

EMPOWERING THE WORLD COMPASSIONATELY

B.GRIMM POWER
PUBLIC COMPANY LIMITED
SUSTAINABILITY REPORT 2020

EndPandemics Campaign :
COVID-19 is hardly the first
pandemic to hit the world.
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B.Grimm : Empowering
People, Communities
and Society | [PAGE 10](#)

Climate Resilience
Management :
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by 2050 | [PAGE 77](#)



"With compassion, business can exist
in harmony with nature and community."

Harald Link



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VISION, MISSION, CORPORATE CULTURE AND CORE VALUES

VISION

“Empowering the World Compassionately”

MISSION

PRODUCT AND SERVICE

Creating value for the society through high-quality energy and services for our customers, with our pioneering spirit and by being people-centric and nature-centric

OPERATION

Constantly improving our business operations to be a world class energy company

GROWTH

Growing in a sustainable way with strong partnerships domestically and internationally

WORKPLACE

Working as a happy team of compassionate professionals with ethics and integrity

COMMUNITY

Empowering people, communities, and society to better serve their needs

ENVIRONMENT

Operating our business in harmony with nature and the environment

CORPORATE CULTURE AND CORE VALUES





MESSAGE FROM THE CHAIRMAN AND PRESIDENT

“Empowering the World Compassionately”

More than 142 years of doing business with compassion

Infrastructure and technology : With the heart of a creative pioneer, B.Grimm has played an instrumental role for over 142 years in jointly developing Thailand's infrastructure and application of modern technology, dating back to 1878, being the first to produce modern European medicines in Siam. In the 1890s B.Grimm co-developed the 1,500 km Rangsit Irrigation Canals (Southeast Asia's largest infrastructure project). B.Grimm then in the early 20th century established telecom, Industrial and commercial systems including power generation plants.

Industrial power plants : Starting in 1995, B.Grimm Power has ushered in combined-cycle thermal power plants in support of the industrial sector by generating highest quality and stable power and steam, one of Thailand's platforms that attracted foreign investment into Thailand that in turn contributed to the steady growth of the nation's industrial sectors (30% of Thai GNP).

Renewable energy : In view of global climate change, B.Grimm Power has since 2015 grown its renewable-energy business. In 2019 B.Grimm successfully inaugurated commercial operation of the largest solar power generation project in Southeast Asia in Vietnam. This year the B.Grimm Power-Energy China consortium began construction of EGAT's Floating Solar Power Plant for Sirindhorn Dam Hydro-Floating Solar Hybrid Pilot Project with an installed capacity of 45 megawatts (MW)—this was incidentally the world's largest solar power system on water.

Performance growth of 21% in Normalised Net Profit (NNP) : Despite the rampant Covid-19 pandemic, B.Grimm Power successfully maintained its NNP growth (parent company's share) at 21.1 percent, rising to Baht 2.617 billion. This year saw 162 MW in capacity growth, 6-percent growth in power distribution to 14,451 gigawatt-hours, and full-year revenue booking of Vietnam's major solar power project.

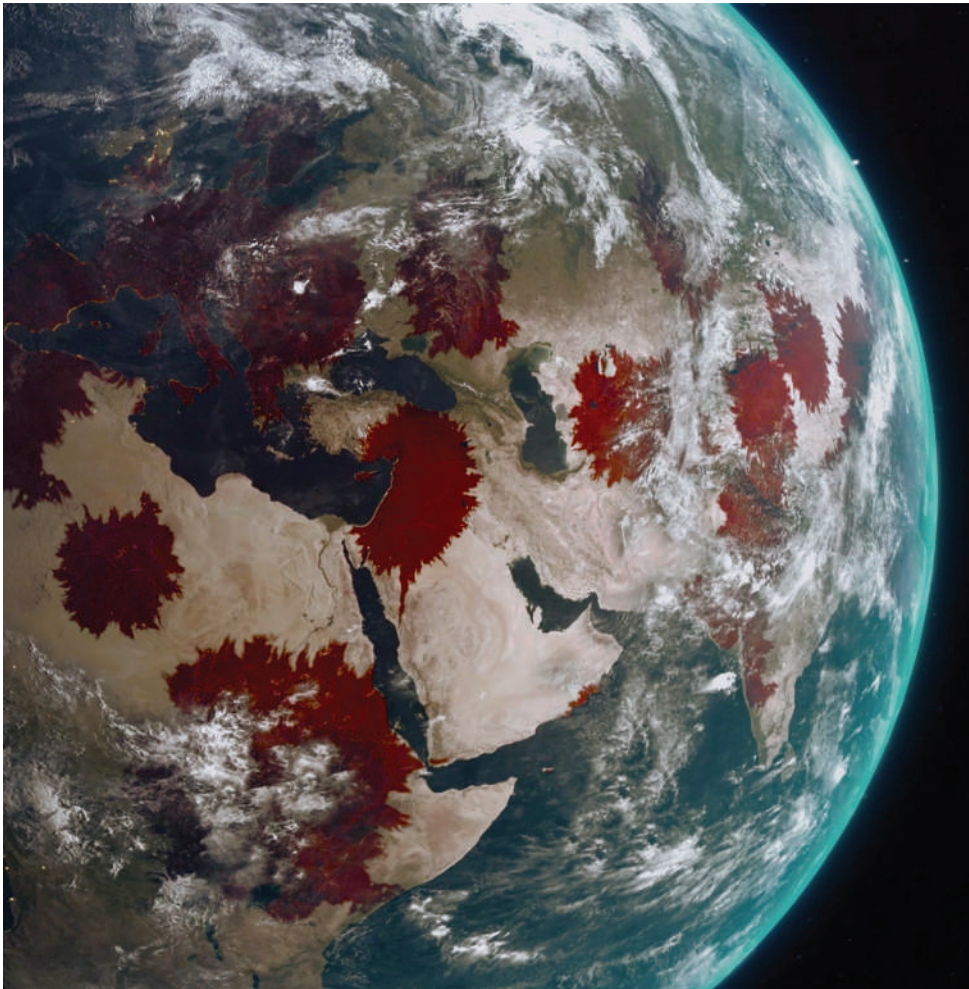
Onward to 7,200 MW goal by 2025 : B.Grimm's vision is to empower the world compassionately, we are now operating in or developing projects in Thailand, Lao PDR, Cambodia, Vietnam, the Philippines, South Korea, Myanmar, Malaysia, Indonesia and Oman. We will continue to support the development of nations and be carbon neutral latest by 2050 with various initiatives taken. At the end of 2020, B.Grimm Power's operational projects numbered 48, with a combined installed capacity of 3,058 MW, excluding projects in the development stage (which would take the capacity to 3,682 MW). Our goal is to reach signed Power Purchase Agreements (PPAs) of 7,200 MW by 2025.

Gratitude to all

On behalf of the Board of Directors, management, and the workforce of B.Grimm Power, may I express my heartfelt thanks and appreciation to all shareholders, partners, suppliers, customers, governmental agencies, regulators, and financial institutions for their consistent faith and trust in B.Grimm. We remain committed to good governance and business responsibility for the economy, society, and the environment.



Mr. Harald Link
Chairman and President



END PANDEMICS

Do you know how many pandemics our world has endured?

B.Grimm has conducted business in Thailand for more than 142 years. We started out introducing modern medicine to the country, saving countless lives in the process. Our philosophy expressed “Doing Business with Compassion for the Development of Civilisation in Harmony with Nature”. Because benefits to people and society have always come first, we have taken part in providing numerous solutions, from upstream all the way to downstream, to international communities.

COVID-19 is hardly the first pandemic to hit the world. We have reasons to believe that the cause of this devastating virus is man’s invasion of forests, destruction of wildlife’s natural habitats, and trafficking of wild animals and other illegal items from forested lands. These activities have led to the spread of pathogens from wildlife to humans. With each pandemic, the disease is becoming more severe. It stands to reason that protecting forests and wildlife, as well as stopping wildlife trafficking, are the steps we should take to protect ourselves against future outbreaks.

Over the past six years, B.Grimm has supported the Tiger Population Conservation and Rehabilitation Project at Mae Wong and Khlong Lan National Parks in Kamphaeng Phet, in collaboration with the Department of National Parks, Wildlife, and Plant Conservation and the Thai arm of the World Wide Fund for Nature (WWF Thailand). Together, we have protected tigers from poaching and their habitats from encroachment. We have also helped restore the biodiversity of western Thai jungles. The Mae Wong and Klong Lan forests are the “Forest of Hope.” They are the most suitable tiger breeding grounds in Southeast Asia, vital to the conservation of tigers, which are an important indicator of the health and balance of a forest and its wildlife. B.Grimm has taken part in the research and survey of tiger and other wildlife populations and contributed to the smart patrol system that ensures rangers’ safety. We have even played an important role in raising awareness and building a network of tiger and wildlife conservation in Thailand. In addition, B.Grimm and the Department of Livestock Development jointly worked on intercepting the outbreak of the African Horse Sickness (AHS), which had abruptly killed many horses in Nakhon Ratchasima and other areas, by providing safety nets and importing vaccine to help control and eradicate this emerging disease, known in the African Continent for years but never in Thailand. The outbreak was found to have come from zebras. With successful results in the past year and mutual intention to permanently curb the AHS outbreak, we have continuously worked with the department for more effective programs.

B.Grimm has supported WWF and the nonprofit organisation Freeland’s EndPandemics campaign to end wildlife trade through various online and offline communication channels, including a CNN campaign, discussion panels, public relations work, YouTube video clips, and sundry other publications to raise awareness in the wider global communities.

We have done all of this because we genuinely believe that harming wildlife is more dangerous than most people can fathom.

In addition, we launched the “B.Grimm Helps Fight COVID-19” project in 2020 to assist stakeholders across the board. Through this initiative, we ensured our employees’ health and safety; organised the annual shareholder meeting per health measures issued by relevant governmental agencies; reduced service fees; and provided greater financial flexibility to our customers. We also contributed in various other ways, such as donating medical equipment; securing life insurance coverage for frontline medical professionals; offering relief packages and other necessities to hospitals, charities, and communities around our headquarters and power plants in Thailand and overseas. This project has an estimated value of more than 50 million baht.



Find out more : EndPandemics





EMPOWERING PEOPLE, COMMUNITIES AND SOCIETY

FORESTATION

Following the footsteps of His Majesty King Bhumibol Adulyadej The Great and Her Majesty Queen Sirikit The Queen Mother in conserving and maintaining destroyed forest areas, B.Grimm recognises and places importance on environmental and natural resources conservation. The Company has initiated a Forest Conservation project since 2010. We have cooperated with community members and local students in the Company's annual reforestation project with the aim of raising environmental and natural resources conservation awareness and adding more green spaces for the community and society.

711,199

Total Area of Reforestation
(sq.m.)





ART & CULTURE

ROYAL BANGKOK SYMPHONY ORCHESTRA UNDER THE ROYAL PATRONAGE OF HRH PRINCESS SIRIVANNAVARI NARIRATANA RAJAKANYA

For more than 16 years, B.Grimm has been supporting the development of the Bangkok Symphony Orchestra (BSO) as a professional Thai orchestra with international standards. Promoting, disseminating and supporting classical universal music arts to be widespread. In addition, the foundation helped found the Bangkok Symphony Music School (BSS) to popularise and promote musical education for youths and the public. In 2019, HRH Princess Sirivannavari Nariratana Rajakanya graciously endorsed the name change of Bangkok Symphony Orchestra Foundation to the Foundation of Royal Bangkok Symphony Orchestra under the Royal Patronage of HRH Princess Sirivannavari Nariratana Rajakanya under her intention to groom Thai musicians to competitive levels with the world's reputed musicians and to have musical performance as their secured profession in support of their family members. The princess also graciously wishes to see BSO on a par with other world-renowned orchestras.



EQUESTRIAN

POLO EQUESTRIAN SPORT IN THAILAND

For over 18 years, B.Grimm has been a vital force in promoting the polo equestrian in Thailand with an aim of developing the polo equestrian sport to be more famous in Thailand as well as organising a polo sport for charity in order to raise funds to support various foundations annually such as net proceeds from the

Thai Polo Open are presented to Chitralada School (Vocational Section under the Chitralada Technology Institute) for scholarships to students to develop their occupational skills. Such proceeds from the Queen's Cup Pink Polo go to the Queen Sirikit Centre for Breast Cancer, a fully integrated treatment and rehabilitation



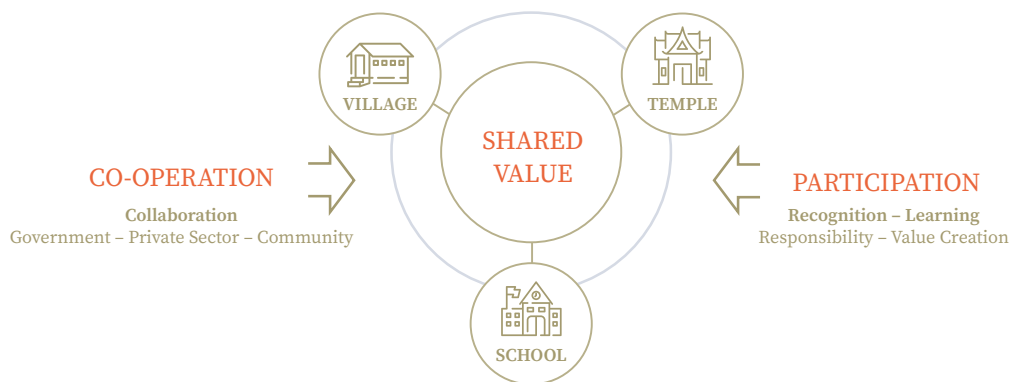
centre for breast cancer patients. Net proceeds from the Beach Polo Open contest have gone to Nabha Foundation under HRH Princess Bajrakitiyabha. In addition to these charitable activities, we continuously support the development of the polo equestrian sport in Thailand on a par with international standards,

including sponsorships for the selection of national equestrians to compete in international events. We were the main sponsor of the FEI Asian Championships Pattaya 2019, the first international event in Thailand awarded by the International Federation for Equestrian Sports.

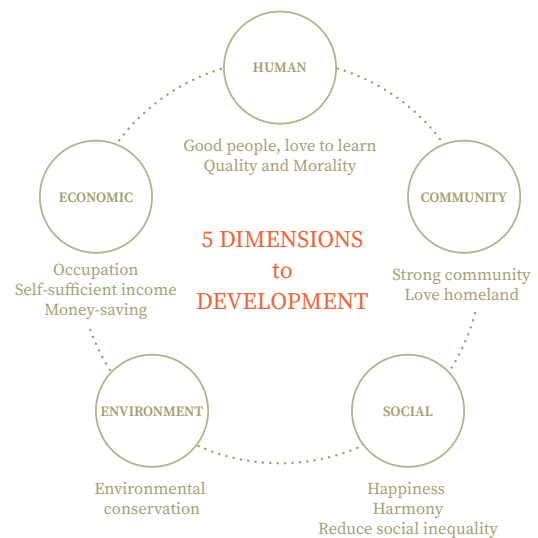


COMMUNITY

B.GRIMM SMART VILLAGE PROJECT (BOWORN)



To develop community in a truly sustainable and effective manner, based on the Village + Temple + School and Sufficiency Economy philosophies of the late king, B.Grimm promotes the love for one's community and create local jobs based on Sufficiency Economy, both of which conduce to strong communities with self-sufficient incomes and balanced, happy living. To this end, we launched the B.Grimm Smart Village Project (Village + Temple + School). The project is driven by the participation of village, temple, and school, fostering a knowledge exchange at the B.Grimm Village (Village 8) of Khlong Thap Chan Subdistrict, Aranyaprathet District, Sa Kaeo Province. It comprises B.Grimm Village, B.Grimm Temple, and B.Grimm School. We have had a long-lasting relationship with this community since Herbert and Alma Link visited it while accompanying Her Royal Highness Princess Srinagarindra, the Princess Mother.



SUSTAINABLE CULTIVATION CENTRE AT XENAMNOY AND XEKATAM HYDRO POWER PLANT, LAOS



Because food safety is a fundamental priority for everyone, B.Grimm established sustainable cultivation centre at Xenamnoy and Xekatam in Lao People's Democratic Republic, located in Xenamnoy 2 and Xekatam 1 hydro power plant in Paksong, Champasak province. We aim to encourage people in the community to learn and improve the quality of life in organic farming ways as well as campaigning to take care of natural water sources, providing knowledge on how to stop burning forests to help preserve the topsoil which is an important mineral source in organic farming, teaching on how to do the vegetable gardening and how to make compost using water and non-reversal instead of using chemicals and encouraging the people on the conservation of soil, water, forest to continue to exist as long as the descendants.

EDUCATION

THE LITTLE SCIENTISTS' HOUSE OF THAILAND



Her Royal Highness Princess Maha Chakri Sirindhorn instructed the initiation of the Little Scientists' House Thailand by obtaining the permission from the Haus der kleinen Forscher Foundation to begin activities in the country. For over 10 years, this initiative was made possible through a network of eight public and private entities, one of which was B.Grimm. We have lent a helping hand since the beginning of the initiative, whose scope has much expanded since. The Little Scientists' House Thailand aims to spark an interest in science among children ages 3 to 6. It also trains teachers, develops teaching materials, and leads family activities in order to be able to transfer scientific knowledge and create learning experiences effectively.

151

Schools Joining in the Local Network



Find out more :
The Little Scientists'
House of Thailand



THE PRINCESS MOTHER'S 90TH BIRTHDAY SCHOLARSHIPS 2020



With the awareness and consciousness of His Majesty King Srinagarindra's royal duties and ethics regarding the implementation of the Royal Initiative in Nursing in Thailand, B.Grimm aims for nursing students to continue the aspirations of nursing careers of Her Royal Highness Princess Maha Chakri Sirindhorn as well as to raise love for the dignity of the profession, exchanging knowledge and create solidarity among the faculties. We have supported "The Princess Mother 90 Scholarship" through the Princess Mother's Charity Fund Foundation Under the royal patronage of the Boromarajonani College, the Royal Institute Royal Thai Army Nursing College, the Royal Thai Navy College of Nursing, and the Air Force College of Nursing Under the Ministry of Public Health, totaling of 30 locations nationwide.

1,217

Graduates from Scholarships



DUAL VOCATION EDUCATION PROGRAMS



Because learning by doing produces more sustainable results, B.Grimm promote dual vocation education with Chitralada School (Vocational). We also pioneer the Vocational Electrical System Engineering Practice College (V-EsEPC) with Map Ta Phut Technical College, Rayong, and the Private Power Producer Association (APPP). We aim at develop thinking skills and learning theories of electrical and electrical engineering, maintenance and practical skills at B.Grimm Power's Power Plant. These programs also allow them to develop an excellent working attitude and comportsment along with social cues and teamwork, which will benefit them and prepare them for future growth.

