separa	ate financial state	nents
	Computer software Baht	Computer software under installation Baht	Total Baht
At 1 January 2016 Cost Less Accumulated amortisation	13,991,395 (1,586,886)	1,200,800	15,192,195 (1,586,886)
Net book amount	12,404,509	1,200,800	13,605,309
For the year ended 31 December 2016 Opening net book amount Additions Transfer in (out) Amortisation charge	12,404,509 9,967,040 1,200,800 (2,617,480)	1,200,800 8,234,749 (1,200,800)	13,605,309 18,201,789 - (2,617,480)
Closing net book amount	20,954,869	8,234,749	29,189,618
At 31 December 2016 Cost Less Accumulated amortisation Net book amount	25,159,235 (4,204,366) 20,954,869	8,234,749 - 8,234,749	33,393,984 (4,204,366) 29,189,618
For the year ended 31 December 2017 Opening net book amount Additions Transfer in (out) Amortisation charge	20,954,869 25,506,664 6,862,909 (7,162,222)	8,234,749 14,235,139 (6,862,909)	29,189,618 39,741,803 - (7,162,222)
Closing net book amount	46,162,220	15,606,979	61,769,199
At 31 December 2017 Cost Less Accumulated amortisation Net book amount	57,528,808 (11,366,588) 46,162,220	15,606,979 - 15,606,979	73,135,787 (11,366,588) 61,769,199

Amortisation was charged to the statements of comprehensive income as follows:

	Consol financial st		Sepai financial st	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Cost of sales Administrative expenses	128,553,993 129,575,764	74,110,156 134,394,248	7,162,222	- 2,617,480
	258,129,757	208,504,404	7,162,222	2,617,480

### 18 Deferred income taxes

The amounts recognised in the statements of financial position as at 31 December are as follows:

	Consol financial st		Sepa financial s	
	2017 2016		2017	2016
	Baht Baht		Baht	Baht
Deferred tax assets Deferred tax liabilities	100,851,780	90,676,642	1,784,146	926,103
	(85,552,156)	(75,483,749)	-	<u>-</u>
Deferred tax assets, net	15,299,624	15,192,893	1,784,146	926,103

The analysis of deferred tax assets and deferred tax liabilities is as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Deferred tax assets: Deferred tax assets to be				
recovered within 12 months Deferred tax assets to be	16,655,476	28,463,153	5,816	349,106
recovered after 12 months	325,655,299	352,327,121	1,778,330	576,997
	342,310,775	380,790,274	1,784,146	926,103
Deferred tax liabilities: Deferred tax liabilities to be				
settled within 12 months Deferred tax liabilities to be	(26,674,838)	(25,460,896)	-	-
settled after 12 months	(300,336,313)	(340,136,485)		<u>-</u>
	(327,011,151)	(365,597,381)		<u>-</u>
Deferred tax assets, net	15,299,624	15,192,893	1,784,146	926,103

The gross movements of deferred tax assets and deferred tax liabilities account are as follows:

	Consol financial st		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
At 1 January (Credited) charged to profit or loss	15,192,893	46,656,119	926,103	773,378
(Note 30) Exchange differences	(4,889,320) 4,996,051	(31,463,226)	858,043 	152,725 -
At 31 December	15,299,624	15,192,893	1,784,146	926,103

18 Deferred income taxes (Cont'd)

The movements in deferred tax assets and liabilities during the year are as follows:

			Consolic	Consolidated financial statements	ments		
	Mark up margin on property, plant and equipment Baht	Tax loss carry forwards Baht	Employee benefit obligations Baht	Provision for decommissioning Baht	Depreciation Baht	Allowance for inventory revaluation Baht	Total Baht
<b>Deferred tax assets</b> At 1 January 2016 Charged (credited) to profit or loss	153,420,416 48,360,184	86,298,051 (42,065,402)	16,603,071 1,034,260	28,158,039 14,538,250	47,036,273 25,491,328	1,915,804	333,431,654 47,358,620
At 31 December 2016	201,780,600	44,232,649	17,637,331	42,696,289	72,527,601	1,915,804	380,790,274
At 1 January 2017 Charged (credited) to profit or loss	201,780,600 (608,392)	44,232,649 (17,747,150)	17,637,331 1,137,773	42,696,289 4,075,484	72,527,601 (35,169,626)	1,915,804 9,832,412	380,790,274 (38,479,499)
At 31 December 2017	201,172,208	26,485,499	18,775,104	46,771,773	37,357,975	11,748,216	342,310,775

### 18 Deferred income taxes (Cont'd)

The movements in deferred tax assets and liabilities during the year are as follows: (Cont'd)

		Consolida	ited financial s	tatements	
	Fair value on property, plant and equipment from acquisition of subsidiaries	Fair value on intangible assets Baht	Depreciation Baht	Decommissioning cost Baht	Total Baht
Deferred tax liabilities					
At 1 January 2016 Charged to profit or loss	87,127,417 974,252	136,010,379 34,780,899	48,395,714 33,359,699	15,242,025 9,706,996	286,775,535 78,821,846
At 31 December 2016	88,101,669	170,791,278	81,755,413	24,949,021	365,597,381
At 1 January 2017 Credited to other	88,101,669	170,791,278	81,755,413	24,949,021	365,597,381
profit or loss Exchange differences	(1,194,018)	(8,663,592) (4,996,051)	(22,466,975)	(1,265,594)	(33,590,179) (4,996,051)
At 31 December 2017	86,907,651	157,131,635	59,288,438	23,683,427	327,011,151
				sta	ite financial tements oyee benefit obligations Baht
Deferred tax assets At 1 January 2016 Charged to profit or loss	3				773,378 152,725
At 31 December 2016					926,103
At 1 January 2017 Charged to profit or loss	3				926,103 858,043
At 31 December 2017					1,784,146

Deferred income tax assets are recognised for tax loss carry forwards only to the extent that the realisation of the related tax benefit through the future taxable profits is probable. At 31 December 2017, the Group has unrecognised tax losses of Baht 1,539,050,782 (2016: Baht 1,202,024,218) that can be carried forward to offset against future taxable income; these tax losses will expire in 2018 - 2022 (2016: in 2017 - 2021), respectively.

#### 19 Other non-current assets

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Deposits Prepaid long-term service	18,042,958	15,903,344	106,702	128,168
agreements Deferred financing fee	61,178,380	79,306,236	-	-
over than 1 year	14,893,920	100,491,594	219,693	219,693
Advances for project development Advance payment for investment in	278,106,734	147,567,445	-	-
a joint venture (Note 36.4 (I)) Deferred employee benefits	28,512,000	-	28,512,000	-
expense over 1 year	28,261,007	-	8,805,733	-
Prepaid land rental	89,775,688	13,739,409	-	
Withholding tax receivables	71,190,460	-	13,427,942	-
Others		3,879,810		
	589,961,147	360,887,838	51,072,070	347,861

#### 20 Trade and other payables

		lidated statements	Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Trade payables Amounts due to related parties	2,140,684,599	1,444,130,584	7,890,759	1,537,724
(Note 34.4)	6,533,683	3,699,748	389,877,239	118,759,803
Other payables	595,681,095	647,225,018	18,378,533	10,731,695
Accrued interest expenses				
- financial institutions	304,254,573	275,787,020	45,222,315	53,938,042
- a related party (Note 34.4)	369,828,314	396,057,433	-	-
- other parties	799,762	817,702	799,762	817,702
Accrued expenses	235,913,016	537,789,115	4,203,787	6,293,130
Accrued expenses from long-term				
service agreements	358,547,905	309,070,980	-	-
Dividends payable	479,654,626		<u> </u>	
	4,491,897,573	3,614,577,600	466,372,395	192,078,096

# 21 Borrowings

# Short-term borrowings from financial institutions

	Consol financial s		Sepa financial s	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Short-term borrowings from financial institutions		195,773,690		

Short-term borrowings from financial institutions are in form of promissory notes due within 1 year. The short-term borrowings bear interest rate at MLR minus certain margin.

# Long-term borrowings from financial institutions

	Conso financial s		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Current portion of long-term borrowings from financial				
institutions <u>Less</u> Deferred financing fee	1,874,275,693 (29,619,436)	2,523,708,264 (42,794,453)	200,000,000 (1,136,411)	560,000,000 (3,811,719)
Current portion of long-term borrowings from				
financial institutions, net	1,844,656,257	2,480,913,811	198,863,589	556,188,281
Long-term borrowings from				
financial institutions <u>Less</u> Deferred financing fee	35,481,824,698 (485,347,219)	47,571,344,596 (573,246,304)	1,712,240,000 (1,360,579)	6,152,240,000 (6,126,364)
Long-term borrowings from financial institutions, net	34,996,477,479	46,998,098,292	1,710,879,421	6,146,113,636
	01,000,177,170	10,000,000,202	1,7 10,070,121	0,110,110,000
Total long-term borrowings from financial institutions, net	36,841,133,736	49,479,012,103	1,909,743,010	6,702,301,917

# 21 Borrowings (Cont'd)

### Long-term borrowings from financial institutions (Cont'd)

Maturity of long-term borrowings are as follows:

	Consol financial s		Separate financial statements		
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Within 1 year Later than 1 year and	1,874,275,693	2,523,708,264	200,000,000	560,000,000	
not later than 5 years Later than 5 years	8,414,116,235 27,067,708,463	15,123,304,552 32,448,040,044	1,712,240,000	6,152,240,000 <u>-</u>	
Less Deferred financing	37,356,100,391	50,095,052,860	1,912,240,000	6,712,240,000	
fees	(514,966,655)	(616,040,757)	(2,496,990)	(9,938,083)	
Total long-term borrowings from financial	00.044.400.700	40 470 040 400	1 000 740 040	0.700.004.047	
institutions, net	36,841,133,736	49,479,012,103	1,909,743,010	6,702,301,917	

Long-term borrowings from financial institutions can be classified by currencies as follows:

	Consol financial s		Separate financial statements		
	2017	2016	2017	2016	
	Baht	Baht	Baht	Baht	
Thai Baht US Dollars Less Deferred financing fee	25,401,621,054	34,069,118,972	1,912,240,000	6,712,240,000	
	11,954,479,337	16,025,933,888	-	-	
	(514,966,655)	(616,040,757)	(2,496,990)	(9,938,083)	
Total long-term borrowings from financial institutions, net	36,841,133,736	49,479,012,103	1,909,743,010	6,702,301,917	

Interest on long-term borrowings are floating rates. The effective interest rates at the statements of financial position date were as follows:

		Consolidated financial statements		ate atements
	2017 %	2016 %	2017 <u>%</u>	2016 %
Long-term borrowings from financial institutions	2.18 - 6.36	3.03 - 5.32	5.25 - 6.36	5.25 - 5.32

The fair values are based on discounted cash flows using a discount rate based upon the borrowing rate which the management expects would be available to the Group and the Company at the statement of financial position date. The carrying amounts of short-term borrowings and long-term borrowings approximate their fair values. The fair value are within level 2 of the fair value hierarchy.

#### 21 Borrowings (Cont'd)

### Long-term borrowings from financial institutions (Cont'd)

The movements of the long-term borrowings from financial institutions can be analysed as follows:

	Consol financial st		Separate financial statements		
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Opening net book value Additions Repayments	49,479,012,103 5,814,161,469 (17,297,663,709)	44,554,362,264 10,952,370,885 (5,710,513,714)	6,702,301,917 - (4,800,000,000)	7,016,853,023 1,842,100,000 (2,159,916,000)	
Unrealised exchange gains Additions of deferred financing fee	(1,161,560,710) (88,629,910)	(246,706,677) (136,146,190)	-	(4,067,693)	
Amortisation of deferred financing fee Exchange differences	188,774,419 (92,959,926)	51,582,595 14,062,940	7,441,093 -	7,332,587	
Closing net book value	36,841,133,736	49,479,012,103	1,909,743,010	6,702,301,917	

During the second quarter of 2017, the three subsidiaries being Amata B.Grimm Power 3 Limited, Amata B.Grimm Power (Rayong) 1 Limited and Amata B.Grimm Power (Rayong) 2 Limited have fully repaid the long-term borrowings before the maturity date totalling Baht 6,991.19 million and US Dollar 110.15 million (equivalent to Baht 3,800.49 million). The subsidiaries paid for early repayments fees totalling Baht 31.41 million and US Dollar 1.64 million (equivalent to Baht 56.92 million), and wrote off the remaining deferred financing fees totalling Baht 144 million. The fees and the write-off were presented as finance costs in the consolidated statements of comprehensive income for the year ended 31 December 2017.

During the third quarter of 2017, the Company has repaid the long-term borrowings before the maturity date totalling Baht 4,600 million. The Company wrote off the remaining deferred financing fees totalling Baht 5.27 million. The write-off was presented as finance costs in the consolidated and separate statements of comprehensive income for the year ended 31 December 2017.

The above long-term borrowings are secured by pledge of subsidiaries' shares (Note 13), plot of land and power plants of the Group (Note 16) and standby letter of credit of the Company and subsidiaries (Note 36.3). In addition, the Group has to comply with certain conditions as specified in the agreements including covenants such as maintaining the financial ratio.

### **Borrowing facilities**

The Group and the Company have the following undrawn committed borrowing facilities:

	Consol financial s		Separate financial statements		
	2017 2016		2017	2016	
	Baht Baht		Baht	Baht	
Floating rate - expiring within one year - expiring beyond one year	846,403,501	139,960,049	87,760,000	-	
	656,944,000	6,656,959,343		87,760,000	
	1,503,347,501	6,796,919,392	87,760,000	87,760,000	

The facilities expiring within one year are annual facilities subjected to be reviewed at various dates. The facilities have been arranged to finance the expansion of the operations.

### 22 Debentures, net

	Consolidated financial statements		•	Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Current portion of debentures <u>Less</u> Deferred financing fees	2,300,000,000 (1,927,117)	 	2,300,000,000 (1,927,117)	<u> </u>	
Current portion of debentures, net	2,298,072,883		2,298,072,883		
Debentures <u>Less</u> Deferred financing fees	14,700,000,000 (22,234,795)	5,500,000,000 (10,921,936)	3,200,000,000 (4,083,023)	5,500,000,000 (10,921,936)	
Debentures, net	14,677,765,205	5,489,078,064	3,195,916,977	5,489,078,064	
Total debentures, net	16,975,838,088	5,489,078,064	5,493,989,860	5,489,078,064	

The movements of debentures can be analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Opening balance, net Additions Deferred financing fees Amortisation of deferred	5,489,078,064 11,500,000,000 (19,038,500)		5,489,078,064 - -	5,500,000,000 (11,983,340)
financing fees	5,798,524	1,061,404	4,911,796	1,061,404
Closing balance, net	16,975,838,088	5,489,078,064	5,493,989,860	5,489,078,064

### **Details of debentures**

- 1) On 14 October 2016, the Company issued 2 unsecured debentures denominated in Thai Baht of which details are as follows:
  - Series 1 Debenture amount of Baht 2,300 million. The principal will be redeemed on the completion date of the second year from the issuance date which is 14 October 2018. The debenture bears interest at a fixed rate per annum and the interest payment schedule is every six month.
  - Series 2 Debenture amount of Baht 3,200 million. The principal will be redeemed on the completion date of the third year from the issuance date which is 14 October 2019. However, debentures can be redeemed before the maturity date by the issuer. The debenture bears interest at a fixed rate per annum and the interest payment schedule is every six-month.