114

Students joining
during 2011 to 2021



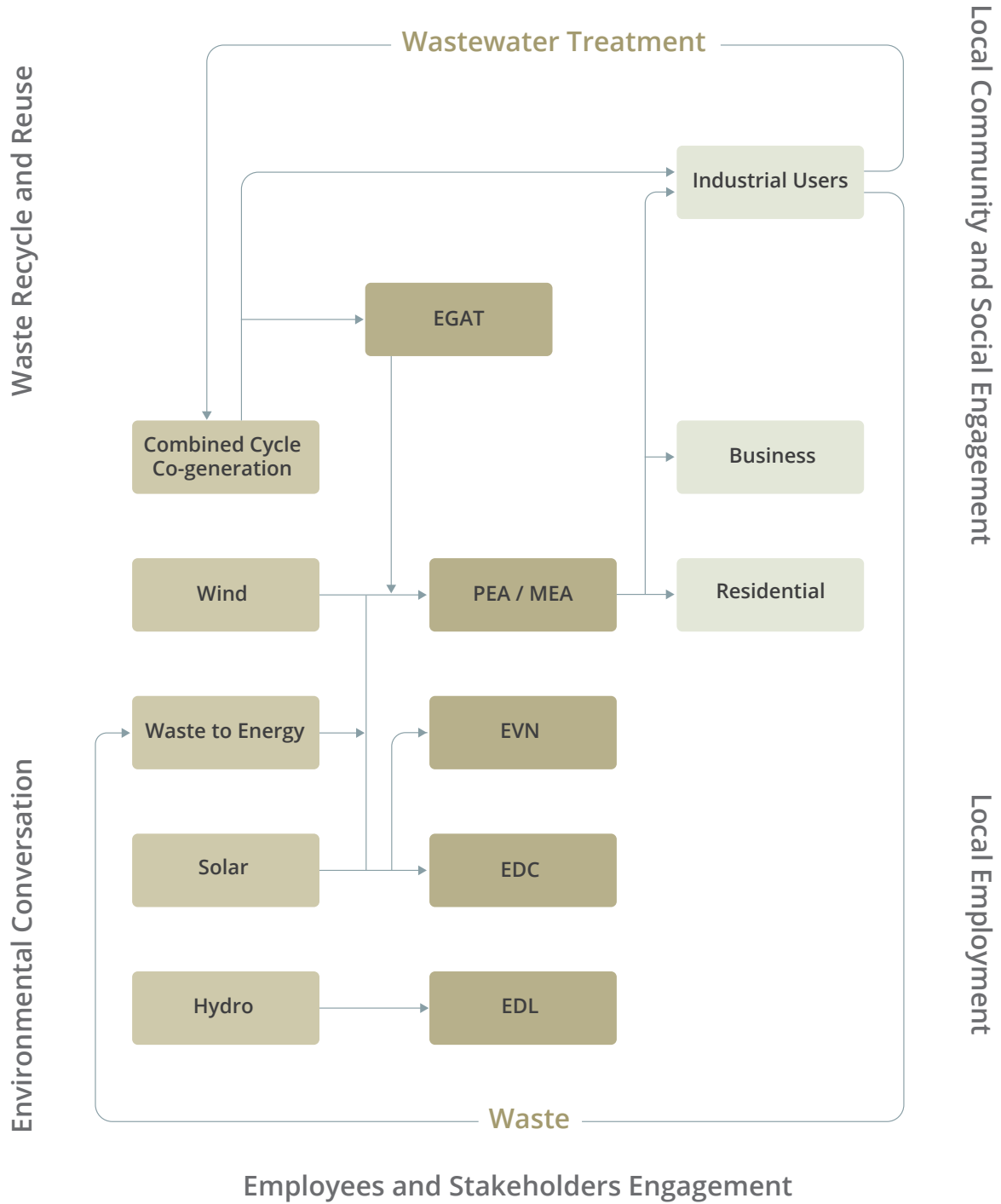
Find out more :
Dual Vocation
Education
Programs





OUR VALUE CHAIN

Long-term Cooperation among Business Partners





BUSINESS OVERVIEW

Project Status

48 POWER PLANTS
IN OPERATION

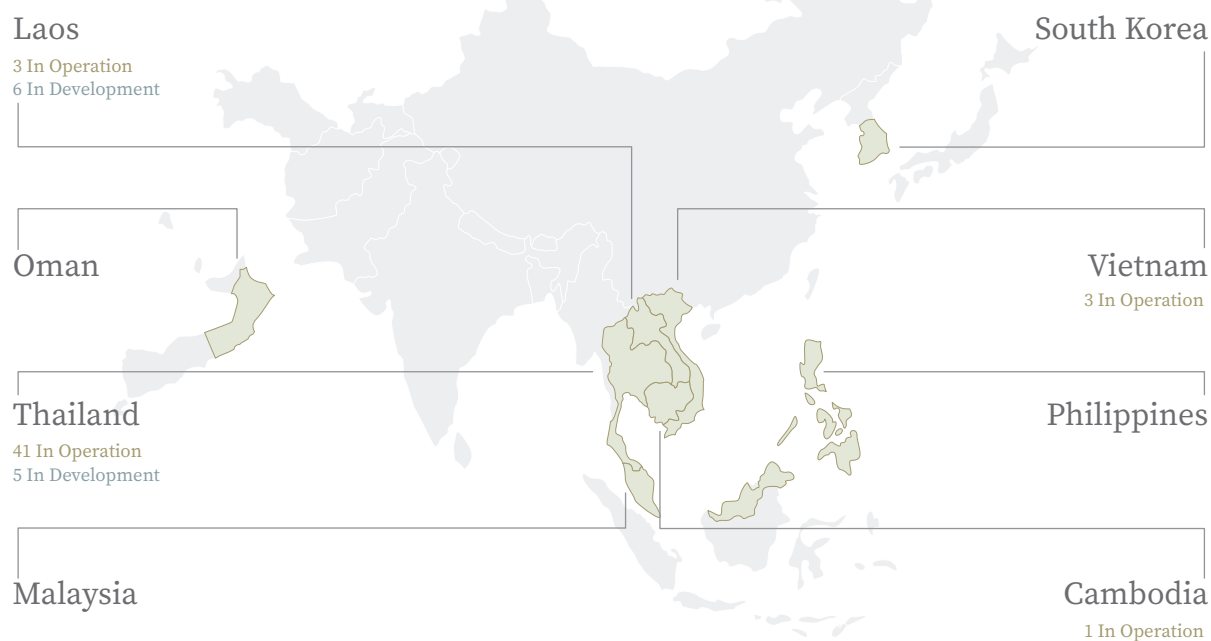
11 POWER PLANTS
IN DEVELOPMENT

Total Generating Capacity (MW)

3,058 **3,682**

2020 2025

Project Location (as of 31 December 2020)



Generation Capacity by Resource (MW)

🔥	☀️	💧	⚡	🌬️	🏠	♻️	
2,560	861	133	95	16	13	5	Within 2025
2,145	861	35	-	-	13	5	2020

🔥 Co-Generation 💧 Hydro ☀️ Solar 🌬️ Wind
 ⚡ Hybrid 🏠 Backup for Power Trading ♻️ Waste to Energy

MILESTONES

1993

Incorporated under the name of Borneo (1993) Company Limited

2011

Renamed as B.Grimm Power Company Limited

1996

Opened the commercial operation of the first combined cycle co-generation power plant (Amata B.Grimm Power 1) in Amata City Chonburi Industrial Estate

2015

Opened the commercial operation of 14 solar power plants in Thailand

B.Grimm Power Public Company Limited is one of the pioneers in Thailand's private power generation industry with a track record of successfully developing, financing, constructing and operating green-field power plants, we are world class energy company aiming to fulfill the needs of our associates, business partners and society at large by **"Doing Business with Compassion for the Development of Civilisation in Harmony with Nature."**

B.Grimm Power currently operates power and steam generation and sale both in the country and abroad, divided into combined cycle co-generation power plant, solar power plant, hydropower plant, wind power plant and industrial waste power plant. As of December 31, 2020, the Company had total of 48 power plants that have been in commercial operation with a total installed capacity of 3,058 MW. If the project under development and construction are completed, it will have a total installation capacity of 3,682 megawatts, divided into 2,144 MW combined cycle co-generation power plant, 901 MW renewable power plant and 13 MW diesel power plant. It accounts for 71% of combined cycle co-generation power plants and 29% of renewable energy plants. There are also 624 MW of power plant projects under development and construction.

Projects in Operation

70.1%

Combined Cycle Co-generation

29.5%

Renewable Energy

0.4%

Back up for Power Trading

2016

Transformed into B.Grimm Power Public Company Limited

2019

Opened of commercial operation of solar power plants in Vietnam, namely the DT 1&2 project as the largest solar power plants in Southeast Asia and the Phuyen TTP project.








2017

Listed in Stock Exchange of Thailand

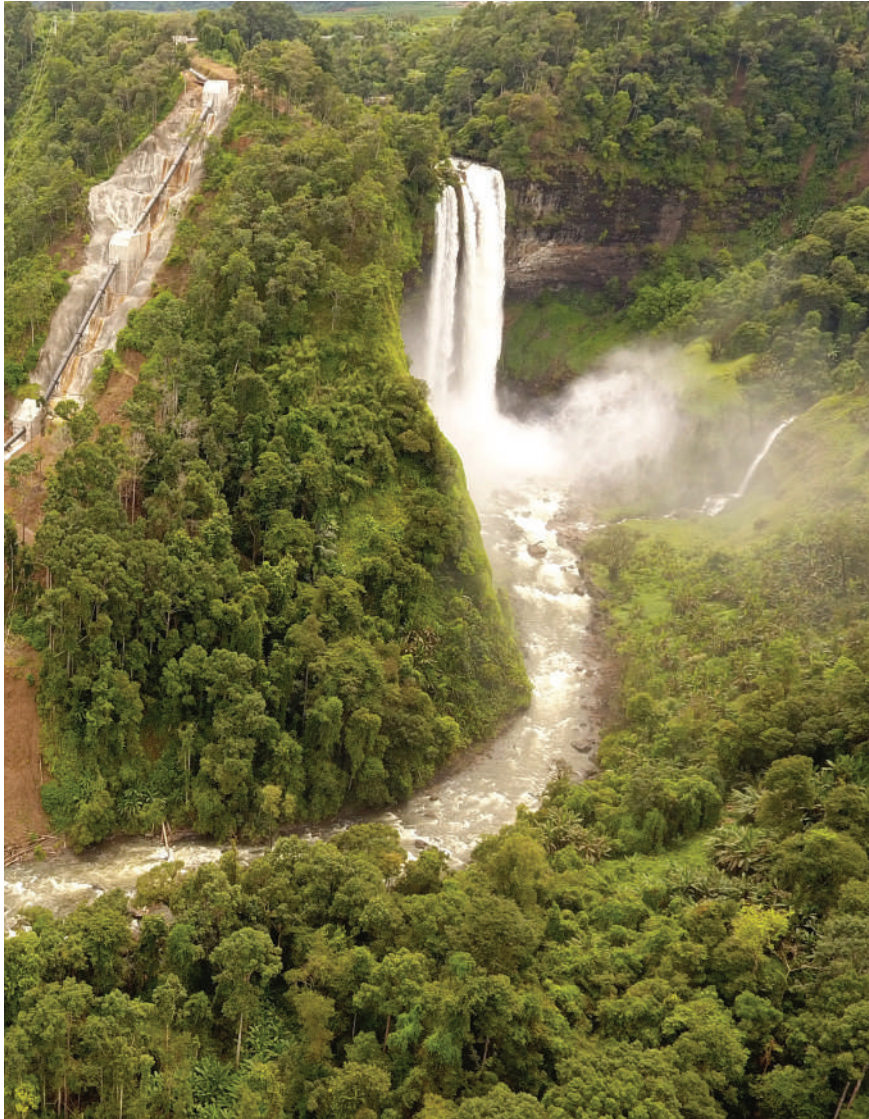
2020

B.Grimm Power has **48** projects in operation with a total installed capacity of **3,058** MW.

OUR WELL-DIVERSIFIED PORTFOLIO WITH EXPERTISE IN GREEN-FIELD DEVELOPMENT





Type of Energy	Installed MW			Equity MW		
	Total Capacity	%	In Operation	Total Capacity	%	In Operation
 Gas fired	2,560	69.5%	2,144	1,769	70.1%	1,310
 Solar	861	23.4%	861	596	28.2%	596
 Hydro	133	3.6%	35	95	1.1%	25
 Hybrid	95	2.6%	-	95	-	-
 Wind	16	0.4%	-	15	-	-
 Back up for Power Trading ¹	13	0.4%	13	4	0.4%	4
 Waste to Energy	5	0.1%	5	2	0.2%	2
Total	3,682	100.0%	3,058	2,576	100.0%	1,938

¹ The electricity distribution business purchased from EVN's subsidiary supplied to industrial users in Amata City Industrial Estate, Bien Hoa, through B.Grimm Power's grid.



SUSTAINABILITY HIGHLIGHTS 2020

NET ZERO CARBON EMISSIONS BY 2050

 Economic	44,087 Revenue (Million Baht)	14,451 Electricity Sale (GWh)	97.6% Availability Factor	99.5% Transmission and Distribution Reliability
 Environmental	901 Renewable Source (MW)	26.1% Reducing in Net Water Consumption	63.2% Treated Wastewater used in Operations	89.4% Re-use / Recycle Waste
 Social	77% Employee Engagement	283 Social Responsibility Investment (Million Baht)	88.2% Customer Satisfaction	100% Active Suppliers Acknowledged on Supplier Code of Conduct
 Governance	66.7% Independent Directors	66.7% Female Directors	ZERO Corruption Complaint	

Based on power plants in Thailand that have been included in B.Grimm Powers portfolio for more than two years.



AWARDS AND RECOGNITIONS



Awards from “10th Asian Excellence Award 2020” including Asia’s Best CEO, Asia’s Best CFO, Asia’s Best CSR, Best Investor Relations Company and Best Investor Relations by Corporate Governance Asia



The Best Power Plant Project Developer – Solar for Phu Yen TTP by International Finance Magazine



MSCI ESG RATING OF BBB in 2020 by MSCI ESG Research



The List of Thailand Sustainability Investment Index (THSI) 2020 for 3rd consecutive year from the Stock Exchange of Thailand



Excellent CG Scoring for 2020 from Thai Institute of Directors Association



Excellent score of Annual General Meeting (AGM) Checklist in 2020 from the Thai Investors Association



Awards from “Asian Power Awards 2020” including Power Utility of the Year - Thailand, Power Plant Upgrade of the Year - Thailand and Hydro Power Project of the Year- Bronze by Asian Power Magazine



Certified by Climate Bonds Initiative for green loan of Phu Yen TTP in Vietnam which is the first green loan in Thailand and CLMV region to be certified



Included in the FTSE4Good Indexes Series - FTSE4GOOD Emerging Markets Index & FTSE4GOOD ASEAN 5 Index announced by FTSE Russell



ESG100 : 2020 List for 3rd consecutive year and Sustainability Disclosure Award 2020 from Thaipat Institute



Awards from “Institutional Investor Corporate Awards 2020” including Strongest Adherence to Corporate Governance, Most Organised Investor Relations and Most Consistent Dividend Policy by Alpha Southeast Asia

SUSTAINABILITY FRAMEWORK

B.Grimm Power has established its sustainability framework as guidelines for corporate sustainability management covering economic, social, environmental and good governance aspects. By taking the organisational context for excellence and professionalism at international level as well as enhancing benefits and values to meet stakeholder expectations, thereby leading to long-term growth, stable and sustainable success.



The **outer ring** refers to how we demonstrate our responsibility for our operations' impacts on our stakeholders, fostering acceptance and good relations.

The **inner ring** refers to our excellence power plant management and corporate social responsibility throughout the value chain from upstream to downstream.

STRENGTHENING CORPORATE GOVERNANCE SYSTEM

We have created an effective governance system based on corporate governance best practices, which underline the importance of a corporate governance structure that facilitates the integration of social responsibility across the organisation and the prevention or reduction of all forms of corruption risks. Furthermore, we have publicised our Anti-Corruption Policy and equipped all employees with anti-corruption know-how. All of these efforts generate long-term economic value to our business.

FAIR PEOPLE DEVELOPMENT

Our people management extends to improving our employees' overall life quality. We strive to elevate employees' satisfaction, take care of their occupational health and safety, and provide training to develop their skills and knowledge. In addition, we have a mechanism in place that facilitates dialogues between our employees and us. We also raise their human rights awareness and promote risk assessments, as well as improve their work condition and environment out of our respect for their basic human rights. These efforts lead to the continuous improvement of our people's life quality.

SOCIAL ENGAGEMENT AND DEVELOPMENT

With **"compassion,"** we engage and build relationships with society to develop understanding and acceptance. We focus on mitigating our operations' impacts or potential impacts on society, as well as support and develop communities. These efforts ensure a long-lasting and genuine relationship between society and us.

ECO-FRIENDLY OPERATIONS

We ensure that every part of our operations takes its environmental impacts into account and provide mitigation measures for our environmental footprint, such as greenhouse gases, air pollution, and noise pollution. We promote resource optimisation awareness among our employees and encourage them to put it to practice.

RESPONSIBLE SUPPLY CHAIN

We treat our suppliers fairly and build relationships with them. We learn about relevant sustainability issues from our suppliers and help them develop economically, socially, and environmentally responsible operations.

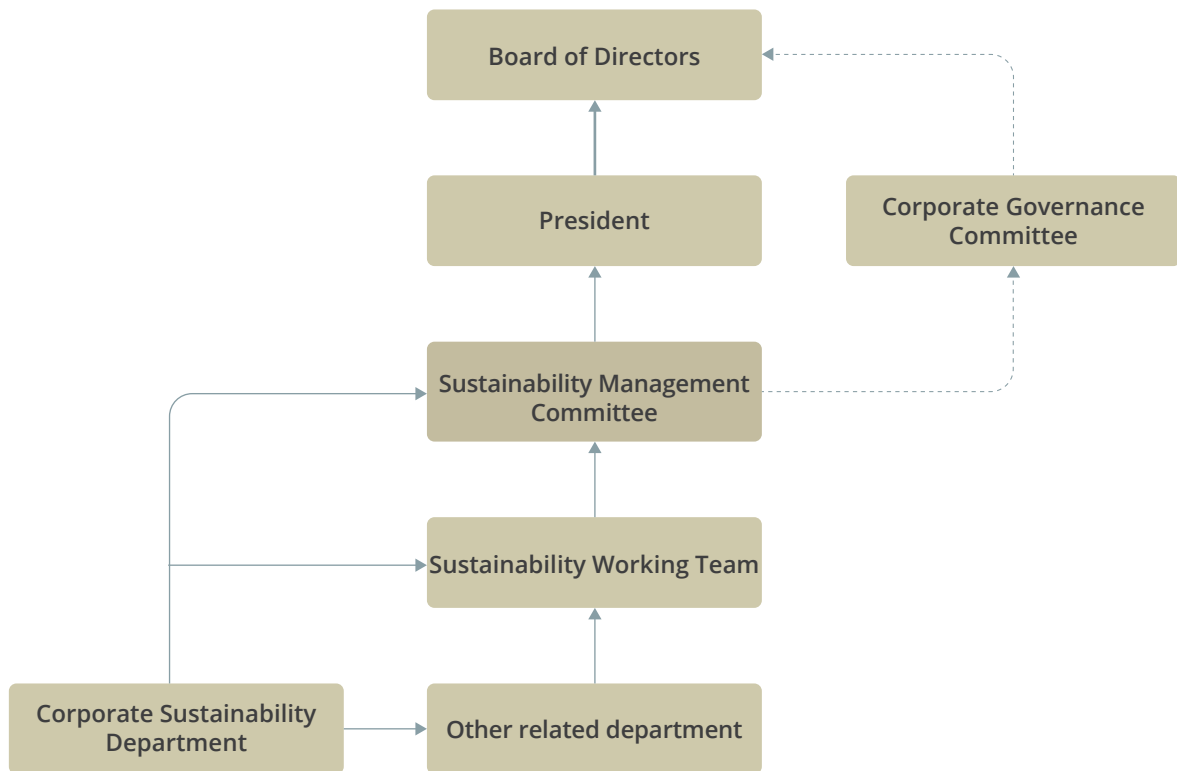
EFFICIENCY AND STABILITY OF ELECTRICAL SYSTEMS

We make sure that our electric power generation has the highest level of efficiency and stability. We also focus on managing our power generation and using advanced machinery and technology. All of this enables our power plants continue to supply electricity smoothly.

CUSTOMER SATISFACTION AND PRODUCT RESPONSIBILITY

We are committed to maintaining the highest level of customer satisfaction through easily accessible and comprehensive services, in addition to a safe and stable supply of electricity. Additionally, we always treat our customers' data in the strictest confidence.

SUSTAINABILITY MANAGEMENT STRUCTURE





B.Grimm Power committed to the stability and sustainable growth of our business. To tangibly manage sustainable development, we have established the Sustainability Management Committee, consisting of senior management, and formed the Sustainability Working Team, comprising representatives from all departments across our organisation, to drive sustainable development efforts forward. The Sustainability Management Committee's responsibilities are to :

1. Establish policies, directions, and goals for sustainable development and regularly review and update them according to the current context.
2. Review sustainability issues and determine measures and guidelines for responsible care of stakeholders and mutual value creation.
3. Review the sustainability framework and the importance of the value chain to foster cooperation with stakeholders.
4. Assign sustainability missions to the Sustainability Working Team and related departments to drive sustainable development efforts according to the established plans and goals.
5. Support and monitor the implementation of sustainable development strategies and policies, as well as report on their progress regularly.