The Company is required to comply with certain procedure and conditions; for example, maintaining debt to equity ratio at the level as specified in the contract.

### **22 Debentures, net** (Cont'd)

### Details of debentures (Cont'd)

2) On 21 April 2017, Amata B.Grimm Power SPV 1 Limited ("ABPSPV1") (formerly "Amata B.Grimm Power Service (Rayong) Limited") which is an indirect subsidiary issued the guaranteed debentures denominated in Thai Baht totalling Baht 11,500 million as details below:

Series	Amount (Baht million)	Due Date	Tenor period (Year)	Interest rate (% per annum)	Interest payment
1	1,800	21 April 2020	3	2.68	Semi-annually commencing from 21 October 2017
2	600	21 April 2021	4	3.00	Semi-annually commencing from 21 October 2017
3	1,500	21 April 2022	5	3.25	Semi-annually commencing from 21 October 2017
4	900	21 April 2023	6	3.58	Semi-annually commencing from 21 October 2017
5	900	21 April 2024	7	3.76	Semi-annually commencing from 21 October 2017
6	1,000	21 April 2026	9	4.01	Semi-annually commencing from 21 October 2017
7	1,500	21 April 2027	10	4.17	Semi-annually commencing from 21 October 2017
8	800	21 April 2028	11	4.33	Semi-annually commencing from 21 October 2017
9	1,000	21 April 2029	12	4.35	Semi-annually commencing from 21 October 2017
10	600	21 April 2030	13	4.48	Semi-annually commencing from 21 October 2017
11	900	21 April 2032	15	4.79	Semi-annually commencing from 21 October 2017

The debentures are guaranteed by three subsidiaries being Amata B.Grimm Power 3 Limited, Amata B.Grimm Power (Rayong) 1 Limited and Amata B.Grimm Power (Rayong) 2 Limited. ABPSPV1 will proceed to ensure that the guarantors comply with certain procedures and conditions, for example, maintaining interest bearing debt to equity ratio at the level as specified in the contracts.

Book value and fair value of debentures as at 31 December 2017:

	Consolidated financial statements		Separate financial statements	
	Book value Baht	Fair value Baht	Book value Baht	Fair value Baht
Debentures	16,975,838,088	17,488,616,387	5,493,989,860	5,557,842,020

Fair value of debentures have been calculated based on future cash flow and discounted by the yield curve of the Thai Bond Market Association at 2.19% - 4.40%. The fair value is within level 2 of the fair value hierarchy.

The effective interest rates at the statements of financial position date were as follows:

	Consolidated financial statements		Separate financial statements	
	2017 %	2016 %	2017 %	2016 %
Debentures	2.74 - 4.80	3.71 - 3.88	3.71 - 3.88	3.71 - 3.88

# 23 Employee benefit obligations

	Consolidated financial statements		•	Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Liabilities in the statement of financial position	175,435,372	156,488,086	8,920,730	4,630,517	
Employment benefits included in operating profit	19,173,598	22,783,500	820,175	763,625	

Employee benefit obligations comprise "Retirement benefits" and "Long service award".

### **Retirement benefits**

The movements in the retirement benefits over the year are as follows:

		Consolidated financial statements		Separate financial statements	
	2017 Bobt	2016	2017	2016	
	Baht	Baht	Baht	Baht	
At 1 January	146,684,137	127,854,038	4,416,879	3,687,368	
Current service cost	13,983,852	17,364,096	691,562	661,516	
Interest cost	3,541,449	3,866,003	90,610	67,995	
Employee transferred within					
the Group	-	-	3,470,038	-	
Exchange differences	(226,312)	-	-	-	
Benefit payment	- -	(2,400,000)	-	-	
At 31 December	163,983,126	146,684,137	8,669,089	4,416,879	

The amounts recognised in 'operating profit' in the statement of comprehensive income are as follows:

		Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016	
	Baht	Baht	Baht	Baht	
Current service cost	13,983,852	17,364,096	691,562	661,516	
Interest cost	3,541,449	3,866,003	90,610	67,995	
Total charge	17,525,301	21,230,099	782,172	729,511	

The total charge were included in 'cost of sales and services' and 'administrative expenses' in the consolidated and separate financial statement as follows:

		Consolidated financial statements		rate tatements
	2017	2016	2017	2016
	Baht	Baht	Baht	Baht
Cost of sales and services	7,432,777	7,142,182	782,172	729,511
Administrative expenses	10,092,524	14,087,917	-	
	17,525,301	21,230,099	782,172	729,511

# 23 Employee benefit obligations (Cont'd)

# **Long service Award**

The movements in the Long service award over the year are as follows:

		Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016	
	Baht	Baht	Baht	Baht	
At 1 January	9,803,949	8,250,548	213,638	179,524	
Current service cost	1,390,065	1,322,562	31,380	28,547	
Interest cost	258,232	230,839	6,623	5,567	
At 31 December	11,452,246	9,803,949	251,641	213,638	

The amounts recognised in 'operating profit' in the statement of comprehensive income are as follows:

		Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016	
	Baht	Baht	Baht	Baht	
Current service cost	1,390,065	1,322,562	31,380	28,547	
Interest cost	258,232	230,839	6,623	5,567	
Total charge	1,648,297	1,553,401	38,003	34,114	

The total charge were included in 'cost of sales and services' and 'administrative expenses' in the consolidated and separate financial statement as follows:

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
	Baht	Baht	Baht	Baht
Cost of sales and services	699,070	522,592	38,003	34,114
Administrative expenses	949,227	1,030,809		
	1,648,297	1,553,401	38,003	34,114

#### 23 Employee benefit obligations (Cont'd)

The principal actuarial assumptions used were as follows:

			Consolidated financial statements			
			2017 %	2016 %		
Dia a sunt nata						
Discount rate		4.0	3.1 - 9.0	3.1 4.0 - 9.0		
Salary increase rate Turnover rate		-	10.0	0.0 - 10.0		
Turriover rate		0.0 -	10.0	0.0 - 10.0		
		2017				
	Impact o	n defined benefit ol	oligatio	ns		
	Change in assumption	Increase in assumption		Decrease in assumption		
Discount rate	1%	Decrease by 10%	Inc	crease by 12%		
Salary increase rate	1%	Increase by 15%		crease by 13%		
Turnover rate	20%	Decrease by 3%	Ir	ncrease by 6%		
		2016				
	Impact o	n defined benefit ol	oligatio	ns		
	Change in	Increase in		Decrease in		
	assumption	assumption		assumption		
Discount rate	1%	Decrease by 11%	Inc	crease by 13%		
Salary increase rate	1%	Increase by 13%		crease by 11%		
Turnover rate	20%	Decrease by 4%		ncrease by 4%		

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligations to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method) has been applied as when calculating the employee benefit obligations recognised in the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

The weighted average duration of the defined benefit obligations is 19 years (2016: 19 years).