B.GRIMM POWER'S CONTRIBUTION TO UN SUSTAINABLE DEVELOPMENT GOALS

B.Grimm Power commits to realising all of 17 United Nations Sustainable Development (UN SDGs), our core business operations have so far been able to integrate the following nine UN SDGs :



UN SDGs Goals	Our Management Approach	2020 Performance
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<p>We promote strict compliance with workplace safety and working environment laws. Our supervision ensures the safety of all employees and all personnel involved.</p>	<p>In 2020, we recorded no severe accidents or occupational fatalities suffered by our employees or contractors. We conducted a total of 10,181 hours of training for our employees to promote a corporate culture of environment, safety, and health awareness.</p> <p>Additionally, all of our combined-cycle cogeneration became either ISO 45001 or OHSAS 18001 certified. Developed by world-class organisations, both of these standards are recognised as the global benchmark for assessing and auditing occupational health and safety management systems that guarantee their appropriateness and efficiency.</p> <p>Concerning the effects of COVID-19, B.Grimm Power ensured continuity and minimised impacts on operations. We supported working from home and put measures in place to prevent the disease from spreading, such as setting up checkpoints, rotating shifts, arranging accommodations, preparing food, and arranging shuttle service. We also launched a project entitled "B.Grimm Helps Fight COVID-19," worth more than 50 million baht, to assist communities affected by the pandemic.</p>
 <p>6 CLEAN WATER AND SANITATION</p>	<p>We committed to using natural resources efficiently. We also regularly monitor changes in water sources.</p>	<p>We closely monitored the climate and were on the lookout for any events that could adversely affect our operations. We also established risk management and business continuity plans to mitigate their impacts and find ways to operate most efficiently and effectively.</p> <p>Thailand suffered a more severe than usual drought in 2020. Our combined-cycle cogeneration power plants used water efficiently by reusing as much as possible and treating gray water before recycling it 11 times, depending on the water quality in each location. Doing so allowed us to significantly reduce the amount of water used in our production processes by up to 26.1%. In addition, B.Grimm Power adhered to the most stringent legal requirements for effluent discharges.</p>

UN SDGs Goals	Our Management Approach	2020 Performance
7 AFFORDABLE AND CLEAN ENERGY 	<p>We improve and increase our investments. Our goal is to have 30% of our power-plant investment portfolio in renewable energy, both in Thailand and overseas, to minimise our pollution emissions and climate change contributions. This strategy also supports the Thai government's policy to increase the use of renewable energy.</p>	<p>In 2020, the 39-megawatt Ray Power solar farm in Cambodia began its commercial operation on schedule despite devastating floods. It was the only project unaffected by floodwaters, thanks to the design that considered 100 years of local flooding history. This project became the first Thai-owned power plant project under a power purchase agreement with the Electricité du Cambodge.</p> <p>As of 31 December 2020, B.Grimm Power's renewable energy power plants, either commercially operating or under construction, had a total installed capacity of 1,029 megawatts accounted for 29.5% of all of our commercially operating power plants. We also continued to expand our commercial solar rooftops.</p>
	<p>We work with business allies to improve our electric power generation's efficiency by employing modern and clean technologies. We also embark on cooperative projects with them to develop energy technology.</p>	<p>Over the past three years, we have made significant improvements to reduce our natural gas consumption and increase our electricity generation's efficiency. We completed the shutdown of our ABPR1 and ABPR2 power plants in the second half of 2020, bringing the total of improved-efficiency combined cycle co-generation power plants to four. As a result, these sites saw a 7% decrease in natural gas consumption from the previous year.</p>
8 DECENT WORK AND ECONOMIC GROWTH 	<p>We increasingly invest in domestic and international power plant projects to promote economic growth. These plants employ modern and clean technologies to generate electricity and pay due regard to the quality of life and safety of employees and surrounding communities.</p>	<p>We put in place a 5-year plan to increase our total installed capacity to 7,200 MW by 2025, focusing on power plants with relatively low environmental impacts, including natural-gas combined cycle co-generation power plants and renewable energy power plants. These are the power plant model of the future. They are in line with sustainable development, prepare us for a future of smart energy, and support the economic growth of Thailand and regions. More precisely, we began working on a project to build a hybrid power plant that combines a combined cycle co-generation power plant with a solar farm and features an intelligent energy storage system to support the development of U-Tapao Airport and the Eastern Aviation City.</p> <p>At B.Grimm Power, we underlined the importance of managing and executing our safety, occupational health, environmental, and social activities. To this end, we incorporated various international standards into our operations, including ISO 14001 standards for environmental management and ISO 45001 standard for occupational health and safety management systems.</p>

UN SDGs Goals	Our Management Approach	2020 Performance
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>We develop, invested, and improve power generation systems for maximum efficiency.</p>	<p>We increased our total installed capacity by an additional 162 megawatts, representing 5% growth, from acquiring a 70% stake in the 123-megawatt ATP combined cycle co-generation power plant in March 2020 and starting the 39-megawatt Ray Power solar farm's commercial operation in Cambodia. In addition, we had several projects under construction and development, representing 624 megawatts of total installed capacity. On top of supporting national and regional economic growth, these projects would also better life quality and improve access to energy sources for communities in the locality of each development.</p> <p>Furthermore, we made preparations for smart energy solutions, where digital technology would play a role in data analysis and energy management. We also studied the feasibility of applying an energy storage system (ESS) to grid management, creating a highly efficient and stable smart microgrid with support for disruptive technologies, meeting our customers' electricity consumption needs and serving as critical infrastructure for smart cities.</p>
 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>Our defined objectives and goals allow us to grow sustainably with society, create value and benefits to stakeholders, and imbue our organisational culture with good corporate governance.</p>	<p>We held a public forum for all B.Grimm Power projects to gather stakeholders' opinions, which we used to devise action plans and environmental and safety measures to prevent and mitigate any negative impacts on communities and the environment. Moreover, we prepared reports according to the Code of Practice for environmental impact analysis and preventive measures.</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>We underline the importance of natural resource optimization and maximisation. To this end, we select and employ modern, clean, and eco-friendly machinery and technology that use the least amount of resources to generate electricity with the most efficiency.</p>	<p>29.50% of our power plants used renewable energy, including solar energy, wind energy, and hydropower, to generate electricity. All of our hydropower projects were run-of-the-river projects. Instead of requiring a dam to be constructed, these power plants used the river's natural flow to generate power; therefore, they were considered the least disruptive to nature. We also had a power plant project that used industrial waste as fuel. In doing so, we helped reduce the amount of industrial waste.</p> <p>We chose to deploy advanced technology to generate power at the seven power plant projects—with a combined installed capacity of 980 megawatts—under development. This technology would use less fuel to generate power, maximizing natural resources' value for optimal benefits.</p>
	<p>We require commercially operating power plants to undertake environmental management per the ISO 14001 : 2015 standard for Environmental Management System to ensure efficiency, environmental impact minimisation of all processes, and strict compliance with applicable environmental laws and regulations.</p>	<p>All of our power plants in Thailand have received ISO 14001 : 2015 certification for their environmental management systems. These are 18 combined cycle co-generation power plants and 15 solar farms. Furthermore, we have assessed and managed operational risks that may adversely affect the environment. We have had a system of internal control, as well as controls and prevention and mitigation mechanisms, for the environmental impact of our operation. In addition, we encourage our employees to contribute to environmental protection and natural resource optimisation. We received no significant complaints about or fines for our environmental mismanagement in 2020.</p>

UN SDGs Goals	Our Management Approach	2020 Performance
	Our risk management and business continuity plan help reduce climate-change impacts on our operations and find ways to cope with any climate-change-induced crisis.	Armed with a Business Continuity Plan (BCP) and Business Continuity Management (BCM), we regularly trained for crises to reduce their adverse effects and learn how to operate the most efficiently and effectively. We also continued to push for the implementation of energy conservation projects
	It is our policy to improve our operational efficiency by using clean technology to make the most of natural resources, minimise our environmental impact, and reduce our greenhouse gas emissions.	<p>We made significant improvements on the efficiency of gas turbine generators to reduce our natural gas consumption. We completed the shutdown of our ABPR1 and ABPR2 power plants and planned to do the same for two more power plants by 2023.</p> <p>As for the SPP Replacement project, which seeks to replace power plants whose contracts will expire between 2017 to 2025, we opted for a new, highly efficient technology expected to reduce natural gas consumption by 10–15%. This technology is expected to reduce pollution as well.</p>
	It is our policy to increase our investment in renewable energy to 30% to reduce greenhouse gas emissions.	As of 2020, renewable energy power plants accounted for 29.5% of our total installed capacity of 3,058 megawatts. Our 39-megawatt solar power plant in Cambodia began operating commercially on schedule. We had seven projects under construction and development—namely, a 16-megawatt wind farm; an 80-megawatt hybrid power plant comprising an 80-megawatt cogeneration power plant, a 15-megawatt solar farm, and a 50-megawatt-hour energy storage system (ESS); and five hydropower projects in Laos with a total installed capacity of 98 megawatts.
	We push for the continued implementation of energy conservation projects, promote knowledge and understanding about climate change and its impacts, and raise awareness of natural resource conservation and environmental protection.	We provided training and activities for employees and external communities to enhance their knowledge, understanding, and awareness of safety, occupational health, and the environment. We also raised awareness of natural resource conservation and environmental protection through CG Day, Safety and Environmental Conservation Week, and reforestation projects.
	We have clear policies and guidelines on compassionate business operations, which focus on an environment of adequate, appropriate, and sufficient internal control. We operate under the established Principles of Good Corporate Governance, Code of Conduct, and Anti-Corruption Policy, which we communicate to employees of all levels. Their strict adherence to these policies is required.	At B.Grimm Power, we regularly evaluate and monitor our people's compliance with the Corporate Governance Policy and the Code of Conduct. This past year, we conducted CG Day. We have been a certified member of Thailand's Private Sector Collective Action Coalition against Corruption (CAC) since 2017. In the past year, there were zero complaint related of corruption or bribery.

STAKEHOLDER ENGAGEMENT

B.Grimm Power values every stakeholder in every sector, we engage with them in various manners, which enable us to learn of their expectations and determine appropriate responses to all of them. Additionally, we have used the input gained from our stakeholder engagement to improve our operational efficiency. In doing so, we have garnered their trust and support in our organisation in the long run, helping our company grow sustainably.

STAKEHOLDER ANALYSIS

1 Stakeholder Identification	2 Define levels of B.Grimm Power impacts on Stakeholders	3 Define levels of Stakeholders' influence on the Company	4 Stakeholders Prioritization
<ul style="list-style-type: none"> • Roles and responsibilities • Relationships • Influences • Other factors 	<ul style="list-style-type: none"> • Economic impact • Social impact • Environmental impact • Corporate governance 	<ul style="list-style-type: none"> • Operations • Image and reputation • Finances • Laws and regulations 	<ul style="list-style-type: none"> • Determine appropriate forms of engagement and guidelines for each group of stakeholders <ul style="list-style-type: none"> ◦ Press interviews ◦ Conferences ◦ Discussions and forums ◦ Co-organised activities ◦ Communication and public relations

STAKEHOLDERS ENGAGEMENT APPROACH

Shareholders & Investors	Topics Reported	Customers
Objectives <ul style="list-style-type: none"> • Effective management and project successes • Opportunity and risk management • Favorable performance and continuous growth • Corporate governance, anti-corruption and qualifications of directors and senior management • Dividend payments, great value stock, protection of shareholders' interests • Complete, accurate, and timely reporting 	<ul style="list-style-type: none"> • Annual Registration Statement / 2020 Annual Report (Form 56-1 One Report) • 2020 AGM Minutes • 2020 Sustainability Report • Information disclosure on company website • Investor Presentation • Company profile 	Objectives <ul style="list-style-type: none"> • Generating and delivering safe and stable electricity at the capacity specified in the purchase agreement and at a reasonable price • Fair and ethical adherence to the terms and conditions of agreements and contracts • Use of eco-friendly power-generating technologies that do not impact local communities and society at large • Confidentiality of information • Quick service and assistance
Engagement Approach <ul style="list-style-type: none"> • Annual general meeting of shareholders (AGM) • Shareholders' ability to propose agenda items and nominate director candidates ahead of the AGM • Annual registration statement / annual report (Form 56-1 One Report) and sustainability report • Quarterly analyst meeting • Roadshows twice a year or more • Quarterly opportunity day • Conferences and seminars for general investors, retail investors, and institutional investors • Company visits 	Business Partners & Suppliers Objectives <ul style="list-style-type: none"> • Support and joint projects for mutual growth • Supervision of business partners' and suppliers' occupational safety and work environment • Ability to meet deadlines and fulfill contracts / business payment terms and conditions / transparent, fair, accountable, and equal opportunity selection Engagement Approach <ul style="list-style-type: none"> • Ongoing selection and evaluation of business partners' and suppliers' performance • Use of ESG assessment and delivery satisfaction in the partner selection process • Meetings, training sessions, and seminars with partners and suppliers • Company visits Topics Reported <ul style="list-style-type: none"> • Corporate Governance • Code of Conduct & Anti-Corruption • Supply chain management • Knowledge and innovation management • Occupational health and safety 	Engagement Approach <ul style="list-style-type: none"> • Meetings with customers in industrial estates for needs-based electricity generation capacity planning • Ongoing dialogue with EGAT's control centers • Customer satisfaction surveys for service improvement • Regular meetings and activities with customers • 24-hour assistance and maintenance • Call Center and SMS notification service Topics Reported <ul style="list-style-type: none"> • Customer satisfaction and product responsibility • Data protection and cybersecurity management • Excellence Electricity Generation Management

Creditors	Engagement Approach	<ul style="list-style-type: none"> • Performance assessment and use of employees' feedback to improve operational efficiency • Policies and news communicated through various channels, including meetings, activities, and electronic media such as emails and announcements, promotional messages, and images • Meetings between senior management and employees • Employee engagement survey every 2 years
Objectives <ul style="list-style-type: none"> • Strict adherence to the terms and conditions of contracts and applicable laws and regulations • Fair and equal treatment of all creditors • Continuous growth • Corporate governance • Complete, accurate, and timely reporting 	<ul style="list-style-type: none"> • Regular meetings and exchanges with regulators • Monitoring changes in applicable laws and regulations to ensure compliance • Co-organised activities to improve communication, exchanges of opinions, and relationships • Occasional visits • Company visits 	Topics Reported
Engagement Approach <ul style="list-style-type: none"> • Meetings and information exchanges • Performance reporting • Business visits • Occasional project progress updates for creditors 	Topics Reported	<ul style="list-style-type: none"> • Corporate Governance • Code of Conduct & Anti-Corruption • Our People • Occupational Health and Safety • Community and Social Engagement
Topics Reported <ul style="list-style-type: none"> • Annual Registration Statement / 2020 Annual Report (Form 56-1 One Report) • 2020 AGM Minutes • 2020 Sustainability Report • Information disclosure on company website 	<ul style="list-style-type: none"> • Corporate Governance • Code of Conduct & Anti-Corruption • Environmental Management • Operational Eco-Efficiency • Climate Resilience Management • Biodiversity Conservation • Water Stewardship • Community and Social Engagement 	Communities & Society
Regulators	Employees	Objectives
Objectives <ul style="list-style-type: none"> • Transparent, fair, and accountable operations • Compliance with applicable laws, rules, and regulations • Transparent, accurate, and timely reporting • Support for government initiatives and timely tax and fee payments 	Objectives <ul style="list-style-type: none"> • Fair employment and appropriate compensation package, including health and life insurance and provident fund contributions • Skill development and career growth and stability • Good quality of life • Occupational health and safety oversight • Work-life balance 	<ul style="list-style-type: none"> • Responsible operations that do not impact communities, society, and the environment • Timely rectification and mitigation of impacts caused by operations • Openness to local communities' participation • Improving local communities' quality of life while ensuring business growth • Support for community enterprises, community development projects, and beneficial knowledge for community development
	Engagement Approach	Engagement Approach
	<ul style="list-style-type: none"> • CG Day communication and activities to promote our corporate governance principles, code of conduct, business ethics, and anti-corruption policy, which are part of our organisational culture and involvement in local communities 	<ul style="list-style-type: none"> • Socioeconomic surveys and platforms for public opinions • Bilateral meetings (company and communities) and trilateral meetings (company, communities, and regulators) to obtain inputs from society

- Continuously building relationships with communities through activities, such as community visits, public relations programs, and news
- Support for community and other activities for social betterment

Topics Reported

- Corporate Governance
- Code of Conduct & Anti-Corruption
- Environmental Management
- Operational Eco-Efficiency
- Climate Resilience Management
- Biodiversity Conservation
- Water Stewardship
- Community and Social Engagement

Media

Objectives

- Complete, accurate, and timely reporting of verifiable information

- Quick, convenient, and easily accessible channels of communication
- Good relationships between media outlets and our organisation

Engagement Approach

- Press conferences and press releases about quarterly and annual earnings and other current topics of interest
- Interviews and press conferences to report on the progress of projects
- Occasional media visits, such as on their anniversary, to obtain their feedback and continue to build relationships
- Company visits

Topics Reported

- Annual Registration Statement / 2020 Annual Report (Form 56-1 One Report)
- 2020 AGM Minutes
- 2020 Sustainability Report
- Information disclosure on company website

CHANNELS

Information disclosure on company website :

<https://www.bgrimpower.com/en>

Whistleblowing channels

Email : whistle_blowing@bgrimpower.com

Website : https://investor.bgrimpower.com/whistle_blowing.html

Investor Relations

Tel : 0-2710-3528

Email : ir@bgrimpower.com

Company Secretary

Tel : 0-2710-3162

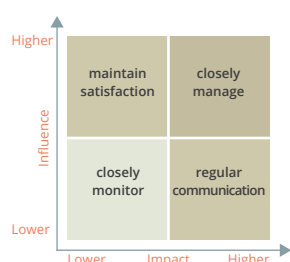
Email : companysecretary@bgrimpower.com

MATERIALITY ASSESSMENT

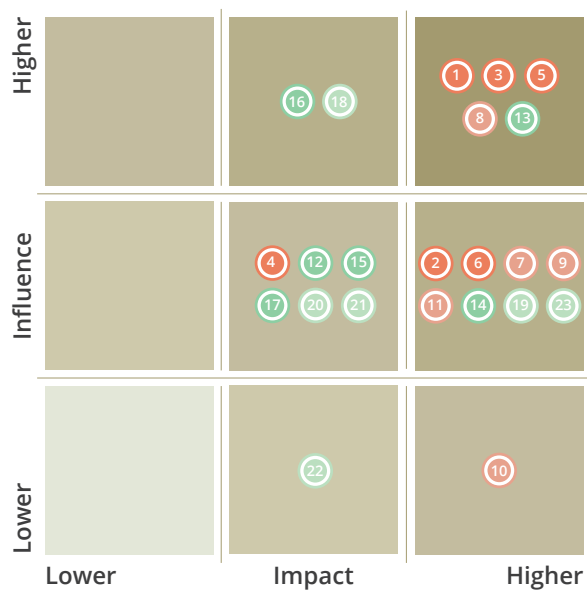
B.Grimm Power has conducted a materiality assessment according to the Global Reporting Initiative (GRI) Standards, prioritizing sustainability issues that matter most to our business and are of most concern to our stakeholders. The economic, social, environmental, and corporate governance aspects of sustainability are all considered. Our directors, executives, employees, and relevant stakeholders have all taken part in designing the framework for sustainability within which we operate. It has enabled us to deliver on sustainability values that our stakeholders expect and are interested in. We have also communicated our performance on these issues of materiality to internal and external stakeholders through various channels.

PROCESS TO DEFINE THE MATERIALITY

1	2	3	4
Identification	Prioritisation	Validation	Review
<ul style="list-style-type: none"> Stakeholders' expectations and interests Industrial standards International standards and sustainability assessments Emerging trends and possible impacts on the business Domestical and international concerns 	<ul style="list-style-type: none"> B.Grimm Power had organised a workshop with management and relevant units, we determine the scope of the report based on two materiality factors : the influence of stakeholders on B.Grimm and the significance of B.Grimm's economic, environmental, and social impacts 	<ul style="list-style-type: none"> B.Grimm Power had validated the completeness of our material issues against internal and external impacts—namely economic, social, environmental, and governance impacts—before presenting our report to senior management for review and approval. 	<ul style="list-style-type: none"> B.Grimm Power is focused on continuously developing the Sustainability Report and is open to suggestions and opinions from all stakeholders for further improvement.



MATERIALITY ASSESSMENT



 Economic	 Governance	 Environmental	 Social
1. Business Growth 2. Knowledge and innovation Management * 3. Operational Excellence Management 4. Supplier Management 5. Business Continuity Management 6. Data Protection and Cybersecurity*	7. Corporate Governance 8. Risk Management 9. Anti-Corruption 10. Whistleblowing 11. Compliance	12. Energy Management 13. Water Stewardship 14. Climate Resilience and Greenhouse Gas Management 15. Pollution Management 16. Waste Management 17. Biodiversity Conservation*	18. Employee Wellness 19. Occupational Health and Safety 20. Human Rights 21. Customer Satisfaction 22. Child Labor 23. Communities' Involvement

* Update issues

RE-VALIDATION OF MATERIAL TOPICS

In 2020, B.Grimm Power used the 2019 materiality assessment to define the sustainability topics for 2020 Sustainability Report; however, some closely-related issues were grouped together to ensure thorough coverage of stakeholders' expectations and interests, while some were renamed to better suit the context of our organisation—namely, 2. **knowledge and**

innovation management; 6. **data protection and cybersecurity**; and 17. **biodiversity conservation**. Currently, B.Grimm is conducting a materiality assessment to define the scope of the subsequent sustainability report according to stakeholders' expectations and interests and the context of the constantly changing world.

IMPACT BOUNDARY OF MATERIAL TOPICS

Material Topic	Impact Boundary							
	Employees	Shareholders & Investors	Regulators	Customers	Partners & Suppliers	Creditors	Communities & Society	Media
Economic								
1. Business growth		●			●	●		
2. Knowledge and Innovation management					●			
3. Operational Excellence Management				●				
4. Supplier management					●			
5. Business continuity management				●				
6. Data Protection and Cybersecurity	●			●				
Governance								
7. Corporate Governance	●	●	●	●	●	●	●	●
8. Risk Management	●	●	●	●	●	●	●	●
9. Anti-Corruption	●	●	●	●	●	●	●	●
11. Compliance	●	●	●	●	●	●	●	●
Environmental								
12. Energy Management			●	●				
13. Water Stewardship			●				●	
14. Climate Resilience and Greenhouse Gas Management			●				●	
15. Pollution Management			●	●			●	
16. Waste Management			●	●			●	
17. Biodiversity Conservation			●				●	
Social								
18. Employee Wellness	●							
19. Occupational Health and Safety	●		●		●		●	
20. Human Rights					●			
21. Customer Satisfaction				●				
23. Communities' Involvement	●						●	

CORPORATE GOVERNANCE

B.Grimm Power adheres to Corporate Governance principles achieve sustainable growth by fostering a corporate culture, Business Ethics and Code of Conduct for employees at all levels while streamlining operations and implementing fair, transparent and accountable work processes, the Board of Directors issued the Corporate Governance Policy, which had been formulated in accordance to the Corporate Governance Code for Listed Companies 2017 of the Securities and Exchange Commission, as well as established relevant practice guidelines.

These documents are reviewed annually to allow us to progress and operate efficiently. Furthermore, we also cultivate an organisation-wide culture of compliance and promote the adoption of the Code of Conduct and ethical business practices across the board. We aim to create a solid foundation of good corporate governance that garners the trust and confidence of all stakeholders, which will enable us to achieve sustainable value creation and ensure a sustainable operation.

PRINCIPLES ADOPTED

Domestic	International
Corporate Governance Code for Listed Companies 2017 of the Securities and Exchange Commission	G20 / OECD Principles of Corporate Governance
Code of Best Practices of Directors of Listed Companies	Dow Jones Sustainability Indices (DJSI) by SAM
Articles of Association Pursuant to the Securities and Exchange Act	MSCI ESG Rating of MSCI
ASEAN Corporate Governance Scorecard of the ASEAN Capital Markets Forum	FTSE4Good Index Series of FTSE Russell

66.67%

Independent Directors

66.67%

Women on Board

0

Number of Significant Business Ethics Breaches

100%

All Employees Acknowledged and Passed Test of the Code of Conduct, the Anti-Corruption Policy, and the Whistleblowing and Grievance Policy.

Excellent

CGR Score by the Thai Institute of Directors (IOD)

Excellent

AGM Checklist Level by the Thai Investors Association, the Thai Listed Companies Association, and the Securities and Exchange Commission

CORPORATE GOVERNANCE PROMOTING ACTIVITIES

CG DAY 2020 : ESG | EMPOWERING SUSTAINABILITY GROWTH

In 2020 B.Grimm Power organised the annual Corporate Governance Day, better known as the CG Day, to cultivate good corporate governance as part of the organisational culture. CG Day arms our people with the knowledge and understanding of corporate governance and operating under its principles. It also empowers our people, who are of great value to our organisation, to reach their maximum potential and drive our business towards success, as well as to allow us to achieve our goals. Good corporate governance gives us a competitive advantage and excellence management, both of which are crucial for sustainable growth.

The concept of CG Day 2020 was “ESG | Empowering Sustainability Growth.” Its activities promoted the knowledge, understanding, and implementation of Corporate Governance, Anti-Corruption, and Whistleblowing and Grievance policies. The highlight was a lecture entitled “What is ESG, and why is it

important?” by Anantachai Yoonprathom, the Chief Executive Officer of the Sustainable Business Development Institute, and a panel discussion on the topic “ESG : Empowering Sustainability Growth” by Dr. Harald Link (B.Grimm Power Chairman), Kesara Manchusree (former Chief Executive Officer of the Stock Exchange of Thailand), and the aforementioned Anantachai Yoonprathom. Employees at B.Grimm Power’s headquarters in Bangkok and employees at its power plants tuning in online were afforded ample opportunities to ask any questions they might have about the implementation of the Code of Conduct, the Corporate Governance Policy, and other relevant regulations. Proper guidance was also given to all departments involved to enable all of B.Grimm Power’s workforce to adhere to the same set of standards and encourage them to be a good model of corporate governance regardless of their position within the company.

Details of our Corporate Governance structure, policy, and performance appear in Form 56-1 One Report 2020 and on our website, <https://investor.bgrimpower.com/home.html>, under Form 56-1 One Report 2020.

CODE OF CONDUCT AND ANTI-CORRUPTION

Eradicating corruption from society is a priority that requires the participation of every organisation at national and international levels because corruption is an obstacle to global economic and social development.

B.Grimm Power always expressed our commitment to good corporate governance. Our professionalism, which is an integral part of our corporate culture, is a tool that drives our employees' conscience and motivates them to strictly adhere to the Code of Conduct and the Anti-Corruption Policy. B.Grimm Power recognises the importance of anti-corruption efforts. We campaign for and instill in our people a strong sense of honesty, ethics and morality, responsibility, compassion, unity, and creativity. We encourage our employees to be well-behaved and act as a good corporate citizens. We strive for overt, transparent, and accountable work processes. None of us shall take any action, whether directly or indirectly, that can be linked to any form of corruption.

PRINCIPLES ADOPTED

Domestic	International
Corporate Governance Code for Listed Companies 2017 of the Securities and Exchange Commission	G20 / OECD Principles of Corporate Governance
ASEAN Corporate Governance Scorecard of the ASEAN Capital Markets Forum	The 10 Principles of the United Nations Global Compact (UNGC) on anti-corruption efforts, environmental protection, labor standards, and human rights.
Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)	Dow Jones Sustainability Indices (DJSI) by SAM

100%

All Business Units Conducting an Assessment of Corruption Risks and have a Corruption-Risk Management Mechanism in Place

0

Significant Business Ethics Breaches of Non-Compliance with Applicable Laws and Regulations

0

Significant Business Ethics Breaches of Non-Compliance with the Code of Conduct

0

Significant Business Ethics Breaches of Potentially Corruptive Action and Whistleblowing

CODE OF CONDUCT AND ANTI-CORRUPTION POLICY PROMOTING ACTIVITIES

1. Communicated the policy and provided knowledge on Code of Conduct, anti-fraud and corruption policy, whistleblowing and grievance policy, risk management and other relevant policies and practice guidelines.
2. Risk assessment, determination of risk management plan, monitoring and revision of risk management on fraud and corruption with concerned units.
3. Organised the CG Day 2020 activity to raise awareness and enhance knowledge and understanding of corporate culture, good corporate governance, Code of Conduct, anti-fraud and corruption, sustainable development and risk management for all employees throughout the organisation.
4. Learning and tests on Code of Conduct, anti-fraud and corruption and whistleblowing and grievance for all employees throughout the organisation.
5. Revised the anti-corruption policy, whistleblowing and grievance policy and other relevant policies.
6. Developed whistleblowing and grievance channels and system for easy access.
7. Assigned a unit responsible for overseeing, monitoring whistleblowing and grievance as well as acceptance and offering of gifts in accordance with relevant policies.
8. Communicated anti-fraud and corruption practices to customers for acknowledgment.
9. Supported and participated in activities with external agencies and fraud and corruption networks.
10. Employees related to fraud and corruption operations attended training courses to enhance their knowledge and understanding of fraud and corruption prevention in the organisation.
11. Provided the orientation program for new employees to enhance their knowledge and understanding of corporate culture, Code of Conduct, anti-corruption, whistleblowing and grievance channels, Code of Conduct tests, anti-fraud and corruption, and whistleblowing and grievance.

ANTI-CORRUPTION

B.Grimm Power has been a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) since 2017.

Policies related to anti-corruption

- Anti-Corruption Policy
- Code of Conduct
- Whistleblowing & Grievance Policy
- Gifts and Hospitality Policy
- Donation and Sponsorship Policy and Guidelines
- Human Resource Management Policy of B.Grimm Power and subsidiaries

WHISTLEBLOWING CHANNELS

Mail	Whistleblowing Unit B.Grimm Power Public Company Limited 5 Krungthepkreetha Road, Huamark, Bangkapi, Bangkok 10240 Thailand
Email	Whistle-blowing@bgrimmpower.com
Online	https://investor-th.bgrimmpower.com/whistle_blowing.html

WHISTLEBLOWING PROCEDURES

The Internal Control, Legal, and Whistleblowing departments, jointly conduct an assessment and a preliminary investigation. If they find any wrongdoing, they shall report it to the authorized person, who shall appoint an investigative committee.

The committee shall investigate the matter and report its findings within 45 days of receipt of the appointment letter.

The Company shall carry out the appropriate disciplinary / legal action against the wrongdoer, whichever the case may be, within 30 days.

INFORMANT PROTECTION

1. Names and personal information of all informants will be kept confidential.
2. Intimidating or threatening an informant or any person aiding in an investigation will not be tolerated.
3. Additional protection may be provided, subject to the severity and importance of the subject of the whistleblower report.
4. In case of an employee reports in good faith an alleged act of corruption or a violation and an ensuing investigation reveals no wrongdoing, the Company shall not take any disciplinary or punitive action against the reporter. However, if the report has been filed in bad faith and no wrongdoing has been discovered, the Company will subject the reporter to disciplinary action.

BUSINESS GROWTH

Infrastructure development is the cornerstone of a country's competitiveness. Thailand and other nations in the region have all emphasised energy, transport, logistic, and digital infrastructure development. The electricity industry plays a pivotal role in supporting economic growth as energy stability and security conduce to the support for economic expansion, public needs, and growing industries.

B.Grimm Power has been in the business of producing and supplying industrial electricity and steam for over 25 years. In fact, we pioneered this particular segment of the private sector. As one of Thailand's largest small power producers (SPPs), we have continuously invested in an increasing number of combined cycle co-generation power plants and renewable energy power plants in Thailand and overseas. We aim to raise our production capacity under power purchase agreements to 7,200 MW by 2025, with a focus on power plants with a low environmental impact—namely, natural-gas combined cycle co-generation power plants and renewable energy power plants—both of which are power generating facilities of the future. Our vision also includes hybrid power plant projects, which synergize a combined cycle co-generation power plant, a solar farm, and an energy storage system (ESS). In addition, we have readied B.Grimm Power to provide an Independent Power Supply (IPS) without relying on the Electricity Authority's infrastructure, including rooftop solar farms, in preparation for becoming a smart energy provider that employs digital technology for data analysis and energy management.

In 2020 B.Grimm Power acquired a stake in the ATP combined cycle co-generation power plant with an installed capacity of 124 MW and commenced commercial operation of the Ray Power solar farm in Cambodia with an installed capacity of 39 MW. This facility is the first Thai-owned power plant to operate under a power purchase agreement with Électricité du Cambodge. Despite the COVID-19 pandemic and widespread flooding in Cambodia, this project remained unravaged by floodwaters, thanks to a careful design and assessment process that took 100 years of inundation history into account, which resulted in flood barriers around the premises.

Thailand has opened up its liquefied natural gas (LNG) market to competition. Supply and demand now determine LNG prices. PTT was previously the sole importer, but since the announcement, we have obtained a shipper license to source and wholesale LNG on our own. Doing so has increased our competitiveness and augmented the efficiency of our strategy implementations—the cost of LNG accounting for 67% of our operating expenses last year—as well as created a balance and sustainable value for our stakeholders.

TAX POLICY

B.Grimm Power attaches great importance to tax operations, understanding that they play a crucial role in any sustainable business. Paying the taxes due will create optimal benefit and value to the economy, society, and stakeholders across the board. Our tax policy guides our tax planning and management in Thailand and overseas, ensuring consistency and cohesiveness. It requires officers in charge of taxation matters to possess the knowledge and expertise necessary and prescribes strict conformity to applicable laws, regulations, and timeframes. We have deployed tax risk and impact assessment and tax risk management under this policy. We also have tax administration and / or planning for tax incentives for certain investments and business activities. In addition, we closely monitor changes in tax laws and other applicable regulations to ensure thorough compliance.

B.Grimm Power employs the service of tax advisors who possess the knowledge and expertise in overseeing complex transactions to reduce any potential tax risks and impacts. These advisors also furnish us with guidance for legal compliance, appropriately considering the best interest of our Company and all stakeholders.

For detailed information, please see the "Tax Policy" under "Corporate Governance" via the website <https://investor-th.bgrimpower.com/misc/corporate-governance/20200819-bgrim-tax-policy-en.pdf>

Economic Benefits (Million Baht)

1,763

Employees' Compensation,
other Benefits, and Training Expenses

964

Dividends

328

Applicable Taxes and Fees

29,075

Investments and Operating Expenses

283

Charitable Donations, Community Investments,
and Commercial Social Activities

RISK AND CRISIS MANAGEMENT

RISK MANAGEMENT

B.Grimm Power prioritises effective and systematic risk management. It is a significant factor that contributes to the realisation of the business objectives and goals set out in our business plan. Risk management can reduce the impact and damage from a risk event and create present and future business opportunities.

ADOPTED PRINCIPLES

Domestic	Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)		
International	Enterprise Risk Management—Integrating with Strategy and Performance 2017 of the Committee of Sponsoring Organisations of the Treadway Commission (COSO)	ISO 22301—Business Continuity Management (BCM)	SAM's Dow Jones Sustainability Indices (DJSI)

Our risk management is under the supervision of the Board of Directors, who has appointed the Risk Management Committee (RMC) to oversee the Risk Management Policy and Risk Management Committee Charter. The committee is also responsible for and the *Five Principles of Enterprise Risk Management Manual* (Figure 1) pursuant to the Committee of Sponsoring Organisations of the Treadway Commission (COSO) and its *Enterprise Risk Management—Integrating with Strategy and Performance 2017*. The manual guides our assessment of internal and external risks and their potential impacts. This process includes the

introduction of environmental, social, and corporate governance issues into our evaluation of risks that may affect the achievement of our objectives and goals. Our risk assessment encompasses corporate risks, business-unit risks, and functional risks. Additionally, the committee reviews our internal control policies and systems to evaluate our risk management and controls as well as audit and reporting processes. The committee provides a summary of its progress and reports its performance to the Board of Directors regularly.

FIGURE 1 : ENTERPRISE RISK MANAGEMENT

Mission, Vision & Core Values	Strategy Development	Business Objective Formulation	Implementation & Performance	Enhanced Value
1. Governance & Culture	2. Strategy & Objective-Setting	3. Performance	4. Review & Revision	5. Information, Communication, & Reporting

Currently, B.Grimm Power has deployed risk management in every business, including projects under development. The Risk Management Team is in charge of coordinating with functional risk owners to gather their risk factors. The team's duties and responsibilities include identifying risks and their impacts, conducting risk assessments, exercising current controls, determining key risk indicators (KRIs), devising mitigation plans, supervising and monitoring risk management plans, and reporting and reviewing risks regularly and continuously.

In addition, B.Grimm has provided training to educate executives and relevant employees about risk management as part of the annual CG Day activities since 2019.

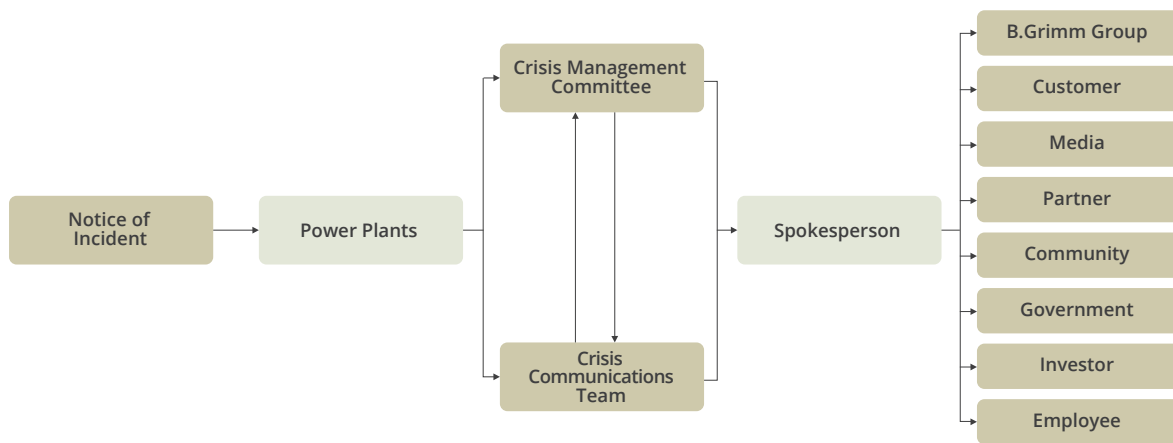
This past year we have identified and assessed three emerging risks to deal with them more accurately comprising 1. climate change risk, the management of which has incorporated DJSI criteria; 2. digital transformation; and 3. cybersecurity.

For more information, please see "Risk Management" disclosed in the "2020 56-1 One Report" and on our website under "2020 56-1 One Report" retrievable from <https://investor-th.bgrimpower.com/home.html>

CRISIS COMMUNICATIONS

In an emergency or crisis, coordinated communications are critical. They protect the reputation and image of a company and garner confidence from all stakeholders. At B.Grimm Power, we highlight the importance of preparing for potential emergencies and crises. These unexpected events may affect our business operations and our stakeholders. As a result, we have developed appropriate and effective plans based on applicable international standards for emergency response, crisis management plan, business continuity management, and crisis communications. They prevent and reduce damage to our people's life and property as well as our corporate reputation and image.

To this end, B.Grimm Power has appointed a Crisis Management Committee and a Crisis Communications Team comprising management, advisors, representatives from various departments within our organisation, and working groups. They are responsible for making decisions and devising plans for emergency situations. They also conduct communications-related activities to reduce any adverse effects on our people's and company's reputation, image, and credibility.



At B.Grimm Power, our combined cycle co-generation power plants are required to conduct crisis communications drills in conjunction with emergency plan drills at least twice a year. This practice allows the Crisis Management Committee, the Crisis Communications Team, power plant employees, and Bangkok office employees to practice communicating, troubleshooting, and collaborating in a simulation exercise. It raises their crisis communications

awareness and increases their communication skills, knowledge, and expertise and prepares them for dealing with emergencies in an effective and standardised manner. Furthermore, we have developed a Crisis Communications Manual to guide the work of our Crisis Communications Team. We also have a Crisis Communications Policy that drives our employees' actions.

In 2020 B.Grimm Power conducted a cybersecurity drill to finetune information security management guidelines and prepare for possible cyberattacks. This drill took place at the Amata B.Grimm Power (Rayong) 2 Power Plant in Rayong, located in the Amata City Industrial Estate, Rayong. The exercise tested our response to an emergency and our coordinated crisis communications.

BUSINESS CONTINUITY MANAGEMENT

In addition, B.Grimm Power's policy requires all power plants to prepare a business continuity management (BCM) plan pursuant to the ISO 22301 standard. A plan of this nature seeks to ready a business in the event of an emergency or crisis. It covers every essential part

of operations. Moreover, they are required to conduct emergency drills and review their BCM plans regularly every year to ensure complete business continuity and efficiency.

ERP : Emergency Response Plan	CMP : Crisis Management Plan	BCM : Business Continuity Management	DRP : Disaster Recovery Plan
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EXCELLENCE ELECTRICITY GENERATION MANAGEMENT

Reliability	Stability	Stability	Safety
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At B.Grimm Power, one of our missions is to always advance our business as a world-leading energy producer. We believe that steady growth can only stem from our high standard of professionalism, pioneership, experience, and excellence in electricity and steam generation and distribution. These factors enable us to provide a stable and reliable supply of electricity to all sectors, give us a competitive edge, and conduce to the energy security of the industrial sector and the nation as a whole.



The Best Power Plant Project Developer – Solar for Phu Yen TTP by International Finance Magazine



Awards from “Asian Power Awards 2020” including Power Utility of the Year - Thailand, Power Plant Upgrade of the Year - Thailand and Hydro Power Project of the Year- Bronze by Asian Power Magazine

ELECTRICITY AND STEAM GENERATION SYSTEMS’ EFFICIENCY IMPROVEMENT

B.Grimm Power greatly emphasises excellence production system. In this regard we have deployed risk management in every production process. Our power generation systems’ planning and control are efficient. We store data systematically, which we use to analyse the efficiency of electricity and steam generation. We have developed a systematic maintenance plan and a management system for our machines’ spare parts. We have also augmented our employees’ skills and experience in operating, maintaining, and repairing

power generation systems. Additionally, we work with suppliers and business allies to develop action plans, further developing and optimising our electricity and steam generation systems. We manage maintenance and repair turnaround times according to action plans and business goals. We manage costs effectively and use resources efficiently. We also minimise the risk of machine failure, which affects the stability and reliability of our power supply to customers.