Expected maturity analysis of undiscounted retirement:

	Consolidated financial statements					
	Less than a year Baht	Between 1-2 years Baht	Between 2-5 years Baht	Over 5 years Baht	Total Baht	
At 31 December 2017 Retirement benefits	5,376,920	2,522,312	29,103,296	518,023,389	555,025,917	
		Consolidate	ed financial s	statements		
	Less than a year Baht	Between 1-2 years Baht	Between 2-5 years Baht	Over 5 years Baht	Total Baht	
At 31 December 2016 Retirement benefits	12,965,075	5,376,920	17,838,211	531,810,786	567,990,992	

#### 23 Employee benefit obligations (Cont'd)

Expected maturity analysis of undiscounted retirement: (Cont'd)

	Separate financial statements					
	Less than a year Baht	Between 1-2 years Baht	Between 2-5 years Baht	Over 5 years Baht	Total Baht	
At 31 December 2017 Retirement benefits	-	-	-	7,546,590	7,546,590	

		Separate financial statements					
	Less than a year Baht	Between 1-2 years Baht	Between 2-5 years Baht	Over 5 years Baht	Total Baht		
At 31 December 2016 Retirement benefits	1,895,529	<del>-</del>	<del>-</del>	7,546,590	9,442,119		

#### 24 Share capital

	Authorise share capital		Issued an share o	Share premium on ordinary shares	
	Shares	Baht	Shares	Baht	Baht
At 1 January 2016 Additional paid-up	37,800,000	3,780,000,000	37,800,000	1,578,140,000 2,201,860,000	
Balance before change in pay value	37,800,000	3,780,000,000	37,800,000	3,780,000,000	
Balance after change in par value Increase of authorised	1,890,000,000	3,780,000,000	1,890,000,000	3,780,000,000	-
shares	810,000,000	1,620,000,000			
At 31 December 2016	2,700,000,000	5,400,000,000	1,890,000,000	3,780,000,000	
Issue of shares Share issuance	-	-	716,900,000	1,433,800,000	10,036,600,000
expenses		<u>-</u> _	<u> </u>		(392,560,052)
At 31 December 2017	2,700,000,000	5,400,000,000	2,606,900,000	5,213,800,000	9,644,039,948

On 16 May 2016, the Company's Extraordinary General Meeting of shareholders had approved to additionally paid up for 1,000,000 ordinary shares at Baht 4.36 per share, and for 29,300,000 ordinary shares at Baht 75 per share, totalling Baht 2,201.86 million.

On 2 September 2016, the Company's Extraordinary General Meeting of shareholders had approved the split of par value of the Company's shares from Baht 100 per share to Baht 2 per share. As a result, the number of registered shares increased from 37,800,000 shares to be 1,890,000,000 shares. The shareholders also approved to increase registered share capital from 1,890,000,000 shares at par value of Baht 2 per share to be 2,700,000,000 shares at par value of Baht 2 per share. The Company registered the change of par value and increase of registered share capital with the Ministry of Commerce on 9 September 2016.

As at 31 December 2016, the total authorised and registered number of ordinary shares is 2,700,000,000 shares with a par value of Baht 2 per share, totalling authorised share capital is Baht 5,400 million and 1,890,000,000 ordinary shares at par value of Baht 2 per share are fully paid-up, totalling paid-up share capital is Baht 3,780 million.

#### 24 Share capital (Cont'd)

On 17 July 2017, the Company received paid-up share capital for 651,800,000 ordinary shares, with a par value of Baht 2 per share from an initial public offering ("IPO") at the offering price of Baht 16 per share totalling Baht 10,428.80 million, including share premium of Baht 9,125.20 million. The Company's shares are trading in the Stock Exchange of Thailand commencing 19 July 2017. The Company recorded share issuance costs amounting to Baht 392.56 million as a deduction to the share premium. The Company registered the increased share capital with the Ministry of Commerce on 17 July 2017.

On 21 August 2017, the Company received paid-up share capital for over-allotment of 65,100,000 ordinary shares, with a par value of Baht 2 per share at the price of Baht 16 per share totalling Baht 1,041.60 million, including share premium of Baht 911.40 million. The Company registered the increased share capital with the Ministry of Commerce on 21 August 2017.

In addition, 10,584,700 IPO ordinary shares were allocated for the Group's directors and employees under Special Remuneration Scheme. 4,976,000 of the shares were paid for by the Company for directors and employees of the Company and subsidiaries at the price of Baht 16 per share totalling Baht 79.62 million. The other 5,608,700 shares were paid by subsidiaries at the price of Baht 16 per share totalling Baht 89.74 million.

#### 25 Legal Reserve

Under the public limited company Act., B.E. 2535, the Company is required to set aside as a legal reserve at least 5 % of its net profit after accumulated deficit brought forward (if any) until the reserve is not less than 10 % of the registered capital. The legal reserve is non-distributable.

During the year ended 31 December 2017, the Company provided additional legal reserve amounting to Baht 58,588,896 (2016: Baht 25,385,206).

26 Sales and service income

	Consolidated financial statements		Separate financial statements		
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Electricity sales Service revenues	30,638,848,900 12,207,335	27,222,909,658 9,352,070	172,955,050	322,801,392	
	30,651,056,235	27,232,261,728	172,955,050	322,801,392	

Other Income

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Interest income Income from delayed works	106,298,959	77,185,104	225,257,452	87,453,821
penalty	-	17,448,024	-	-
Income from insurance claim	67,421,442	57,489,417	-	-
Dividend income	-	-	1,544,218,013	656,496,326
Others	13,300,248	19,602,171	489,407	17,945
	187,020,649	171,724,716	1,769,964,872	743,968,092

# 28 Expenses by nature

The following expenditure items, classified by nature, have been charged in arriving at the operating profit:

	Consoli financial st		Separate financial statements	
	2017	2016	2017	2016
	Baht	Baht	Baht	Baht
Gas purchase	18,128,442,096	16,285,227,548	-	-
Cost of sales of electricity	1,061,426,781	1,084,435,263	-	-
Electricity supply	71,558,738	69,672,195	-	-
Raw water	274,853,531	257,165,849	-	-
Other costs of sales of electricity	135,545,622	159,878,222	-	-
Staff costs	970,997,295	833,269,001	62,572,047	24,098,388
Depreciation of plant and				
equipment (Note 16)	2,499,890,664	2,266,260,334	3,823,664	2,754,393
Amortisation of intangible				
assets (Note 17)	258,129,757	208,504,404	7,162,222	2,617,480
Major repair and maintenance				
of power plants expenses	839,376,890	818,981,699	-	-
Bank charges	47,179,895	60,587,922	12,888,779	27,332,003
Consulting fees	116,846,717	72,918,310	38,228,849	18,312,134
Penalties	101,595,609	97,587,665	-	-
Plant insurance	122,638,033	135,894,472	-	-

# 29 Finance Costs

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Interest on loans and debentures Interest on long-term loan from Amata B.Grimm Power Power Plant Infrastructure Fund	2,291,463,697	2,182,689,700	496,947,453	449,648,733
(Note 34.2 and 34.8) Gain on exchange rate	546,211,620	593,605,363	-	-
from financing activities Amortisation of deferred	(1,099,405,095)	(284,284,899)	(2,041,025)	(27,987,554)
financing fee	204,171,231	46,430,955	29,852,889	8,393,991
Others	110,251,725	24,965,809		<u> </u>
	2,052,693,178	2,563,406,928	524,759,317	430,055,170

#### 30 Income tax expense

	Consol financial st		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Current tax: Current tax on profits for the year	229,611,047	193,678,037	-	-
Deferred tax: Origination and reversal of temporary differences (Note 18)	4,889,320	31,463,226	(858,043)	(152,725)
Total income tax	234,500,367	225,141,263	(858,043)	(152,725)

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate of the home country of the Company as follows:

	Conso financial s	lidated tatements	Separate financial statements		
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Profit before tax	3,828,350,290	2,541,010,505	1,170,919,874	507,551,402	
Tax calculated at a tax rates of 8% to 24% Tax effect of:	779,075,764	509,670,566	234,183,975	101,510,280	
Income not subject to tax Expenses not deductible	(654,171,694)	(380,854,445)	(308,843,603)	(131,299,265)	
for tax purpose Expenses double deduction	28,669,122	41,816,767	3,162,733	2,702,585	
for tax purpose  Tax losses for which no deferred income tax asset was	(9,045,094)	(3,185,114)	(2,053,885)	(918,487)	
recognised Utilisation of previously	131,393,222	65,590,647	72,692,737	27,852,162	
unrecognised tax losses Adjustment in respect of	(37,818,627)	(8,591,781)	-	-	
prior year Others	(3,602,326)	946,290 (251,667)			
Tax charge	234,500,367	225,141,263	(858,043)	(152,725)	
Weighted average applicable tax rate	6%	9%	-	-	

As at 31 December 2017, temporary difference on loss from investment in associates and joint ventures amounting to Baht 200,605,846 was not recognised as deferred tax liabilities. (2016: temporary difference on loss from investment in associates and joint ventures amounting to Baht 76,690,253 was not recognised as deferred tax liability).

#### 31 Earnings per share

Basic earnings per share is calculated by dividing the net profit attributable to shareholders of the Company by the weighted average number of ordinary shares in issue.

	Conso financial s	lidated statements	Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Net profit attributable to ordinary shareholders of the Company (Baht)	2,126,710,355	1,380,249,849	1,171,777,916	507,704,127
Weighted average number of ordinary shares outstanding (Shares)	2,213,727,945	1,479,790,466	2,213,727,945	1,479,790,466
Basic earnings per share (Baht per share)	0.96	0.93	0.53	0.34

There are no dilutive potential ordinary shares issue during the year presented, so no diluted earnings per share are presented.

#### 32 Dividends

#### 2017

On 15 May 2017, the Board of Directors Meeting approved the payment of interim dividends in respect of the operation results for the year ended 31 December 2017 for the 1,890,000,000 ordinary shares at Baht 0.06 per share, totalling Baht 120.96 million. These dividends were paid to shareholders on 12 June 2017.

#### 2016

On 29 June 2016, the Board of Directors' meeting approved the payment of interim dividends in respect of the operation results for year ended 31 December 2016 for 37,800,000 shares at Baht 2.38 per share, totalling Baht 89.96 million. These dividends were paid to shareholders on 30 June 2016.

On 12 October 2016, the Board of Directors' meeting approved the payment of interim dividends in respect of the operation results of 2016 for the ordinary paid-up of 1,890,000,000 shares at Baht 0.12 per share, totalling Baht 230.58 million. These dividends were paid to shareholders on 17 October 2016.

On 19 December 2016, the Board of Directors' meeting approved the payment of interim dividends in respect of the operation results of 2016 for the ordinary paid-up of 1,890,000,000 shares at Baht 0.06 per share, totalling Baht 115.29 million. These dividends were paid to shareholders on 26 December 2016.

#### 33 **Financial instruments**

The principal financial risks faced by the Group are interest rate and exchange rate risks. The Group borrows to finance its operations, which involve payments in foreign currencies, at both fixed and floating rates of interest.

The objectives of using derivative financial instruments are to reduce the uncertainty over future cash flows arising from movements in interest rate and exchange rate and to manage the liquidity of cash resources.

Trading for speculative purposes is not allowed. All derivative transactions are subject to prior approval by the respective board of each company in the Group.

## Interest rate and foreign exchange risks

In order to manage risks arising from fluctuations in interest rates and currency exchange rates, the Group uses the following derivative financial instruments.

#### Interest rate swap contracts

Interest rate swap contracts are entered into to manage exposure to fluctuations in interest rates on specific transactions. The Group entered into interest rate swap contracts as follows:

Currency	Long-term b	orrowings	Interest ra contra	•	Interes	t rates
	2017	2016	2017	2016	2017	2016
	Million	Million	Million	Million	%	%
Converting floating rates to fixed rates - Thai Baht - US Dollar	25,401.62	34,069.12	30,625.88	29,011.60	0.89 - 4.55	1.48 - 4.55
	364.31	465.37	1,278.15	478.83	0.96 - 6.49	0.96 - 6.49
Converting fixed rates to floating rates - Thai Baht - US Dollar	- -	- -	2,300.25 36.57	- -	THBFIX LIBOR	- -

The remaining notional principal amounts of the outstanding interest rate swap contracts for long-term borrowings at 31 December were:

		Consolidated financial statements		
	2017 Million Baht	2016 Million Baht		
Within 1 year Later than 1 year	43,056.54 33,054.54	3,878.24 42,372.40		
	76,111.08	46,250.64		

#### Forward and Cross-currency swap contracts

Forward and cross-currency swap contracts are to manage exposure to fluctuations in currency exchange rates and interest rate.

The subsidiaries entered into forward contracts for the hedging foreign exchange risk for the payments under construction agreements, long-term service agreement and supply agreement and entered into cross-currency swap contracts for the repayments of long-term borrowings.

#### 33 Financial instruments (Cont'd)

#### Interest rate and foreign exchange risks (Cont'd)

#### Forward and Cross-currency swap contracts (Cont'd)

As at 31 December, forward and cross-currency swap contracts by converting foreign currency to Thai Baht are as follows:

	Cons	Consolidated financial statements			
	Unit local cu	Unit local currency Unit Baht			
	2017 Million			2016 Million	
			Million		
Swedish Krona	32.34	326.93	138.84	1,367.18	
Euro	0.20	4.75	7.95	188.31	
US Dollar	2.39	4.76	78.63	168.69	
Japanese Yen	871.18	1,784.42	301.60	613.44	

As at 31 December, forward and cross-currency swap contracts by converting foreign currency to US Dollar are as follows:

	Cor	Consolidated financial statements			
	Unit local c	urrency	Unit US	Dollar	
	2017 Million	2016 Million	2017 Million	2016 Million	
			- IVIIIIOII		
Swedish Krona	-	27.64	-	3.28	
Euro	1.34	6.56	1.53	7.43	

The net fair values of the derivative financial instruments at the date of financial statements are as follows:

	Consolidated financial statements		
	2017 Million Baht	2016 Million Baht	
Favourable - Interest rate swaps - Forward contracts - Cross currency swaps	91.91 2.70 121.30	328.26 1.98	
Unfavourable - Interest rate swaps - Forward contracts	(2,332.36) (56.76)	(1,797.31) (145.18)	

The fair values of interest rate swap contracts, forward and cross currency swap contracts have been calculated using rates quoted by the Group's bankers to terminate the contracts at the date of financial statements.

The fair valuation of financial instruments is in level 2.

The valuation techniques of interest rate swap is calculated as the present value of the estimated future cash flows based on observable yield curve. The valuation techniques of forward contracts and cross-currency swap is determined using forward exchange rate at the date of financial statement, with the resulting value discounted back to present value.

#### 34 Related-party transactions

Individuals and entities that directly or indirectly control or are controlled by or are under common control with the Company, including investment entities, associates, joint venture and individuals or entities having significant influence over the Company, key management personnel, including directors and officers of the Company and close members of the family of these individuals and entities associated with these individuals also constitute related parties.

In considering each possible related-party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

The major shareholders of the Company are the B.Grimm Power (Singapore) PTE. LTD., and Mr. Harald Link 33.99% and 24.30% of the Company's shares, respectively. The ultimate controlling party is Mr. Harald Link. The information on the Company's subsidiaries is provided in Note 13.