ELECTRICITY TRANSMISSION AND DISTRIBUTION SYSTEM MANAGEMENT

B.Grimm Power recognises the importance of an electricity transmission and distribution system and has tasked a dedicated team with its management. The Transmission and Distribution System Management Team is responsible for planning the generation and distribution of electricity in accordance with

the demand of our electricity buyers and industrial customers. The team takes into account the stability, reliability, and safety of our electric power supply. Its effective management maximises the efficiency of each plant's dispatch in business-per-usual and emergency situations.

EFFICIENCY AND STABILITY OF ELECTRICITY DISTRIBUTION NETWORK

At B.Grimm Power, we have continuously improved our load management system with the goal of modernising and improving the reliability of the power transmission and distribution network within industrial estates where there is more than one combined cycle co-generation power plant. We invest in advanced equipment and technology to increase our transmission and distribution network's efficiency and lower our operating costs. These investments prevent or mitigate damage to our networks due to unforeseen circumstances. They also lay the foundation for integrating new technologies.

We work with our industrial customers to make our plants' dispatch decisions according to their needs, ensuring an uninterrupted supply of power to every customer at all times. We also look for ways to minimise the likelihood of service interruptions and reduce service reconnection turnaround time. By lowering our output when demand is low, we effectively decrease waste and increase our generation and distribution network's economic value and sustainability. Our dispatch ensures that we have a sufficient supply of power to meet our customer demand reliably, stably, and uninterruptedly.

IMPORTANCE OF IMPROVING THE EFFICIENCY AND STABILITY OF ELECTRICITY AND STEAM TRANSMISSION NETWORKS



Reliable and stable supply of electricity and steam to customers



Efficient maintenance planning



Flexibility in managing maintenance and repairs



Economies of scale through shared resources



Dispatch decisions based on day / night demand

POWER GENERATION MAINTENANCE MANAGEMENT

B.Grimm Power has short-term and long-term plans for predictive and preventive maintenance. Our spare parts management system spans all power generation processes. We have entered into long-term service agreements (LTSA's) for repairs and maintenance with our machines' manufacturers and insured our machinery against unusual, damaging circumstances. All of this enables us to maintain and improve on our power generation efficiency.

Through root cause analysis (RCA), our technicians and machine manufacturers work closely together to identify the culprit of a malfunction in the machinery and equipment used in our electricity and steam generation processes. We share all of the know-how and known solutions within the organisation, conducting to better management of electricity and steam generation processes, enhanced planning of predictive and preventive maintenance, and efficiency and continuity of operations.

B.Grimm Power coordinates maintenance shutdowns with customers. Doing so allows for maximum maintenance efficiency and reduces our turnaround time. We have a maintenance team stationed at each power plant to perform regular maintenance tasks. Our combined cycle co-generation power plants must undergo major overhauls every three and / or six years, which the onsite team performs alongside an external team of technicians. This process facilitates the transfer of know-how from external maintenance teams to our own technicians and allowing us to do some maintenance work ourselves. The goal is to extend our machinery's lifespan, reduce the number of shutdown days, and lower maintenance costs.

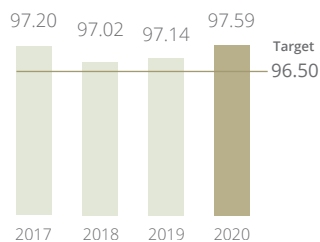
MAJOR OVERHAULS

Partial or total disassembly of a gas turbine unit	Inspection of any damage or wear and tear on a gas turbine unit	Repair or replacement of the damaged or worn part(s)	Assembling and testing a gas turbine unit before full deployment
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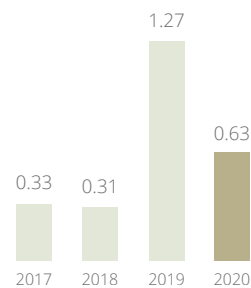
In 2020 we maintained the Availability Factor (AF) and System Average Interruption Duration Index (SAIDI) of all combined cycle co-generation power plants in Thailand. Our AF was at 97.6%, higher than our target of 96.50%. Meanwhile, our SAIDI was lowered to 0.63 hours / year, meeting our expectations. These figures represent the reliability and stability of our power plants. B.Grimm Power places a great

deal of emphasis on the allocation of resources to effectively reduce fuel consumption, which is reflected in the 2020 heat rate of our electricity generation. Due to a thermal power plant's maintenance shutdown, the heat rate stayed well under the target. Meanwhile, the heat rate of our steam generation dropped to 381 kg / GJ.

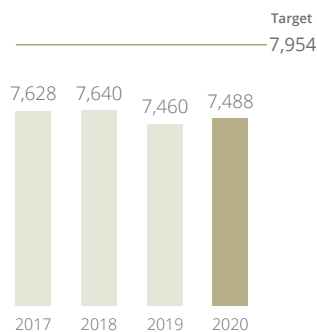
Availability Factor (%)



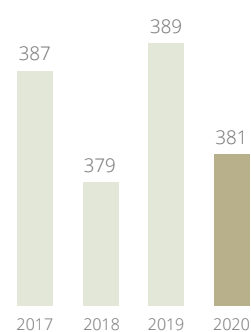
SAIDI Distribution (Hours)



Electricity Generation's Efficiency Rate (BTU / kWh)



Steam Generation's Efficiency Rate (Kg / GJ)



CUSTOMER SATISFACTION AND PRODUCT RESPONSIBILITY

B.Grimm Power commits to creating value for society by producing high-quality energy and providing services with a pioneering spirit and doing business with compassion to our partners. Our people-centric and nature-centric policies are a reflection of our compassionate operations. Thanks to our dedication to developing international-standard electricity and steam and a consistent sense of responsibility towards customers, society, and the environment, we have garnered customers' confidence in our services. Their trust has enabled us to maintain and continue to expand our base of industrial clients. Our growth reflects our success in developing products and providing services, both of which meet the needs of our customers and foster mutual benefits. We consider the fact that we have made significant contributions to the development of Thailand's vital energy infrastructure an achievement, because it brings about stable and sustainable economic and industrial development.

Part of the B.Grimm Power Code of Conduct describes “**customer services, quality of products, and marketing communications.**” We strive to generate and deliver safe and stable electricity at the capacity specified in the purchase agreement and at a reasonable price, using eco-friendly power-generating technologies that do not impact local communities and society at large.

Further details can be found under Corporate Governance, Code of Conduct, accessible via https://investor.bgrimpower.com/code_of_conduct.html.

88%

Customer Satisfaction

24/7

Customer Services

B.Grimm Power has established several best practices to foster excellent customer experience and relationships.

	Management Approach	Benefits to Customers
Pricing	B.Grimm Power bases some of its electricity and steam prices on its customers' avoided cost, which refers to the expenses that industrial customers would have to bear if they were to source their own energy supplies or use a different energy provider, such as purchasing power from PEA or paying for the installation and operation of a steam generator.	Profit margin maximisation
Customer Relations	B.Grimm Power's Sales and Marketing team develops an individual action plan for each customer.	Understanding and meeting customer needs
Demand Management	B.Grimm Power's Sales and Marketing team reviews customers' business plans and explores their factories' premises and actual energy usage. If their demand has significantly risen, the team will negotiate a new meter and a new contract with the customers. The team is also responsible for any technical and business issues reported.	Reliable and highly stable energy source with sufficient supplies for customers' productions
Energy Care Package	The service package of B.Grimm Power has been individually designed for each customer. It may include steam conduit maintenance, high voltage electricity network maintenance, thermography service, and electricity consultancy. Customers always receive service from our closest power plant, whose onsite customer service team will facilitate communication and consultancy, as well as take responsibility for complaint submissions and other usage problems that may occur.	Service and maintenance available 24/7
Network Maintenance Expertise	B.Grimm Power's electrical engineers have a profound understanding of technology. They have extensive experience in the energy sector and are considered experts in their field. They lead the maintenance of nearly all of our machinery themselves. This level of expertise is unprecedented and is not found at other power plants. We have excelled at balancing our supply system and maximising our production capacity since we first opened. We have continued to do so ever since and have adhered to the highest applicable international standards.	Balanced supply system and maximum production capacity

CUSTOMER SATISFACTION SURVEY

B.Grimm Power conducts a customer satisfaction survey annually and use the results to develop and improve our operational efficiency. The survey also helps us maintain our product quality and service excellence. It contributes to the creation of value and mutual business growth. In addition, we manage our relationships with clients through meetings, visits, discussions, and participation in relationship-building activities on various occasions.

DATA PROTECTION

B.Grimm Power is committed to the protection of all stakeholders' personal data. Our policy and framework pursuant to the Personal Data Protection Act B.E. 2562 (2019) or PDPA, as published in the Royal Thai Government Gazette, encourage our Board of Directors, executives, and employees to respect the principles and rights prescribed by applicable laws and regulations. In addition, we have a mitigation plan in place in the event of a data leak. All of this guarantees and enhances the protection of personal data against inappropriate use and helps prevent potential issues and litigation. To this end, B.Grimm Power pays particular attention to direct or indirect access to personal data. Data collection, use, and disclosure strictly require the data owner's consent.

In 2020 we were able to resolve issues and complaints submitted by our customers within the timeframes specified. We encountered no complaints about the use of our products or services or our impact on safety and the environment. Furthermore, we received no complaints about personal data infringements.

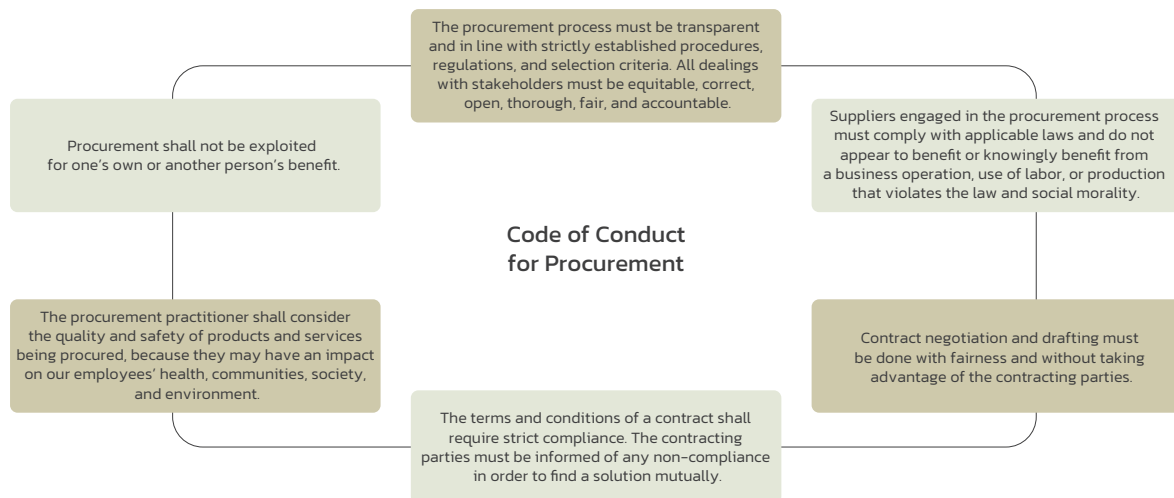
SUSTAINABLE SUPPLY CHAIN MANAGEMENT

At B.Grimm Power, we underline the importance of effective supply chain management. Because we regard our suppliers as stakeholders who play a significant role in the sustainability of our operations, we have integrated sustainability issues into our supply chain management to empower our suppliers to deliver quality, standardised products and services in an economically, socially, and environmentally responsible manner. This approach enhances our business opportunities, enables us to manage risks in the supply chain, and safeguards our business continuity.

100%

All Suppliers have Acknowledged the Suppliers' Code of Conduct

Code of Conduct for Procurement



In 2020 we issued the **Suppliers' Code of Conduct** to facilitate the adoption of sustainability best practices by suppliers, according to the context of their business,

with due consideration to environmental, social, and governance responsibility, which will foster mutual growth.

The Suppliers' Code of Conduct is summarised below :

Environment	Society	Governance
<ul style="list-style-type: none"> • Environmental management • Natural resource and environmental conservation • Greenhouse gases • Waste management and pollution control 	<ul style="list-style-type: none"> • Occupational health and safety and work environment • Emergency prevention and response • Human rights • Treatment of employees • Community and social engagement • Freedom of association, union, federation, and bargaining power 	<ul style="list-style-type: none"> • Compliance with applicable laws and regulations • Business ethics and transparency • Anti-corruption efforts • Intellectual property and confidentiality • Conflict of interest • Quality standards

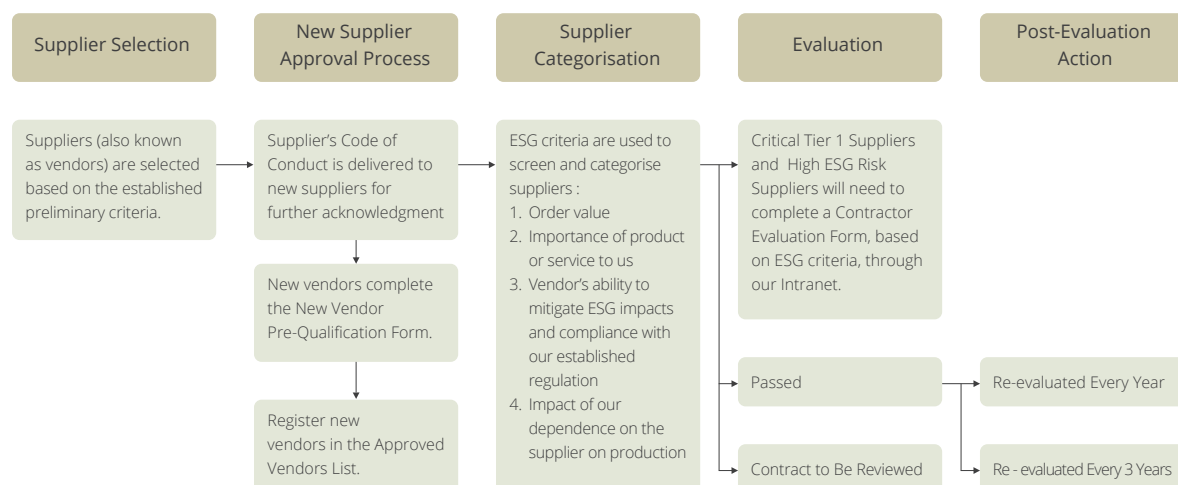
Whistleblowing and Grievance Channels

Further details on this topic can be found in the Suppliers' Code of Conduct and Guidelines for Sustainability under Corporate Governance via website : <https://investor-th.bgrimpower.com/misc/corporate-governance/20200819-bgrim-supplier-code-of-conduct-en.pdf>

PRINCIPLE ADOPTED

Domestic	<ul style="list-style-type: none"> • Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) • Sustainable Supply Chain Management of the Stock Exchange of Thailand • Applicable laws and regulations
International	<ul style="list-style-type: none"> • ISO 14001 : 2018 Environmental Management System • ISO 45001 : 2018 or TIS / OHSAS 18001 Occupational Health and Safety System • UN Global Compact Supply Chain Sustainability, A Practical Guide for Continuous Improvement Second Edition • UN Guideline Principles in Business and Human Rights • UN Global Compact • WBCSD Sustainable Supply Chain Management, Guide for Procurement Leaders • Dow Jones Sustainability Indices (DJSI) by SAM

SUSTAINABLE SUPPLIER MANAGEMENT FRAMEWORK



ESG SUPPLIER SCREENING

B.Grimm Power divides its suppliers into the following categories :

Category	Condition	Impact on ESG and Compliance	Impact on Production
Category 1 High ESG Risk Suppliers	<ul style="list-style-type: none"> High order value Product / service of high importance to B.Grimm 	Some impact	Direct impact. <u>No alternatives.</u> Critical problems in maintaining production capacity.
Category 2 Critical Tier 1 Suppliers	<ul style="list-style-type: none"> Medium order value of 20,000,000 baht or more Product / service of medium importance to B.Grimm 	Some impact	Direct impact. Alternatives available.
Category 3 Critical Non-Tier 1 Suppliers	<ul style="list-style-type: none"> Low order value Product / service of low to medium importance to B.Grimm 	Some impact	Indirect impact.
Category 4 General Suppliers	<ul style="list-style-type: none"> Low order value Product / service of low importance to B.Grimm 	Some / Low impact	None.

In 2020 B.Grimm Power had 1,278 Tier 1 Suppliers on the Approved Vendors List with an aggregate procurement value of 51,205 million baht; 26 Critical Tier 1 Suppliers on the list, which accounted for 98.2% of all procurement value. However, B.Grimm Power is in the process of formulating new standards and developing a system that will host data from all business units. We also have an income distribution plan that seeks to hire locally in every country we operate in.

KNOWLEDGE AND INNOVATION MANAGEMENT

Knowledge and innovation management engender business development, which in turn ensures continuous and sustainable growth. B.Grimm Power's corporate culture is driven by professionalism and pioneering spirit. We encourage our people to learn and innovate in order to bring about competitive advantage as well as enable us to adapt to business and disruptive technology. All of this garners stakeholders' confidence in our business growth in the long run.

TECHNOLOGY AND INNOVATION DEVELOPMENT

Technology and innovation development undeniably play a pivotal role in today's business operations. At B.Grimm Power, we prioritise continuous research and development of power generation systems to achieve maximum efficiency. In this regard, we endeavor to improve our machinery, production technology, maintenance, repair, controls, and facility management. Furthermore, we work to develop our people's skills and competencies in modern technology and innovation, empowering them to lead us into the ever-changing digital era and effectively contributing to our digital disruption survival. For B.Grimm Power, it crucial for everyone in our organisation, from operations staff to senior management, to understand how technology changes. We arm them with the ability to go beyond their current limits and plan for the future.

TECHNOLOGY AND INNOVATION OBJECTIVES

To increase operational efficiency.	To maintain the current customer base and gain new customers through improved customer experience.	To create new business models that prompt growth opportunities or enable us to survive digital disruption.
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B.Grimm Power's 5-Year Innovation Research and Development Plan (2020–2025) covers the following :

Power Plants Systems	<ul style="list-style-type: none"> • MyHealth : We are developing an application called MyHealth in collaboration with Siemens to look into the overall performance data of our combined cycle co-generation power plants, including the trends of our systems' availability and reliability and gas turbines' maintenance notification and recorded servicing hours • Executive Information System (EIS) : We are developing an application for our senior executives. It will display a dashboard of data optimised for decision-making. • Artificial Intelligence for Power Plant Maintenance Management System : Using artificial intelligence, reports and data will be automatically populated to support power plant maintenance decisions. • Computerised Maintenance Management System (CMMS) & Dashboard : This computerised system will help us manage preventive maintenance and inventory. It will also report maintenance progress and provide other maintenance-related information. Data will be pulled from Q4 and other applications and displayed in various forms of reports • Planned Maintenance Optimiser : This project aims to increase maintenance efficiency according to Optimisation PM Plant and Spare Parts plans. • Maintenance Budget Cost : This application aims to find the optimal per unit maintenance cost by analysing past maintenance costs • Continuous Emission Monitoring System (CEMS) Monitoring : This web application monitors and reports nitrogen dioxide and oxygen emissions between our power plants and government agencies—namely, the Industrial Estate Authority of Thailand (IEAT) and the Department of Industrial Works. • SMS & Line Application : We are automating messages from our power plants to our customers, employees, and management.
Distribution Network Systems	<ul style="list-style-type: none"> • Distribution Management System (DMS) : We are developing power transmission and distribution lines to increase the reliability of our power systems, reduce SAIDI and SAIFI, increase the heat rate of power plants, and improve power system analysis and planning. • Asset Management System (AMS) for Substation Equipment : This system will increase the reliability of the power system, lower shutdown time, help mitigate business and financial risks, and decrease substation equipment maintenance costs. • Automatic Meter Reading (AMR) : Thanks to AMR, our meters will send a data update to our server every 15 minutes. We will also develop automatic invoicing and a customer-facing web portal that will enable our customers to see their complete usage history.
Back-End Systems	<ul style="list-style-type: none"> • Procurement & Supplier Management : We are developing a system to record and store procurement documents and suppliers' information to issue purchase orders (PO) and pay them. Data will be updated through Oracle and Q4. • Financial Dashboard : This is a form of easily digestible financial reporting that will facilitate management's decision-making. • Customer Relation Management : This integrated system will help us manage customer data, which will improve marketing and customer service. The goal is to maximise customer satisfaction.
Energy Storage System (ESS)	<ul style="list-style-type: none"> • This collaboration between B.Grimm Power and a world-leading battery manufacturer will result in the development of an energy storage system for use in our power plants and with our power lines. It will increase the overall stability of the system and support the growth in renewable energy. It is also an opportunity to experiment with new energy business models of the future.