The following transactions were carried out with related parties:

#### 34.1 Revenues and other income

	Consolidated financial statements		Sepa financial s	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Revenue Sales:				
Other related parties	24,841,240	27,034,600		_
Service income: Subsidiaries Other related parties	12,560,000	- 8,040,000	160,395,050 12,560,000	314,761,392 8,040,000
	12,560,000	8,040,000	172,955,050	322,801,392
Other income Interest income: Subsidiaries Other related parties	12,718,808	- 15,194,530	190,364,572 12,718,808	68,258,922 15,194,530
	12,718,808	15,194,530	203,083,380	83,453,452
<b>Dividend income</b> Subsidiaries		_	1,544,218,013	656,496,326

The following transactions were carried out with related parties: (Cont'd)

# 34.2 Expense

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Purchases of raw water: Other related parties	217,304,295	200,584,673	_	
Finance cost: Associate Other related parties	546,211,620	593,605,363	-	-
(shareholders)	41,952,055		41,952,055	
	588,163,675	593,605,363	41,952,055	<u> </u>
Land purchase: Other related party	36,000,000		36,000,000	
Rental and office service: Other related party	32,461,284	27,191,537		

#### 34.3 Trade and other receivables

	Consolidated financial statements		Sepa financial s	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
<b>Trade receivables:</b> Subsidiaries Joint ventures Other related parties	- - 375,742	4,322,800 381,613	20,704,500	91,283,050 4,322,800
	375,742	4,704,413	20,704,500	95,605,850
Accrued interest income: Subsidiaries Other related parties	59,548 59,548	- - -	232,109,001 59,548 232,168,549	59,792,374
<b>Dividends receivables:</b> Subsidiaries Joint ventures	27,047,674 27,047,674	- - -	816,872,178 27,047,673 843,919,851	- - -
Other receivables: Subsidiaries Joint ventures Other related parties	27,975,121 	24,615,971 12,037	157,541,202 27,975,120 -	1,214,291,443 24,615,971 
	27,975,121	24,628,008	185,516,322	1,238,907,414

The following transactions were carried out with related parties: (Cont'd)

#### 34.4 Trade and other payables

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Trade account payables: Subsidiaries Joint ventures Other related parties	18,066 6,515,617 6,533,683	3,699,748	389,580,705 18,066 278,468 389,877,239	118,555,758 - 204,045 118,759,803
Accrued interest: Associate	369,828,314	396,057,433	-	_

#### 34.5 Short-term loans to related parties

	Consolidated financial statements		Separate financial statements	
	2017 Baht	2016 Baht	2017 Baht	2016 Baht
Subsidiaries	207 000 000	268 000 000	4,880,755,820	5,062,000,000
Other related parties	207,000,000	268,000,000 268,000,000	207,000,000 5,087,755,820	268,000,000 5,330,000,000

As at 31 December 2017, short-term loans to related parties are unsecured and repayable at call and bear interest rate at MLR minus certain margin per annum (2016: MLR minus certain margin per annum).

#### 34.6 Long-term loan to a related party

	Sepa financial s		
	2017 2 Baht E		
Subsidiary	1,137,947,500		

On 25 December 2017, the Company entered into a loan agreement with B.Grimm Power (Lao) Company Limited which is a direct subsidiary. Total loan facility is Baht 1,980 million. The loan bears interest rate at MLR less a certain margin per annum. The principal and interest are repayable at call. However, as at 31 December 2017, the Company has no plan to recall such loan within one year. As a result, the loan has been presented as a long-term loan to.

The following transactions were carried out with related parties: (Cont'd)

#### 34.7 Short-term borrowings from a related party

In May 2017, the Company had entered into a short-term borrowing agreement with a director and major shareholder for Thai Baht borrowing amounting to Baht 1,360 million. The short-term borrowing bears interest rates at MLR minus certain margin per annum. The interest and principal is repayable at call. The Company repaid such loan and fully wrote-off deferred financing fees during the third quarter of 2017.

#### 34.8 Long-term borrowings from a related party

	Conso financial s	lidated tatements
	2017 Baht	2016 Baht
An associate	4,085,000,000	4,547,500,000

On 19 September 2013, the Group enter into the Revenue Sharing Agreements ("the Agreements") with Amata B.Grimm Power Power Plant Infrastructure Fund ("the Fund") to borrow Baht 6,202 million for the purposes of the Group's funding support.

Under the Agreements, the Group commits to transfer the benefits from the electricity generated to the Fund which cover the period from 1 January 2013 to 27 September 2022. The installment and interest payment are to be made every six-month. The Agreements will expire on 27 September 2022. The interest has been calculated based on operating result and the remaining cash flow of each period of Amata B.Grimm Power 1 Limited and Amata B.Grimm Power 2 Limited less the principal repayment of each period which has been set out under the Agreements.

According to the conditions specified in the Revenue Sharing Agreement, any liabilities obligated by the Group as of the expiration date of the agreement shall be terminated.

The movements of the long-term borrowings from a related party can be analysed as follows:

	Consolidated financial statements	
	2017 Baht	2016 Baht
Opening book value Repayment of long-term borrowings	4,547,500,000 (462,500,000)	4,997,500,000 (450,000,000)
Closing book value	4,085,000,000	4,547,500,000

The following transactions were carried out with related parties: (Cont'd)

## 34.8 Long-term borrowings from a related party (Cont'd)

Maturity of long-term borrowings from a related party are as follows:

	Consolidated financial statements	
	2017 Baht	2016 Baht
Within 1 year Later than 1 year but not later than 5 years Later than 5 years	527,000,000 3,558,000,000 -	462,500,000 3,706,500,000 378,500,000
	4,085,000,000	4,547,500,000

## 34.9 Key management compensation

Key management includes directors (executive and non-executive) and members of the Executive Committee. The compensation paid or payable to key management for employee services is shown below:

	Consolidated financial statements	
	2017 Baht	2016 Baht
Salaries and other short-term employee benefits Post-employment benefits Other long-term benefits Share-based payments for key management	140,233,625 1,631,013 11,552 17,624,309	106,646,000 7,212,469 14,948
	159,500,499	113,873,417

#### 35 Share-based payments

On 16 May 2017, the Group put in place a 'Special Remuneration Scheme' for its directors and employees where participating employees will be granted the right to use their remuneration to subscribe for initial public offering shares (IPO Shares) at the IPO Share price. This is provided that they enter into an agreement with B.Grimm Power or its subsidiaries to continue their employment for next four calendar years (the lock-up period). If the employees resign before the lock-up period, they will be forced to sell all of their shares to other parties in the market and return the proceed from sales to the Group.

The movements in the number of shares under the Special Remuneration Scheme are:

	Consolidated financial statements Shares	Separate financial statements Shares
At 1 January 2017 Granted Vested Cancellation due to non-compliance with	10,584,700 (59,900)	1,068,100 -
the service conditions	(8,100)	
At 31 December 2017	10,516,700	1,068,100

The fair value of shares at the grant date determined using the Discounted Cash Flow model was Baht 16.50 per share. The significant input using for the model was the forecasted future free cash flows of the Group.

The principal assumptions used in the Discounted Cash Flow were:

	Consolidated financial statements
Risk free rate	3 %
Risk premium	8 %
Beta	0.79

The amounts recognised in the financial statements for the year ended 31 December 2017:

	Consolidated financial statements  Baht	Separate financial statements Baht
Investments in subsidiaries, in the statement of financial position Share-based payments to employees, included in operating profit	36,926,838	11,192,816 9,669,859
Other reserve - share-based payments, in equity	36,926,838	20,862,675

#### 36 Commitments and significant agreements

## 36.1 Capital commitments

Capital expenditure contracted at the statement of financial position date but not recognised in the financial statements is as follows:

As at 31 December, there was capital commitments expenditure in respect of the power plant construction and purchases of machineries and equipment which have not been recognised as follows:

	Consolidated financial statements	
	2017	2016
Thai Baht	1,898,042,013	3,163,341,463
Japanese Yen	895,654,802	1,730,042,957
Swedish Krona	58,425,524	781,218,585
US Dollar	7,441,284	23,833,124
Euro	7,172,156	18,870,302
Vietnamese Dong	-	1,335,070,158

#### 36.2 Operating lease commitments - where a Group company is the lessee

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	Consolidated financial statements		Separa financial sta		
	2017 Baht	2016 Baht	2017 Baht	2016 Baht	
Not later than 1 year Later than 1 year	75,107,976	43,122,408	4,267,761	4,638,778	
but not later than 5 years	104,149,225	74,976,813	4,148,094	2,260,955	
Later than 5 years	233,714,060	194,949,305		<del>-</del>	
	412,971,261	313,048,526	8,415,855	6,899,733	

#### 36.3 Letter of Guarantee and standby letter of credit

	Currency	Consol financial s		Sepa financial s	
	(Million)	2017	2016	2017	2016
Additional paid-up for ordinary shares Machinery purchase	ТНВ	1,720.50	3,595.30	690.58	1,454.63
agreements	EUR	-	4.49	-	_
Bank guarantee to the EGAT according to PPA					
(Note 36.4 (a))	THB	4,123.70	4,524.99	1,366.13	1,858.70
Bank guarantee to the PEA Bank guarantee to the	THB	115.27	91.61	7.20	7.20
War Veterans Organization Bank guarantee to the Energy	THB	284.38	-	284.38	-
Regulatory Commission	THB	184.00	-	184.00	-
Other purpose	THB	15.05	15.01	-	-

#### 36.4 Significant agreements

#### Power purchase agreements

- 16 subsidiaries entered into the power purchase agreements ("PPA") with Electricity Generating Authority of Thailand ("EGAT"). Each agreement is effective for periods of 21 and 25 years commencing from the first commercial operation dates ("COD"). According to the PPA, the subsidiaries are required to comply with the conditions set out in the PPA. Furthermore, the subsidiaries are required to provide bank guarantees for the obligation of the agreements. The collateral is to be returned to such subsidiaries upon the expiry of the agreements (Note 36.3). As at 31 December 2017, the five subsidiaries have not commenced their commercial operation.
- A subsidiary entered into the power purchase agreement ("PPA") with Provincial Electricity Authority ("PEA"). The agreement shall be effective for 25 years from Commercial Operation Date ("COD"). According to the PPA, a subsidiary is required to comply with the conditions set out in the PPA.
- 3 overseas subsidiaries were awarded concession agreements by the Government of the Laos People's Democratic Republic ("GOL") to build, own, and operate a Hydropower project ("the Project") to provide generating capacity and distributing electricity to Electricite Du Laos ("EDL"). The concessions period are effective for a period of 50 years commencing from the date of concession agreement. At the end of the concession period, subsidiaries are subjected to transfer all of its right title and interest in the Project to GOL. According to a concession agreement, the overseas subsidiaries entered into power purchase agreement ("PPA") with EDL. The PPA is effective for a period of 25 years commencing from the first commercial operation dates ("COD").

#### Gas Purchase Agreements

12 subsidiaries entered into Gas Purchase Agreement with PTT Public Company Limited. The agreements are effective for periods of 21 and 25 years commencing from the trading dates. The sale quantities and their prices must be complied with the agreements. The agreements can be extended by the parties upon the conditions as specified in the agreements.

#### 36 Commitments and significant agreements (Cont'd)

#### 36.4 Significant agreements (Cont'd)

#### Water Purchased Agreements

e) 12 subsidiaries have entered into Water Purchased Agreements with the sellers in industrial parks to provide water to be used in the electricity generating system. The agreements are effective for a period of 21 and 25 years and can be extended for another period with the conditions mutually agreed by the parties.

#### Electricity assets and land lease agreements

f) On 10 April 1997, a subsidiary entered into a lease agreement with the industrial estate company in Vietnam to lease the electricity generation, transmission, distribution assets and a portion of the land of the industrial estate company in order to produce, sell and distribute electricity to tenants in the industrial park. The subsidiary obtained control and use of these assets in September 1997. The ownership rights and title on these assets will not transfer to the subsidiary at the end of the lease term.

#### Other agreements

- g) 11 subsidiaries entered into Long-Term Service Agreement for power plant equipment. The agreements are effective for periods of 8 and 9 years commencing from the commercial operation dates and it can be extended for another period with the conditions as specified in the agreements.
- h) On 19 September 2013, ABP1 and ABP2 ("the subsidiaries") entered into the Revenue Sharing Agreement ("the Agreement") with ABPIF to borrow Baht 6,202 million for the purposes of the subsidiaries' funding support. Under the Agreement, the subsidiaries commit to transfer the benefits from the electricity and steam generated to ABPIF which cover the period from 1 January 2013 to 27 September 2022. The payments are to be made twice a year. The Agreement will be terminated on 16 September 2019 and 27 September 2022, respectively.
- i) On 18 May 2016, a subsidiary had entered into Land Sale and Purchase Agreements ("the Agreements") with 2 sellers ("the Sellers") for the purpose of developing 33 solar farm projects. There are 33 agreements, totalling contracts amount is Baht 8,277.25 million. As at 31 December 2017, the subsidiary has remaining deposit for land purchase under such agreements totalling of Baht 1,369.56 million. Under the Agreements, a subsidiary is entitled to receive the return of deposit in case of the transfer of each land is no longer beneficial to a subsidiary.
- j) The Company had entered into a Sponsor Support Agreement facility to secure loan of a subsidiary amounting to US Dollar 29.12 million.
- k) On 16 June 2017, the Company had entered into a joint venture agreement with a partner for developing and operating electricity distribution system in Cambodia.

#### 36 Commitments and significant agreements (Cont'd)

#### 36.4 Significant agreements (Cont'd)

Other agreements (Cont'd)

- I) On 21 December 2017, the Company had entered into a Share Purchase Agreement to invest in 48% interest in Progress Interchem (Thailand) Co., Ltd. which operates in industrial waste-to-energy power plant with the installed capacity of 4.8 megawatts. Total investment cost is Baht 95 million. The Company paid for an advance payment of Baht 28.51 million (Note 19).
- m) During 2017, the Group had entered into Joint Investment Agreements for granting right to sell electricity with the War Veterans Organization of Thailand and the Agricultural Cooperative under the state agencies' and agricultural cooperatives' solar farm projects B.E. 2560 (2017), totalling 7 projects with the total capacity of 30.83 megawatts. Under such agreements, the Group are required to comply with the conditions specified in the agreements.

#### 37 Promotional privileges

The Group has been granted promotional privileges by the Office of the Board of Investment (BOI) under promotion certificates in respect of electricity and steam generation. 16 subsidiaries have been granted exemption from certain taxes and duties as detailed in the certificates including exemption from corporate income tax for a period of 8 years from the date of first revenue. As promoted entities, these subsidiaries are required to comply with the terms and conditions specified in the promotion certificates. Four subsidiaries in Lao PDR are also granted with promotional privileges from the Investment Promotion Department in Lao PDR for operating business in generating electricity and investing in electric power business. The privileges provide four subsidiaries with exemption from certain taxes and duties as stated in promotion certificates. Privileged period could varies from 3 to 10 years depending on the Investment Promotion Department in Lao PDR, grantor of the right.

#### 38 Events occurring after the reporting date

On 4 January 2018, the Company invested in 48% interest in Progress Interchem (Thailand) Co., Ltd. which operated in industrial waste-to-energy power plant with the installed capacity of 4.8 megawatts. As a result, Progress Interchem (Thailand) Co., Ltd. is considered as a joint venture of the Company.