DATA PROTECTION AND CYBERSECURITY MANAGEMENT

At B.Grimm Power, protecting and monitoring information technology (IT) security are our priorities. Because cyber threats are global risks that every organisation should address, we have measures in place to provide maximum computer security. We also have procedures, processes, and systems to safeguard our material information and data and facilitate our IT systems' recovery if an anomaly occurs. Moreover, we conduct simulations of disruptive events to hone our responsiveness and train our employees to protect themselves against, respond to, and monitor cybersecurity threats.

IDENTIFY	<ul style="list-style-type: none"> • IT Asset Management • IT Environment Management • IT Governance • IT Risk Assessment • IT Risk Management
PROTECT	<ul style="list-style-type: none"> • Access Control • Cyber Threat Awareness Training • Data and Network Security • Information Protection Processes and Procedures • Adoption of Suitable Protective Technology
DETECT	<ul style="list-style-type: none"> • IT Anomaly Detection and Event Monitoring • IT Anomaly Detection Processes
RESPOND	<ul style="list-style-type: none"> • Cyber Threat Response Planning • Communications About Threats to Management and Staff • Cyber Threat Analysis and Mitigation • Digital Forensics
RECOVER	<ul style="list-style-type: none"> • IT Recovery Planning • Communication Improvements in the Event of Damage

CYBERSECURITY

B.Grimm Power's cybersecurity-related policies include the Information Technology Security Policy, the Data Access Control Policy, the Mobile Device Security Policy, and the Remote Working Policy. Our cybersecurity best practice guide enables our employees to comply with applicable computer and information technology laws and regulations. Furthermore, we have adopted the ISO / IEC 27001 : 2013 standard for information security management in every one of our relevant processes. To this end, we have closely monitored our information technology security and developed our own cybersecurity protocols, which include around-the-clock data analysis, validation, and processing. It allows us to decidedly take action and respond to a wide range of situations and ensure a smooth and uninterrupted operation.

Additionally, our Security Operation Center (SOC) under the Computer Incident Response Team (CIRT) deals specifically with cybersecurity issues. They monitor any cyber threats to our information technology security and work with other departments to respond to any threatening cyber events. Whenever they detect or learn of an anomaly, they will investigate the incident and determine the cause to limit the spread of damage and run system recovery. CIRT members are also responsible for protecting our information technology systems from threats, minimising vulnerabilities, and shielding us from cyberattacks to maintain the accuracy, confidentiality, and availability of information and data.

RESPONSIBILITIES OF THE COMPUTER INCIDENT RESPONSE TEAM (CIRT)

Monitoring	Awareness	Security Audit and Proactive Security
<ul style="list-style-type: none"> • CIRT designs and manages our IT systems in conformity with international standards for cybersecurity. • CIRT monitors potential threats 24/7. • CIRT responds to threats and coordinates with relevant units. • CIRT follows up on and determines the root cause of a cyberattack in collaboration with relevant units. It also provides solutions and suggestions on how to develop more effective security protocols. 	<ul style="list-style-type: none"> • CIRT regularly raises our employees' cybersecurity awareness through various channels of communication. • CIRT alerts and informs our employees about cybersecurity vulnerabilities and threats. • CIRT provides computer security training for employees. 	<ul style="list-style-type: none"> • CIRT inspects our IT systems' safety and provides recommendations and solutions according to various international standards. • CIRT provides us with the measures and support needed to ensure the continued availability of our information technology systems. • CIRT performs mock cyberattacks to detect vulnerabilities and prevent damage from actual malicious attacks.

PERSONAL DATA PROTECTION

B.Grimm Power places a great emphasis on safeguarding all employees' and suppliers' personal data, including its access, collection, use, and disclosure. To this end, we have established a policy and a working team to protect personal data pursuant to the **Personal Data Protection Act B.E. 2562 (2019)** or PDPA, as published in the Royal Thai Government Gazette, for the protection of personal data of all stakeholders. Additionally, we have established guidelines for our Board of Directors, management, and employees to respect the principles and rights prescribed by applicable laws and regulations. We even have a mitigation plan in place in the event of a data leak. All of this guarantees and enhances personal data protection against inappropriate use and helps prevent potential issues and litigation.

100%

Compliant with the ISO / IEC 27001 : 2013 Standard for Information Security Management.

0

Complaints about Data Protection and Cybersecurity.

Awareness Promotion CG Day 2020 : ESG I Empowering Sustainability Growth

At the event, CIRT representatives educated our employees on cybersecurity. They also answered questions and provided solutions to our employees' IT-related issues and problems.

B.Power Be Transform Unleashing the Power of IT

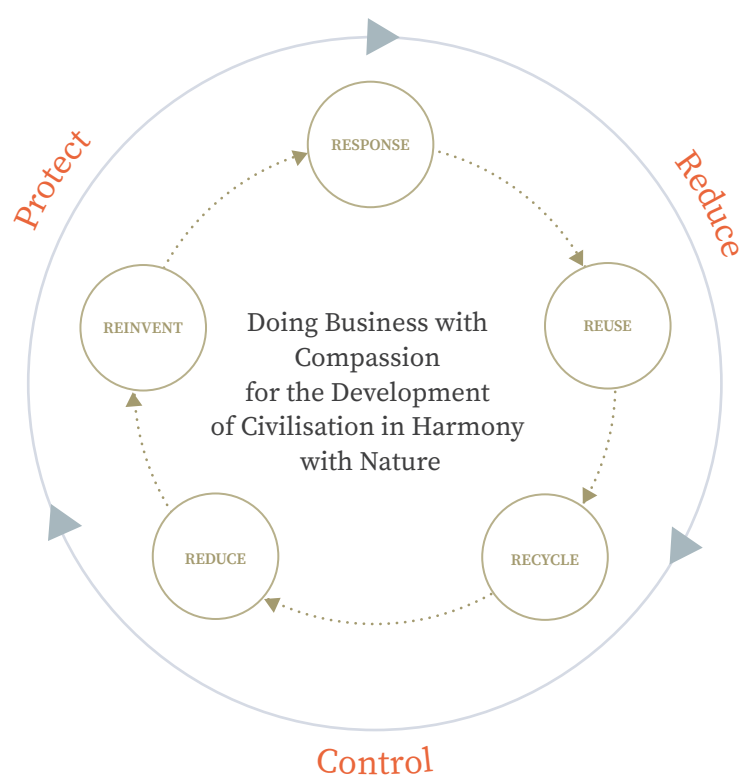
This activity aimed to promote the use of information technology (IT) to increase our competitiveness in the industry. Throughout this activity, our employees expressed their opinions on the matter and learned about the role of information technology in digital transformation. The activity afforded our employees the knowledge and understanding about cybersecurity threats in 2020 and defenses against cyber threats, such as business email compromise attacks, ransomware, multi-stage ransomware, Personal Data Protection Act B.E. 2562 (2019), and cybersecurity health check.

ENVIRONMENTAL MANAGEMENT SYSTEM

B.Grimm Power commits to operating our business while also protecting the environment, which is vital to our sustainable development. To this end, we have issued environmental management policies and guidelines, minimised the environmental impacts of our operational processes, and cultivated an awareness of conserving the environment and natural resources. We strive to strike a balance between economic growth and environmental sustainability.

Further details can be found under the Environmental Management Policy and Guidelines on the website: <https://www.bgrimmpower.com/en/sustainability/environment>.

Environmental management pursuant to ISO 14001 : 2015 is a priority at B.Grimm Power. We require our power plants to obtain certification within 18 months after they begin operating commercially to ensure operational efficiency and to minimise the environmental impact of every process. Besides, we assess and manage environmental risks in our operations. We have an internal control system in place, and we always regulate, prevent, and minimise any environmental impacts we may have. Furthermore, we cultivate a corporate culture of environmental protection and resource maximisation among our employees.



ENVIRONMENTAL MANAGEMENT APPROACHES

Project Location Selection and Project Design and Planning	Promotion of a Good Understanding of Power Plant Operations	Public Hearing and Stakeholders Engagement
Environmental Assessments :		
Environmental Impact Assessment (EIA)	Initial Environmental Examination (IEE)	Code of Practice (CoP)
Water Stewardship	Waste Management	Occupational Health and Safety
Transportation	Air Quality	Landscape Restoration and Rehabilitation

OPERATIONAL RESOURCE EFFICIENCY

"In the conventional economic model known as linear economy, we take resources, make products, and create waste. This approach brings about a series of environmental problems, which prompted us to find a new model. That's circular economy. In this new system, we consider a product's value throughout its life cycle and reuse or recycle it effectively. We also manage waste systematically and comprehensively. As a result, business transactions take place alongside social and environmental responsibility. A circular economy also effectively lowers greenhouse gas emissions, which are a major global environmental issue" Dr. Harald Link

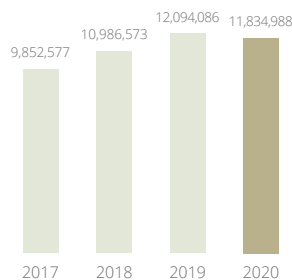
B.Grimm Power's ultimate goal is to sustainably protect the environment and conserve its precious natural resources for future generations. Because we greatly value resource efficiency and optimisation, we have made a commitment to maximise the efficiency of our power generation technology and resource consumption through developments and improvements. For that reason, we have opted to use natural gas to generate power because it is the most stable form of fuel with the lowest environmental impact. We also ensure that our generators are more efficient and eco-friendly through regular maintenance and upgrades in addition to working in tandem with manufacturers to perform a life cycle impact assessment (LCIA) on our machinery in the entire power generation process. Furthermore, we protect the environment and conserve natural resources through our participation in natural resource and environmental conservation projects in collaboration with external organisations and agencies with the aim of helping mitigate and reduce adverse effects on the environment. Moreover, we maximise the efficiency of our power dispatch to minimise power losses.

ENERGY MANAGEMENT

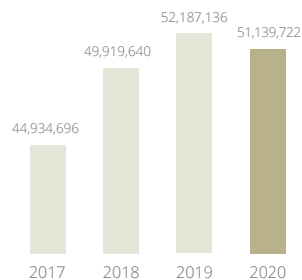
At B.Grimm Power, we have the most efficient energy management, which is crucial to our power generation process and an integral part of lowering our greenhouse gas emissions. Through developments and improvements, we ensure optimal energy consumption and reduce our energy losses, effectively lowering our operating expenses as well. In 2020 B.Grimm Power consumed 51,139,722 GJ of energy to generate a total of 11,835 MWh of electric power and steam from 15 combined cycle co-generation power plants and 22 solar power plants based on these figures, each unit consumed 4.32 GJ / MWh. We attribute this reduction

to our application of modern technology to improve the efficiency of our gas-turbine generators as well as repair and maintain the cooling towers' turbines, both of which were part of our action plan. Our inspection and maintenance of machinery and equipment to ensure the utmost efficiency and our continued investment in renewable energy projects—namely, solar farms, hydropower plants, and wind farms—also contributed to this significant drop in energy consumption. Thanks to all of this, B.Grimm Power's energy consumption and greenhouse gas emissions will continue to decline.

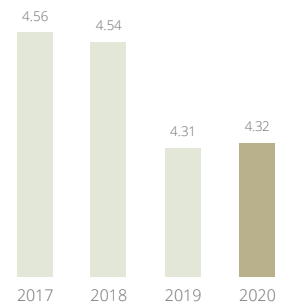
Gross Electricity Equivalent Generation (MWh)



Energy Consumption (GJ)



Energy Intensity (GJ / MWh)

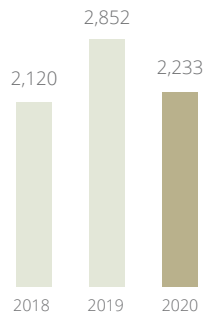


WASTE MANAGEMENT

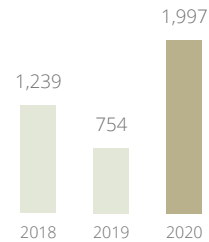
At B.Grimm Power, we are dedicated to properly managing waste. We strive not only to lower the amount of waste we generate while producing power but also to reuse that waste to its fullest potential, which further decreases the amount of waste going to landfills. In addition, we encourage sorting waste into general, compostable, recyclable, and hazardous. This categorisation conforms to waste management

principles. Our efforts contribute to resource optimisation and sustainability, reduce our environmental impacts, and cut down our operating costs. In 2020 B.Grimm Power generated 2,233 metric tons of waste, which was a drop of 619 metric tons or 21.7% from the previous year. Of this amount, we were able to reuse, recycle, and sell 1,997 metric tons or 89.4%.

**Total Waste Generated
(Metric Tons)**



**Total Waste Reused, Recycled, or Sold
(Metric Tons)**



NOISE MANAGEMENT

We assess the impact of the noise we generate, especially from loud machinery, such as gas-turbine generators (GTGs), heat recovery steam generators (HRSGs), steam turbine generators (STGs), condensers, and cooling towers. In addition to having machines that conform to noise control regulations, we also have measures in place to reduce the noise level at its source and conductors, as well as protect the surroundings from our noises.

100%

**Noise Intensity Measurement results
in accordance with the specified Laws
and Standards**

CLIMATE RESILIENCE MANAGEMENT

“Net Zero Carbon Emissions by 2050”

Climate change has triggered more frequent extreme natural events with wide-ranging implications. One of the most notable causes of climate change is the greenhouse gases emitted from human activities. When these gases are released into the atmosphere, they produce the greenhouse effect, which warms the Earth's surface. Climate change has an impact on the ecosystem, agriculture, natural resources, and health, among others. It has led to more frequent and severe natural disasters, including prolonged periods of drought, heatwaves, destructive storms and floods, and rising sea levels due to polar ice caps melting. These extreme events have caused damage to life, property, economies, and society.

B.Grimm Power is committed to taking action to prevent more devastating climate change issues. We strive to reduce greenhouse gas emissions and help Thailand forge ahead towards being a low-carbon society. This commitment is in line with the Thai government's national policy and the international community's attempts to fulfill its commitment to the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC), hence **B.Grimm Power has a target of Net Zero Carbon Emissions by 2050.**

73,265

Reduce GHG emissions
(ton CO₂e)

0.4298

GHG emission concentration
(ton CO₂e / MW-hour)

MANAGEMENT APPROACH ON CLIMATE RESILIENCE

- Establish a policy and goals for business growth and expansion by increasing the proportion of investment in renewable energy to 30% of total investment projects by 2022.
- Consider and select investments using advanced and eco-friendliness technology along with the highest possible level of resource efficiency as well as reduce impacts arising from the use of fossil fuel across the power generation process, and set goals and monitor GHG emission reduction results
- Assess and manage climate change risks that may have an impact on current and future business operations as well as closely monitor environmental incidents and natural disasters

209

**Renewable Energy
In Development**
(MW)

901

**Renewable Energy
In Operation**
(MW)

- Improve efficiency of power generating system to reduce GHG emissions arising from the operations such as improving technology and changing machinery and equipment to reduce environmental impacts as well as supervising and controlling all processes throughout the life cycle or life cycle impact assessment (LCIA) encompassing the supply chain, ranging from the raw material sourcing process, power plant production and maintenance processes, and transmission and distribution system to customers
- Support and work with partners in the network to reduce greenhouse gas emissions actively, promote a circular economy, protect the environment, and conserve natural resources.
- Foster employees' awareness of environmental conservation and efficient use of resources in conformity with the Company's philosophy and corporate culture

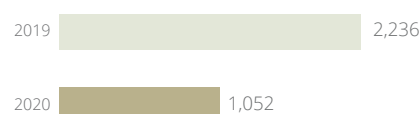
In 2020 We have declined by 73,265 tonnes CO₂e from the previous year. Our combined-cycle cogeneration power plants had direct greenhouse gas emissions of 5,085,605 tonnes CO₂e and indirect greenhouse gas emissions of 1,052 tonnes CO₂e, a total of 5,086,657 tonnes CO₂e as a result from our efforts to ramp up the efficiency of our machinery and equipment through planned development, maintenance, and modern technology deployment. Our efforts included an ongoing energy conservation project, energy efficiency management, inspection and maintenance of machinery, equipment, and the cooling towers' turbines to improve our machinery's efficiency. Another factor contributing to the drop was our continued investments in renewable energy projects, such as solar farms, hydropower plants, and wind farms. Due to these efforts, we have been able to gradually lower our greenhouse gas emissions.

DIRECT AND INDIRECT EMISSIONS

Emissions Scopes 1 (MWh)



Emissions Scopes 2 (MWh)



* Based on our use of natural gas and electricity purchases for power and steam generation at 15 combined-cycle cogeneration power plants and 22 solar farms in Thailand only.

AIR QUALITY MANAGEMENT

It is in our best interest to control our own air pollution emissions to minimise our impact on local communities and the environment. We constantly measure air pollutants generated by all our combined cycle co-generation power plants and also thoroughly and efficiently monitor the air quality within the vicinities of our power generating facilities. In addition, we perform well-planned improvement and maintenance tasks on our generators and related equipment as well as incorporate new and efficient technology into our power plants to reduce our air pollution and its impact.

The following are B.Grimm Power's air quality management practices :

A good combustion system design for the power generating process creates complete combustion, which		The installation of nitrogen oxide (NO _x) controlling dry low NO _x burners for our gas-turbine generators	
lower	carbon monoxide (CO), unburned hydrocarbons (UHCs), and total suspended particles (TSP)	lower	Combustion temperature, which also lowers the formation of NO _x .

We have a continuous emission monitoring system (CEMS) in place. Through stack sampling from our heat recovery steam generators (HRSG), we measure the concentration of various nitrogen oxides (NO_x), sulfur dioxide (SO₂), total suspended particles (TSP), and oxygen (O₂), as well as stack-end temperatures and flow rates. We audit and review these readings based on the methodologies prescribed by the world-trusted U.S. Environmental Protection Agency (U.S. EPA) or other procedures mandated by local government agencies. The audit is divided into two categories :

System Audit	Performance Audit
We determine whether our CEMS is in working order through qualitative evaluation, in which we look at the system's diagnostics.	We also verify whether our CEMS is working correctly through quantitative evaluation, in which we verify NO _x and O ₂ readings from the system against NO _x and O ₂ measurements taken from a stack being tested. All of these measurements are read at the same time. This process is known as a relative test audit (RATA), in which we calculate the relative accuracy of the CEMS' data.

Furthermore, we also randomly assess the quality of air samples taken from our stacks by analysing them according to requirements and criteria announced by the Ministry of Industry. We also measure the air quality of communities around our power generating premises every six months.

100%

Air Quality Measurement Results in accordance with the Specified Laws and Standards and No Complaints about Air Pollution Problems Caused by Our Operations.



BIODIVERSITY CONSERVATION

At B.Grimm Power, we understand the importance of preventing, minimising, and mitigating our operations' impacts on the environment. Conserving biodiversity—the variety of life, both flora and fauna, in a naturally existing ecosystem—is of great interest to us, which includes protecting and preserving water sources and forested lands. To this end, we continue to campaign and raise conservation awareness in collaboration with external agencies. We want to make sure that the balance between man and nature will continue to exist in the long run.

B.Grimm Power strictly adheres to local laws and regulations, including best practices such as the Environment and Social Management System (ESMS), the ADB Safeguards Policy Framework, and the IFC Guidance Note 6 : Biodiversity Conservation and Sustainable Management of Ecosystem Services and Living Resources. We analyse the risks of potentially endangered areas and the potential damage to their land and water biodiversities.

Our projects must never encroach on an important wildlife habitat.	Our projects must never be on legally protected land.	Our projects must never be constructed on land on the International Union for Conservation of Nature Red List (IUCN Red List).	Our projects must never intrude into national parks, wildlife paths, and reserved forests, among others.
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All B.Grimm Power's power plant projects were required to conduct an environmental impact study process in accordance with relevant regulations / laws such as Code of Practices (COP), Initial Environmental Examination (IEE) as a preliminary impact assessment. Before we approve an investment in the construction of any major project, we also require a comprehensive Environmental Impact Assessment (EIA), which reports in detail on the various potential impacts of a given project or activity. An EIA helps us identify

risks and avoid or mitigate them through adequate risk management. We also prepare a Biodiversity Management Plan (BMP) to prevent or mitigate adverse environmental and social impacts of a project. We have monitoring and mitigation measures as well as an action plan in place to protect the environment. There are also remedial measures to compensate for our potential impacts on biodiversity.

SUPPORT FOR CONSERVATION OF NATURAL RESOURCES AND WILDLIFE IN COLLABORATION WITH EXTERNAL AGENCIES

TIGER POPULATION CONSERVATION AND REHABILITATION PROJECT

Over the past six years, B.Grimm has supported the Tiger Population Conservation and Rehabilitation Project at Mae Wong and Khlong Lan National Parks in Kamphaeng Phet, in collaboration with the Department of National Parks, Wildlife, and Plant Conservation and the Thai arm of the World Wide Fund for Nature

(WWF Thailand). In 2020 we expanded our efforts to two more areas—namely, the Khlong Wang Chao National Park in Kamphaeng Phet and the Umphang Wildlife Sanctuary in Tak. These forested locations border the existing project's locality.





Tigers are an indicator species. Their existence indicates that a forest is healthy and the ecosystem is well balanced. Tigers are at the top of the food chain. They maintain a forest's balance and control the population of herbivores, such as deer, wild boar, and bulls. Without tigers, these plant-eating species could overpopulate a forest and tip the balance. A thriving tiger population in a forest also means greater biodiversity.

"Tigers live in a healthy forest, and the forest is so because of them. Similarly, grass covers healthy soil, and that soil stays so because of grass."—King Vajiravudh,

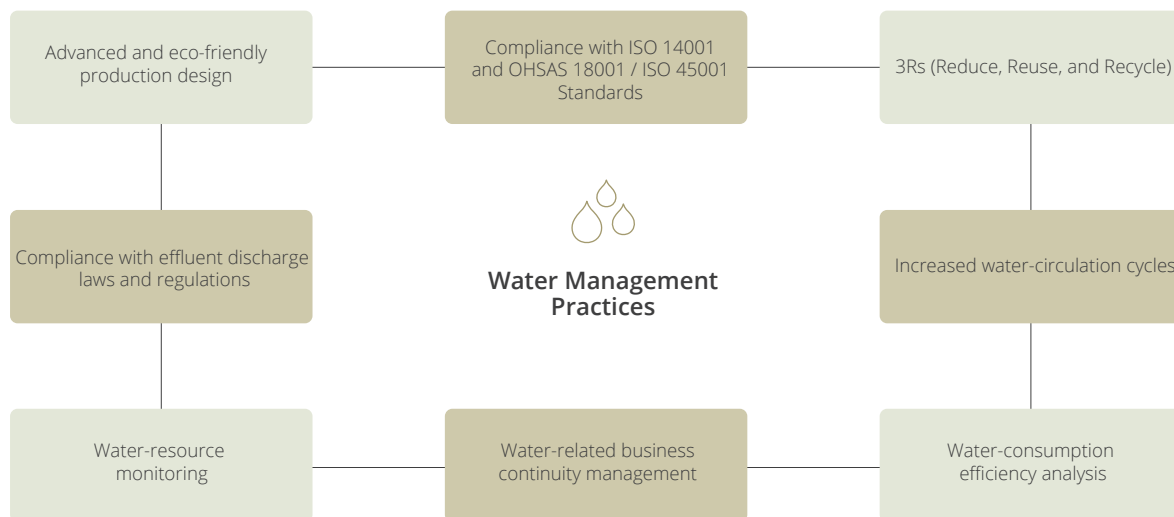
The goal of this initiative is to restore nature to western Thai jungles and increase the population of tigers there to 300 by 2022, a figure that Thailand has pledged at the Global Tiger Conservation Summit in Russia in 2010. The project also aims to protect tigers from poaching and their habitat from encroachment. The Mae Wong and Klong Lan forests are the "forest of hope." They are the most suitable tiger breeding grounds in Southeast Asia, vital to the conservation of tigers. B.Grimm has taken part in the research and survey of tigers and other wildlife populations and

contributed to the smart patrol system that ensures rangers' safety. We have even played an important role in raising awareness and building a network of tiger and wildlife conservation.

B.Grimm Power has built a Tiger Learning Center at Anuban Khlong Lan School to provide opportunities for local students and communities to experience and learn about tigers and wildlife in their area and Thailand in general. This is an essential process for understanding the importance of tigers and wildlife in biodiversity conservation.

WATER STEWARDSHIP

B.Grimm Power uses water in a way that takes public interest into account, striving for balance, sustainability, and cost-effectiveness. We pay special attention to practices that help us reduce water consumption. To this end, we have employed the 3Rs—reduce, reuse, and recycle—to ensure optimisation throughout the entire production chain. Due to the persisting drought throughout 2020, we campaigned for water conservation and put relevant measures in place, such as increasing cooling water circulation cycles and reusing other organisation's wastewater at our facilities to lessen our reliance on raw water and effectively reduce wastefulness. In addition, we made sure that all of our seven combined cycle co-generation power plant projects under development had been designed to optimise their water usage and minimise their environmental impact.



WATER QUALITY MANAGEMENT

Every power plant belonging to B.Grimm Power has a water-quality management system in place, which is supervised by an onsite expert in this field. This practice allows us to provide an immediate solution in the event of an emergency. A third party conducts a monthly and biannual water-quality assessment at our power plants in detail. Our wastewater treatment systems meet international quality standards. Our combined cycle co-generation power plants have their own wastewater treatment and assessment mechanisms. Their treated wastewater discharges, known as effluent, must meet or surpass standards before they can be released into each industrial estate's central wastewater treatment system. Based on past assessments, we have always found the quality of our effluent at all power-generating projects to exceed standards. Our renewable energy power plants have similar practices. Their water management systems are methodically designed. Their effluent complies with applicable laws and regulations.

CHEMICALS MANAGEMENT OF WATER TREATMENT

We have implemented policies, processes, and controls to minimise the risk of chemical spills and our workers' exposure to chemicals. We also provide occupational health, safety, and environment training to raise their awareness of these matters. Included in the training are chemical spill prevention and emergency best practices. In addition, the B.Grimm Power regularly conducts emergency drills to train workers for the event of a chemical spill.

WATER RESOURCE RISK ASSESSMENT

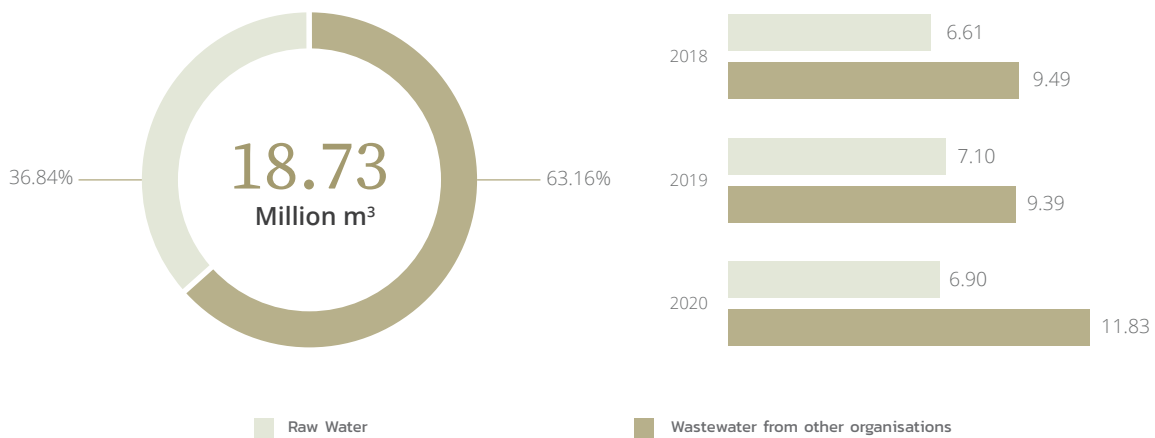
At B.Grimm Power, we assess areas with short-term and long-term water scarcity risks annually. We also have an open dialogue with industrial estates to find ways to mitigate the impact and risk of potential water shortages. We monitor reports from the Smart Water Operation Center of the Office of Water Management and Hydrology, Royal Irrigation Department, Ministry of Agriculture and Cooperatives. The information in these reports helps us devise mitigation measures for water shortages. Thanks to this information, we also ensure that we will have sufficient water for our power plants to operate without interruption.

In 2020 we consumed 6.9 million cubic meters of raw water, a dip from the previous year's figure by 2.8 %. We successfully increased the amount of circulated cooling water up to 5–11 cycles. We discharged a total of 3.7million cubic meters of wastewater, which we treated ourselves. This treated wastewater passed all of the applicable standards and requirements even before it was sent to the central treatment system of each industrial estate.

0.63

Water Consumption Intensity
(cubic meters / megawatt-hours)

2020 Water Consumption Ratio (Million m³ / year)



OUR PEOPLE

At B.Grimm Power, we see our employees as vital stakeholders. They drive our operations towards success and enable us to achieve business goals. Our organizational values include a positive attitude, cooperation, professionalism, creativity, love and pride in being part of a dignified organization, honesty, and compassion. At the same time, we foster a good corporate culture by equipping our people with an understanding of the Code of Conduct and other ethical policies and encouraging them to hone the skills and competencies they need for their respective positions. The combination of our culture and values engenders organization management excellence and conduces to economic, social, and the environmental corporate responsibility. In addition, they create value-added for all stakeholders.

B.GRIMM DNA

At B.Grimm Power, we have always sought to build our B.GRIMM DNA that is open and inclusive where all perspectives are valued. We value and respect people from all walks of life, regardless of characteristics, age, nationalities, ethnicities, and religions. While we come from many different backgrounds and norms, we are passionate about our philosophy in Doing Business with Compassion and being as a Partner for Civilisation: the foundation of our B.GRIMM DNA.

We have introduced the integrated people management processes and practices to employees in order to create the understanding on 4Ps expected behaviors, the positive working environment and B.GRIMM DNA principles.

Our values and leadership behaviors are a vital part of our culture to ensure that through our conduct and decision making, we do the right thing for the business and our stakeholders.

We have more than 1,000 B.Grimm Power people serving our partners in the society. We continue to celebrate the diversity within our way of doing business with compassion and create an environment B.Grimm Power people can be themselves and have an opportunity to get on.

**Doing Business with Compassion for
the Development of Civilisation
in Harmony with Nature**



**Promote Happiness for
All Stakeholders**



B.GRIMM DNA

Core Values – 4Ps	Way to live and work together
+	
GNH Principle	Flourishing human society living in harmony with nature
+	
Compassion	Manifestation of caring and imperturbation

PEOPLE STRATEGIC FOCUS

From focus

Attract tomorrow's talent

Leverage tools and techniques to build and sustain a strong employer brand by managing candidates (internal/external) on future focused criteria

Develop for an unknown future

Enhance capability to deliver sustainable value to the business by assembling our people with a diverse set of skills and embracing a continuous learning

Retain a thriving workforce

Build environment and culture to help our people grow and contribute: working as a team, trying the best to perform better and staying motivated

To direction

1. Support Growth Strategy

- Partner with business to build functional excellence
- Forecast number of manpower and skills required
- Recruit and provide training to qualified candidate according to project requirement

2. Re-establish Fundamental Processes & Practices

- Optimize synergy through integration of HR practices
- Streamline processes for reducing lead time, debottlenecking the flow, eliminating unnecessary steps in order to improve efficiency, productivity and satisfaction
- Digitalize to simplify and fully align processes related to people management
- Improve Performance Management System by providing constructive feedback, engaging high performer and managing consequences poor performer
- Improve Performance Management System by providing constructive feedback, engaging high performer and appropriate managing consequences

3. Engage thru People Management & Culture

- Conduct employee engagement survey, define plan and implement action to improve the engagement of employee
- Launch culture campaign to strengthen connection between employee and company
- Equip line managers with skills to manage people more effectively

4. Increase Quality & Quantity of High Potential Pool across the Company

- Promote Employer Branding to attract external candidates and enhance reputation of B.Grimm Power as employer of choice
- Strengthen quality of high potential (HiPo) pipeline by increasing number of HiPo by accelerating development of internal HiPo and recruiting from outside
- Enhance people capability development

PEOPLE PRIORITIES FOR A BETTER EMPLOYEE EXPERIENCE

In 2020, B.Grimm Power built on a number of initiatives to improve existing HR systems and processes as well as develop new tools to enhance the employee experience. These efforts spanned B.GRIMM DNA; recruitment; employer branding; learning and leadership development; people engagement; performance and career management; employees well-being; and business expansion support.

Current Intervention Diagnosis

PEOPLE

- Diverse components of expertise, proficiency and experience
- People development program: leadership and technical competency, LOKM
- Technical expert network among power plants
- Rising star development
- High potential candidates: internal and external

CULTURE

- Long-standing corporate culture: Positivity, Partnership, Professionalism, Pioneering Spirit
- Compassionate professional
- Unity and brother/sisterhood relations: understanding, generosity, collaboration

STRUCTURE

- Matrix Organization
- Cross functional project assignments
- Agile roles and responsibilities

SYSTEM/PROCESS

- Digitalization for high impact outcomes and employee work-life integration
- Performance management for development
- Regular people survey to ensure positive employee experience and engagement

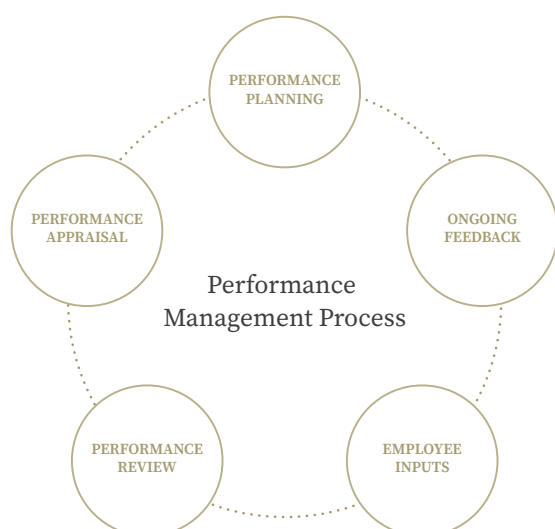
PEOPLE ENGAGEMENT

The compassion and commitment that our people contribute to B.Grimm Power are essential to our success. We focus on delivering an employee experience where our people feel strongly connected to the company and are able to do what they do best each day.

One way in which we enhance our employees' experience is by conducting B.Grimm People Survey every 2 years with the significant objectives as follows;

1. Ensure company's people management practices aligning with GNH Domains, 4Ps Core Values and Corporate Culture
2. Understand employees' perception to ensure company's anticipated actions e.g. Disruptive readiness, Business focus alignment, Risk management, etc.
3. Assess the key achievements of the existing engagement interventions
4. Leverage our current standard to commit sustainable development and benchmark with leading companies

The survey result paints a picture of the current state of employee experiences and engagement in B.Grimm Power. It also unveils how we can get the most out of our people and retain our family members. The admirable points from the survey: good governance, clear accountability and challenging work are perceived as the best practices in B.Grimm.



77%

**Employee Engagement and
12% Higher Than 2018 (65%)**

**Better Results on Demographic
Data and Testing Factors**

1,000

**Target
(Person)
2018 = 715**

20

**Factors Got Higher
Score Compared
to 2018**

94%

**Participation Rate
2018 = 92%**

10

**Locations
2018 = 7 locations**

PERFORMANCE MANAGEMENT

Performance management systems, which typically include performance appraisal and employee development, are in the growth mode for B.Grimm Power people management practices. Our Effective performance management systems have a well-articulated process for accomplishing evaluation activities, with defined roles and timelines for both managers and employees.

We have adopted a constructive approach to our performance management, which includes providing the regular feedback and recognition, while holding people accountable and promoting continuous development. This performance dialogue approach places special focus on employee assessment and significant development. Line managers are encouraged to deliver quality developmental feedback to employees, which sequentially supports regular the career conversations, aligning employees' career aspiration with the available opportunities for growth and development.

RESPECT HUMAN RIGHTS AND FAIR LABOR PRACTICE

Respect for human rights is of great importance to all of us at B.Grimm Power. As a corporation, we treat all persons equally regardless of their race, religion, gender, age, education, or social status. We also respect their individual liberties. We afford all our employees opportunities to demonstrate their competence and expertise in the workplace. We also provide them with fair compensation, welfare benefits, and performance evaluation. Additionally, our Health and Well-Being Project promotes a healthy work-life balance through an array of creative activities that benefit our people's physical and mental health year after year. The project extends from onboarding new staff into the B.Grimm Power family to prepare employees for their retirement. It provides training and education on health, savings, and providing the information they need to know before they retire.

B.Grimm Power has a welfare committee in the workplace which is responsible for presenting and discussing appropriate employee welfare arrangements as well as listen to ideas and guidelines for better development and improvement of welfare that is beneficial to the employees.

We promote employee health by organising company fitness facilities to allow employees to exercise at workplace, saving time on traveling to other gyms.

It also brings about a good relationship between colleagues during exercise together. We also organise other recreational activities that best fits with employees' interests in order to enhance the employee choice and enjoyment such as yoga, zumba dance, singing class, etc.

During the COVID-19 situation, we have placed great emphasis on the health of employees and their families by allowing vulnerable employees to get tested for COVID-19 as needed and appropriate as well as campaigning to encourage employees to take care of their health and their families, such as creating awareness of disease prevention including distributing masks, hand sanitizer and Vitamin C, etc.

In addition, we plan to add activities to reduce the risk of office syndrome for our employees by organising a relaxing massage activity from the visually impaired to employees. It also contributes to the career support of people with disabilities in accordance with the policy of the Disability Promotion and Quality of Life Fund. The event will commence in 2021.

We also provide a channel for employees to suggest ideas and improve the work operations as well as welfare and benefits. We also provide the channel for filing complaints or not receiving fairness to the Whistleblowing Unit in accordance with the company's procedures.

MANAGEMENT APPROACH ON RESPECT HUMAN RIGHTS AND FAIR LABOR PRACTICE

1. Respect in human rights and equally treat employees regardless of the similarities or differences in both races, religion, gender, age, education, marital status, as well as with respect for human rights and freedoms
2. Respect and responsibly handle, protect and maintain the confidentiality of individual information, restrict disclosure of individual information and use it only to the extent necessary, and grant access to personal information according to authorization levels and functions of the authorized employee only
3. Establish the systems for performance appraisal, remuneration, rewarding, and punishment based on fairness, clarity and accountability
4. Constantly focus on the continued and widespread development of knowledges, skills and capability of the employees by providing them with proper training and development programs
5. Set forth proper indicators for evaluation of knowledges, skills, capability and job performances of employees appropriately in order to consider the appointment or rotation with fairness, equality and accountability which must be explainable

6. Enhance the good quality of work-life balance of employees as well as family, community, society and public at large through the promotional activities which contribute the beneficial to them both physical and mental aspects
7. Determine the procedures, processes and mechanisms for considering and resolving employees' grievances with fairness

CHILDREN'S RIGHTS

B.Grimm Power recognizes children's rights and child labor as major national and international issues. To us, child labor is illegal, immoral, and unethical, and we have put measures in place to prevent our operations from exploiting children or infringing upon their rights. These practices are included in our human resource and procurement policies, among others. Our risk assessment and operational supervision also take these issues into account. Moreover, we ensure that all parties involved in our supply chain, including suppliers and contractors, to be free of child exploitation. To date no B.Grimm Power operations have encountered issues of child labor or violations of children's rights.

B.Grimm Power is aware of and constantly monitors children's rights issues. The employees involved in this operation have undergone the Better Business for Children workshop, in which they learned about Children's Rights and Business Principles (CRBP), in collaboration with the United Nations Children's Fund (UNICEF), Save the Children, and the United Nations Global Compact, and the Sustainable Business Development Institute (SBDi). The workshop has armed them with an understanding of children's rights and related issues and allowed them to incorporate the knowledge gained into our policies and management guidelines. Our ultimate goal is to comply with the United Nations Guiding Principles on Business and Human Rights (UNGPs). Currently, we are in the process of reviewing pertinent issues and developing applicable guidelines and best practices.

EMPLOYEES' LEARNING OPPORTUNITIES

The B.Grimm Power People Development Policy underlines the importance of promoting our workers' other competencies in addition to developing and improving occupational capabilities as an incentive to encourage life-long learning. To this end, we urge and provide them with ample learning opportunities to augment their knowledge—which in turn bolsters the organization's know-how—enhance their professional mastery, and hone their other faculties. All of this creates desirably well-rounded employees in a sustainable manner.

Development Rule

70%

Experience Based

20%

Exposure Based

10%

Education Based

The B.Grimm Power Learning Policy follows the 70:20:10 formula. It encourages people to learn 70% through on-the-job experience, 20% through exchanges, and 10% through self-studies. As a company, we maintain a creative work environment with a wide variety of learning opportunities from internal, external, and online sources.

The year 2020, is one difficult year considering the impact of the pandemic. COVID-19 transforms traditional learning mode to some extents. We adapt learning interventions in response to the situation, by picking only those learning interventions that are necessary and adapts them from physical to virtual

or digital format as much as possible. Unsurprisingly, the number of the physical classrooms and learning events drop by about a half from 35 sessions in 2019 to 15 sessions (with strict safety measures). Naturally, our employees online learning commitment increases significantly.