On 12 January 2018, B.Grimm Power (Cambodia) Co., Ltd. ("BGPCAM"), a subsidiary, was established in Cambodia to invest in electric power business. BGPCAM has a registered share capital of US Dollar 1,000 and the Company owns 100% interest in BGPCAM.

# **Definitions**

# Unless otherwise defined in this document, the following terms shall have the following meanings:

ABP	means	Amata B.Grimm Power Limited
ABP1	means	Amata B.Grimm Power 1 Limited
ABP2	means	Amata B.Grimm Power 2 Limited
ABP3	means	Amata B.Grimm Power 3 Limited
ABP4	means	Amata B.Grimm Power 4 Limited
ABP5	means	Amata B.Grimm Power 5 Limited
ABPIF	means	Amata B. Grimm Power Plant Infrastructure Fund
АВРН	means	Amata B.Grimm Power Holding Limited
ABPR1	means	Amata B.Grimm Power (Rayong) 1 Limited
ABPR2	means	Amata B.Grimm Power (Rayong) 2 Limited
ABPR3	means	Amata B.Grimm Power (Rayong) 3 Limited
ABPR4	means	Amata B.Grimm Power (Rayong) 4 Limited
ABPR5	means	Amata B.Grimm Power (Rayong) 5 Limited
ABPS	means	Amata B.Grimm Power Service Limited
ABPSPV1	means	Amata B.Grimm Power SPV1 Limited (formerly Amata B.Grimm Power Service (Rayong) Limited)
APB	means	Amata Power (Bien Hoa) Limited
APR	means	Amata Power (Rayong) Limited
ASEAN	means	Association of Southeast Asian Nations
BGC1	means	B.Grimm Power (Chonburi) 1 Limited
BGC2	means	B.Grimm Power (Chonburi) 2 Limited

BGPL	means	B.Grimm Power (Lao) Company Limited
BGPR1	means	B.Grimm Power (Ratchaburi) 1 Limited
BGPR2	means	B.Grimm Power (Ratchaburi) 2 Limited
BGPS	means	B.Grimm Power Service Limited
BGPSP	means	B.Grimm Solar Power 1 Limited
BGPSK	means	B.Grimm Solar Power (Sakaeo) 1 Limited
BGYSP	means	B.Grimm Yanhee Solar Power Limited
BGSENA	means	B.Grimm Sena Solar Power Limited
BIP1	means	B.Grimm BIP Power 1 Limited
BIP2	means	B.Grimm BIP Power 2 Limited
BORP1	means	B.Grimm Oriental Renewable Power 1 Limited
BORP2	means	B.Grimm Oriental Renewable Power 2 Limited
BORP3	means	B.Grimm Oriental Renewable Power 3 Limited
BORP4	means	B.Grimm Oriental Renewable Power 4 Limited
BPB2	means	B.Grimm Power (Bowin) 2 Limited
BPHL	means	B.Grimm Power Holding (Laem Chabang) Limited
BPLC1	means	B.Grimm Power (Laem Chabang) 1 Limited
BPLC2	means	B.Grimm Power (Laem Chabang) 2 Limited
BPSLC	means	B.Grimm Power Service (Laem Chabang) Company Limited
BPWHA1	means	B.Grimm Power (WHA) 1 Company Limited (formerly Bowin Clean Energy Limited)
BSP (Bamnet Narong)	means	B.Grimm Solar Power (Bamnet Narong) Company Limited
BSP (Cha Am)	means	B.Grimm Solar Power (Cha-am) Company Limited
BSP (Chai Badan)	means	B.Grimm Solar Power (Chai Badan) Company Limited

BSP (Chon Daen)	means	B.Grimm Solar Power (Chon Daen) Company Limited
BSP (Nikhom Kham Soi)	means	B.Grimm Solar Power (Nikhom Kham Soi) Company Limited
BSP (Sap Yai)	means	B.Grimm Solar Power (Sap Yai) Company Limited
BSP (Si Boon Rueang)	means	B.Grimm Solar Power (Si Boon Rueong) Company Limited
BSP (Wanon Niwat)	means	B.Grimm Solar Power (Wanon Niwat) Company Limited
BSP (Yang Talat)	means	B.Grimm Solar Power (Yang Talat) Company Limited
BW	means	Bo Thong Wind Farm Limited
BOI	means	Board of Investment
Btus	means	British thermal units
EDL	means	Electricité du Laos
EPC	means	Engineering, procurement and construction
IPP	means	Independent power producer
LIBOR	means	London Interbank Offered Rate which is a loan interest rate that commercial banks with solid financial and credit standing charge each other. The rate is set by the London money market.
MLR	means	Minimum Lending Rate is a term-loan interest rate that commercial banks charge its large customer with good standing.
Nam Che	means	Nam Che 1 Hydropower Company Limited
Nam Khao	means	Nam Khao Hydropower Company Limited
O&M	means	Operation & maintenance
PV	means	Photovoltaic
Solarwa	means	Solarwa Company Limited
TFRS	means	Thai Financial Reporting Standard
THBFIX	means	Thai Baht Interest Rate Fixing

TPS	means	TPS Commercial Company Limited
TWP	means	Thai Wind Power (Mukdahan) Limited
VSPP	means	Very small power producer
XXHP	means	Xenamnoy and Xekatam Hydro Power Company Limited
ERC	means	Energy Regulatory Commission of Thailand
IEAT	means	Industrial Estate Authority of Thailand
NEPC	means	National Energy Policy Council
MEA	means	Metropolitan Electricity Authority
EGAT	means	Electricity Generating Authority
PEA	means	Provincial Electricity Authority
The group	means	B.Grimm Power Public Company Limited and its subsidiaries and associates
SET	means	Stock Exchange of Thailand
the Company /	means	B.Grimm Power Public Company Limited
B.Grimm Power		
Bangkadi	means	Bangkadi Industrial Park Company Limited
B.Grimm	means	B.Grimm & Co Limited and/or BG JV including their subsidiaries and associates
PTT	means	PTT Public Company Limited
DEDE	means	Department of Alternative Energy Development and Efficiency
Investment	means	Investment Promotion Act B.E. 2520
Promotion Act		
Securities and Exchange Act	means	Securities and Exchange Act B.E. 2535 (and its amendments)
SPP Regulation B.E. 2535 (A.D.1992) (as Amended in 1994)	means	Small Power Producer Power Purchase Regulation B.E. 2535 (A.D.1992) (as Amended in 1994)

SPP Regulation B.E. 2541 (A.D.1998)	means	Small Power Producer Power Purchase Regulation B.E. 2541 (A.D.1998)
SPP Regulation B.E. 2548 (A.D.2005)	means	Small Power Producer Power Purchase Regulation B.E. 2548 (A.D.2005)
SPP Regulation B.E. 2550 (A.D.2007)	means	Small Power Producer Power Purchase Regulation B.E. 2550 (A.D.2007)
SPP Regulation B.E. 2550 (A.D.2007) (as Amended in 2009-2010)	means	Small Power Producer Power Purchase Regulation B.E. 2550 (A.D.2007) (as Amended in 2009-2010)
SPP Regulation B.E. 2553 (A.D.2010)	means	Small Power Producer Power Purchase (Firm Contract - Cogeneration System) Regulation B.E. 2553 (A.D.2010)
SPP Regulation B.E. 2553 (A.D.2010) (as Amended in 2011)	means	Small Power Producer Power Purchase (Firm Contract - Cogeneration System) Regulation B.E. 2553 (A.D.2010)
EIA report	means	Environmental impact analysis report
Hemaraj	means	Hemaraj Land and Development Public Company Limited
Amata City	means	Amata City Limited
Amata Corporation	means	Amata Corporation Public Company Limited
EY Thailand / EY	means	EY Office Limited



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