This year, we also launch the first In-house hybrid class, which is "Infographic for Visual Presentation Workshop". The class receives good response from our employees. There are 75 learners in total, 25 of them join physically and 50 learners joins virtually from various locations and entities. It is cost-effective and helps preparing our employees for future hybrid/digital learning format.

16.9

**Total Cost per Year
Inclusive of Online, In-house and
Public Trainings Locally and Internationally
(Million Baht)**

30

**Average Hours of Training
(Hour/Person/Year)**

TALENT ACQUISITION ACTIVITIES HIGHLIGHTS

EMPLOYER BRANDING INITIATIVE PROFESSIONAL SOCIAL MEDIA (LINKEDIN)

To increase the Employer Brand awareness in the labor market to attract new potentials to join our company and retain our current employees by promoting our identity.

INTERNSHIP PROGRAMME

To strengthen the tie between B.Grimm Power and partner institutions while helping the students to gain experience from business. We hope to support Thailand to build future workforce.

CAMPUS RECRUITMENTS & JOB FAIRS

Attending these events helps drive our Employer Branding effort, as an employer of choice to the younger crowd to consider us before they go out into a broader job market.

OCCUPATIONAL HEALTH AND SAFETY

100%

All combined cycle co-generation power plants implemented (OHSAS 18001/ISO 45001)

10,181

Total Hour of Employee Training on Occupational Health, Safety, Health and Environment

100%

Occupational health, safety, and environment risk assessment deployed in all processes

0

Lost time injury frequency rate (LTIFR) of employees

At B.Grimm Power, we highlight the importance of the occupational health and safety of our employees, suppliers, contractors, and other stakeholders involved in the operations of our power plants and all other operational sites. Operational safety and the highest safety standards fundamentally drive our business forward.

To this end, the safety goal for our operations has been to have zero accidents. It is imperative that we have no accidents that result in lost time or lives. We are truly committed to strictly adhering to and complying with the occupational health and safety requirements and have assessed occupational risks in all processes. Furthermore, we have continued to cultivate safety awareness among our employees and other individuals involved in our operations, reiterating that safety is an integral part of our corporate culture. These efforts aim to prevent any potential loss of or damage to life and property. They also protect the well-being of surrounding communities and the environment and minimize our potential impacts on them.

PRINCIPLES ADOPTED

Domestic	Occupational health and safety laws and regulations
International	OHSAS 18001 / ISO 45001 occupational health and safety standards

MANAGEMENT APPROACH ON OCCUPATIONAL HEALTH AND SAFETY

- Formulate an occupational safety, health and environment policy
- Establish guidelines in accordance with the Occupational Health and Safety Management Systems Standard (OHSAS 18001) and Environmental Management Systems (ISO 14001) Standard
- Communicate the safety, occupational health and environment policy, raise awareness and foster a safety culture, and develop skills and knowledge and organise activities to promote health, safety, occupational health and environment in a continuous manner
- Conduct assessments of risks and guidelines for occupational health, safety and environment risk management as well as risk assessments and guidelines for risk management that may affect the community, society and environment across all work processes
- Develop a safety manual and supervise operations in compliance with its manual and standard procedures
- Report and investigate accidents and incidents as well as establish corrective and preventive measures to prevent repeated accidents
- Oversee compliance with the law on safety, occupational health and environment and other relevant rules and regulations
- Supervise workers, external parties and parties involved in work areas to ensure their strict compliance with safety rules and regulations
- Control working environment, provide personal protective equipment (PPE) for workers and other safety prevention equipment as prescribed by the law to prevent work-related injuries and accidents
- Prepare for emergency incident response and business continuity management
- Provide annual health check-ups for employees to assess and monitor work-related effects
- Data collection and record on safety, occupational health and environment information in a systematic manner
- Arrange meetings and discussions to oversee and monitor performance on safety, occupational health and environment on a regular basis

OCCUPATIONAL HEALTH, SAFETY, AND ENVIRONMENT MANAGEMENT STRUCTURE

B.Grimm Power has an occupational health, safety, and environment committee at its headquarters and all of its power plants. Each of these committees consists of the power plant's executives and professional safety officer representatives. Together they issue and supervise the implementation of the Occupational Health, Safety, and Environment Policy pursuant to applicable laws and regulations. They also establish workplace and workplace safety measures and principles according to OHSAS 18001

ISO 45001 international standards for occupational health and safety management. Moreover, they gather and review reports of incidents and accidents; devise procedures and preventive measures; communicate the Occupational Health, Safety, and Environment Policy to employees; and raise their awareness of it. Their ultimate goal is to enhance the safety of all employees, contractors, and related parties while working onsite. They also report the progress of their operation regularly.

SUPERVISION OF EMPLOYEES, EXTERNAL PARTIES INVOLVED IN WORK AREAS

At B.Grimm Power, we have rules and regulations in place for operational safety to ensure safety across functions of employees, external parties and related parties involved in work areas whereby they must strictly comply with established rules and regulations. The safety officers and area owners perform roles, duties and responsibilities in overseeing the operations in accordance with the safety measures and guidelines as prescribed, for example, before entering work areas, all contractors shall pass a safety training and relevant regulations; and a permission to enter work areas shall be approved according to the procedures of power plants; and a contractor foreman shall possess safety knowledge to supervise and monitor both normal and specific operations.

WORKPLACE ENVIRONMENT CONTROL

At B.Grimm Power, we require our employees and related parties to wear protective equipment at all times to prevent injuries and accidents. The signage within the premises of our power plants indicates various hazards. It warns our employees and related individuals to exercise extreme caution while working onsite. In addition, we regularly assess our work environments and take relevant measurements required by law, such as air quality, noise intensity, and light intensity.

Occupational Health, Safety, and Environment Risk Assessment

We assess occupational health, safety, and environment risks proactively. Visitors and contractors are to assess their work-related risks as well as analyse the nature of their work and that of other people involved to identify potential occupational dangers. Based on the results, we determine the likelihood of these risks and gauge their potential impacts. Through this process we prioritise known risks, ensure operational safety, and monitor risk management implementation according to established plans and goals.

In addition, our employees undergo an annual health examination, which varies depending on the different types of risks they are exposed to at work. The 2020 results show that our employees have had no health risks as a result of their occupation.

Work-Related Injury

This past year none of our employees suffered an accident or lost their lives at work; however, one contractor had an accident. All of us at B.Grimm Power have been saddened by this report. Although thorough surveillance and investigation revealed it was but a minor accident, we have added additional measures and guidelines to prevent this type of accident from happening again.

Occupational Health and Safety Certification

Within this past year, all of our combined cycle co-generation power plants received either an OHSAS 18001 or an ISO 45001 certification for their occupational health and safety management.

Development of Safety Culture, Competence, and Knowledge

Throughout last year B.Grimm Power prioritised and attentively cultivated a consciousness and culture of workplace safety among all employees. We also paid attention to their physical and mental health. There were constant activities to promote and support the development of skills and knowledge in occupational health, safety, and environment, such as OHSE training, OSHE Week activities, occupational safety training, fire and evacuation drills, CPR and AED training, and participation in safety network in campaigning and organising safety activities, such as the Power Run Power Fun 2: Virtual Walk-Run.

POWER RUN POWER FUN: VIRTUAL WALK-RUN

The Power Run Power Fun 2: Virtual Walk-Run campaign encouraged our employees to exercise by walking and running to accumulate distances. About 55% of our senior management and staff at the headquarters participated in the campaign, resulting in a cumulative distance of 21,386 kilometers. In addition to our people's good health, the initiative fostered an excellent work environment and workplace unity.

55%

Of our Senior Management and Staff at the Headquarters Participated in the Campaign

77

Cumulative Distance (Kilometers)



COMMUNITY AND SOCIAL ENGAGEMENT

With B.Grimm's philosophy of "Doing Business with Compassion for the Development of Civilization in Harmony with Nature", B.Grimm Power is committed to creating and developing sustainable energy along the way with compassion towards nature, environment, community and society surrounding as well as creating shared values for the community and society in order to happily raise the quality of life and equality in all dimensions.

283

**Our Community and Social
Engagement Investment**
(Million Baht)

35%

**Charitable
Donations**

61%

**Community
Investment**

4%

**Commercial
Initiative**

COMMUNITY RELATIONS

Building and maintaining good relations with communities and society are of great importance to B.Grimm Power. Our Community Relations Team is responsible for promoting a good understanding of our sustainable and environmentally and socially responsible operations through various means of communication to garner confidence and trust from local communities throughout a project's different stages, including initiation and planning, construction, and commercial operation date (COD). Seeing ourselves as a part of the community in which we operate, we acknowledge, consider, and respond to its problems, needs, and expectations.

Surrounding communities and stakeholders can directly submit suggestions and report complaints to our power plants through various means, including telephone, mail, comments box, and email. They may also do so through community leaders and relevant government agencies. When our power plant receives a suggestion or complaint, it will launch an investigation into the matter and determine appropriate preventive or mitigative actions. It also reports the progress of its action back to the community until all necessary steps have been taken.

COMMUNITY AND SOCIAL ENGAGEMENT

It is our policy to promote and support community and social Engagement projects that are in line with the Sustainability Framework and the United Nations Sustainable Development Goals (UN SDGs) through several social programs and activities. Our goals are

to drive sustainable development forward, create mutual value and benefits for society, foster a good corporate image, and engender stakeholders' trust and confidence.

Aspects	Details	Our Projects
Education 	<ul style="list-style-type: none"> We support schools, vocational colleges, universities, and other institutes of learning. We promote and support education and vocational skills development. We provide scholarships to students. 	<ul style="list-style-type: none"> The Little Scientists' House of Thailand The Princess Mother's 90th Birthday Scholarships for nursing students Dual vocational education programs The Princess Mother's Charities Fund of Thailand nursing camp B.Grimm Electric Power Teachers (Volunteers)
Social Development and Quality of Life 	<ul style="list-style-type: none"> We encourage and support community enterprises to create local jobs and help people earn a living locally. We assist senior citizens, people living with disabilities, and underprivileged individuals in local communities. We provide natural disaster relief. 	<ul style="list-style-type: none"> Support for community enterprises Inspections and repairs of communities' power systems Care for seniors, people living with disabilities, and socially underprivileged individuals Natural disaster reliefs
Arts and Culture 	<ul style="list-style-type: none"> We encourage and support the preservation of art and cultural heritage. 	<ul style="list-style-type: none"> Support for the Royal Bangkok Symphony Orchestra Support for international music and art events
Religions 	<ul style="list-style-type: none"> We support religious activities and the preservation of religious customs and traditions. 	<ul style="list-style-type: none"> Religion preservation Renovation and improvement of notable religious sites
Sports 	<ul style="list-style-type: none"> We support health-promoting activities. 	<ul style="list-style-type: none"> Equestrian sponsorships Support for charitable walk-and-run events Employees' fitness welfare benefits Power Fun Power Run project
Environment 	<ul style="list-style-type: none"> We promote and support environmental and natural resource conservation. 	<ul style="list-style-type: none"> Tiger conservation project in collaboration with WWF Thailand Forest conservation project

ABOUT THIS REPORT

REPORTING STANDARDS

This 2020 Sustainability Report of B.Grimm Power Public Company Limited is the fourth consecutive annual report of our sustainability performance. It details our economic, social, and environmental impacts, as well as corporate governance, which are all of great importance to our stakeholders and us. This report has been prepared in accordance with the GRI Standards: Core Option and Electric Utilities Supplement Sector Disclosures and other international sustainability reporting and management frameworks, including the Dow Jones Sustainability Indices (DJSI). Additionally, our sustainability performance corresponds to the United Nations Sustainable Development Goals (UNSDGs).

REPORTING SCOPE

The information disclosure in this report on the economic data covers the performance of subsidiaries, joint ventures, associates and other companies both domestic and regional in line with the 56-1 One report 2020. Environmental, health and safety data from all business units were included in the report using the combined criteria of equity share of 50% and over and controlled associates, except for overseas operations, the newly established companies, the merging and acquisition companies less than 2 years. The combined of its data accounts for 70.50% of our gross revenue as stated in the 56-1 One report 2020 which is available on the webpage <https://investor.bgrimpower.com/ar.html>. Exclusivity of the data is as shown on page 109-112 The reporting period for the information in this report is from 1 January 2020 to 31 December 2020.

SUSTAINABILITY MANAGEMENT SYSTEM

To ensure that our sustainability management system covers all aspects of our organisation, we have adopted many international standards and earned certifications for our compliance. All industrial power plants have been certified with ISO 14001 Environmental Management System and OHSAS 18001 / ISO 45001 Occupational Health and Safety Management Systems, while 100% of B.Grimm Power's organisation received ISO/IEC 27001:2013 Information Security Management Standards.

REPORTING ASSURANCE

The content of this report has been reviewed for accuracy and completeness of coverage of materiality issues by the Sustainability Working Team and related departments. The Board of Directors and senior management have reviewed and approved the disclosure of this report for the benefit of every party involved.

CONTACT

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2020 REPORTING SCOPES AND BOUNDARIES

Sustainability Issues	Economic						Governance				Environmental						Social				
	Business Growth	Knowledge and Innovation Management	Excellence Electricity Generation Management	Supply Chain Management	Business Continuity Management	Data Protection and Cybersecurity Management	Corporate Governance	Risk Management	Anti-Corruption	Compliance	Energy Management	Water Stewardship	Climate Resilience Management	Pollution Management	Waste Management	Biodiversity Conservation	Employee Wellness	Occupational Health and Safety	Human Rights	Customer Satisfaction	Community and Social Engagement
1 Bangkok Headquarters	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	●	●	●	●	●	●
Combined-Cycle Cogeneration Power Plant Projects																					
Amata City Chonburi Industrial Estate, Chon Buri																					
2 Amata B.Grimm Power 1	ABP1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3 Amata B.Grimm Power 2	ABP2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4 Amata B.Grimm Power 3	ABP3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
5 Amata B.Grimm Power 4	ABP4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6 Amata B.Grimm Power 5	ABP5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Amata City Rayong Industrial Estate, Rayong																					
7 Amata B.Grimm Power (Rayong) 1	ABPR1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8 Amata B.Grimm Power (Rayong) 2	ABPR2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9 Amata B.Grimm Power (Rayong) 3	ABPR3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10 Amata B.Grimm Power (Rayong) 4	ABPR4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
11 Amata B.Grimm Power (Rayong) 5	ABPR5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Laem Chabang Industrial Estate, Chon Buri																					
12 B.Grimm Power (Laem Chabang) 1	BPLC1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
13 B.Grimm Power (Laem Chabang) 2	BPLC2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bangkadi Industrial Park, Pathum Thani																					
14 B.Grimm BIP Power 1	BIP1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
15 B.Grimm BIP Power 2	BIP2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
WHA Chonburi Industrial Estate 1, Chon Buri																					
16 B.Grimm Power (WHA) 1	BPWHA1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
WHA Eastern Industrial Estate (Map Ta Phut), Rayong																					
17 B.Grimm Power (AIE-MTP) (2 projects)	BPAM	●	●	○	●	●	●	●	●	●	○	○	○	○	○	○	●	●	●	●	●

Sustainability Issues	Economic						Governance				Environmental						Social				
	Business Growth	Knowledge and Innovation Management	Excellence Electricity Generation Management	Supply Chain Management	Business Continuity Management	Data Protection and Cybersecurity Management	Corporate Governance	Risk Management	Anti-Corruption	Compliance	Energy Management	Water Stewardship	Climate Resilience Management	Pollution Management	Waste Management	Biodiversity Conservation	Employee Wellness	Occupational Health and Safety	Human Rights	Customer Satisfaction	Community and Social Engagement
World Food Valley Thailand Industrial Estate, Ang Thong																					
18	Angthong Power	ATP																			
Solar Power Plant Projects																					
Nakhon Pathom																					
19	Sai Luang 2	BGYSP																			
20	Sai Luang 3	BGYSP																			
21	Sai Luang 9	BGYSP																			
22	Sai Luang 10	BGYSP																			
23	Sai Yai Na	BGYSP																			
24	Sai Manao	BGYSP																			
25	Sai Phu Tha	BGYSP																			
26	Sai Lui Rim Nam	Solarwa																			
27	Sai Chaluai 1	Solarwa																			
Phra Nakhon Si Ayutthaya																					
28	Sai Sena 2	BGYSP																			
Sara Buri																					
29	BGTTRE 2	Solarwa																			
30	BGTTRE 3	Solarwa																			
31	BGTTRE 1	TPS																			
Sa Kaeo																					
32	BGSPS 1	BGSPS 1																			
Phetchabun																					
33	Chon Daeng Agricultural Cooperative	BSPCD																			

Sustainability Issues	Economic						Governance				Environmental						Social				
	Business Growth	Knowledge and Innovation Management	Excellence Electricity Generation Management	Supply Chain Management	Business Continuity Management	Data Protection and Cybersecurity Management	Corporate Governance	Risk Management	Anti-Corruption	Compliance	Energy Management	Water Stewardship	Climate Resilience Management	Pollution Management	Waste Management	Biodiversity Conservation	Employee Wellness	Occupational Health and Safety	Human Rights	Customer Satisfaction	Community and Social Engagement
Chachoengsao																					
34	Chonburi Regional Office, War Veterans Organization of Thailand	BGRIM																			
Surat Thani																					
35	Ban Na Doem Agricultural Cooperative	BSPCB																			
Bangkok																					
36	Office of Agriculture, Industry, and Service, War Veterans Organization of Thailand	BGPSP																			
37	Veterans General Hospital, War Veterans Organization of Thailand	BGRIM																			
Samut Prakan																					
38	Office of Veterans Factory Affairs, War Veterans Organization of Thailand Project	BGRIM																			
Nonthaburi																					
39	Office of Security Service, War Veterans Organization of Thailand	BGRIM																			
Waste to Energy Power Plant Projects																					
Ratchaburi Industrial Estate's Power Plant Project, Ratchaburi																					
40	Progress Interchem	PIC																			
Hydropower Plant Projects																					
Laos																					
41	Xenamnoy 2 and Xektam 1 (2 hydropower projects)	XXHP																			
42	Nam Che 1	Nam Che 1																			

Sustainability Issues			Economic						Governance				Environmental						Social					
			Business Growth	Knowledge and Innovation Management	Excellence Electricity Generation Management	Supply Chain Management	Business Continuity Management	Data Protection and Cybersecurity Management	Corporate Governance	Risk Management	Anti-Corruption	Compliance	Energy Management	Water Stewardship	Climate Resilience Management	Pollution Management	Waste Management	Biodiversity Conservation	Employee Wellness	Occupational Health and Safety	Human Rights	Customer Satisfaction	Community and Social Engagement	
Backup for power trading																								
Vietnam																								
43	Amata Power (Bien Hoa)	APB	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Solar Power Plant Projects																								
Vietnam																								
44	Dau Tieng 1&2	DT 1&2	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
45	Phu Yen TTP	Phu Yen TTP	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Solar Power Plant Projects																								
Cambodia																								
46	Ray Power	Ray	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

- Reports include management and operational performance data.
- Reports include management and partial operational performance data.
- Reports include management data but no operational performance data.

Sustainability Performance Data

Economic Dimension

Economic Performance

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Revenue	Baht	31,482,175,667	36,585,096,973	44,131,888,652	44,086,854,218	201-1
EBITDA ¹	Baht	8,724,622,018	9,198,505,495	11,485,253,638	13,002,987,570	201-1
Net Profit	Baht	3,593,849,923	2,975,779,380	3,977,028,941	3,755,475,810	201-1
Gross Profit Margin	%	21.4	18.7	18.5	21.0	201-1
Net Debt to Equity Ratio per Shareholder		1.4	1.5	1.0	1.5	201-1
Investment Promotion Privileges and Benefits from Government (Board of Investment: BOI)	Baht	697,225,346	569,868,844	798,134,941	722,734,373	201-4

¹ Earnings before interest, tax, depreciation and amortisation

Economic Value Distributions

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Operating Cost	Baht	22,839,002,896	27,717,049,588	33,543,557,122	36,791,382,488	201-1
• Benefits to employees ¹	Baht	962,628,476	1,177,122,399	1,554,100,774	1,763,955,118	201-1
• Dividend to shareholders	Baht	120,960,000	1,173,105,000 ⁶	834,208,000 ⁶	964,553,000	201-1
• Tax to governments ²	Baht	262,539,804	242,681,127	265,996,278	328,425,830	201-1
• Financing cost ³	Baht	2,052,693,178 ⁶	2,927,560,992 ⁶	2,630,169,000 ⁶	3,186,435,085	201-1
• Payment to suppliers and contractors ⁴	Baht				29,075,510,183	201-1
• Environment ⁵	Baht				24,295,084	201-1
• Community	Baht	217,388,029	227,046,372	198,566,134	283,196,064	201-1
- Charitable donations	%			20	35	
- Community Investments	%			75	61	
- Commercial Initiatives	%			5	4	

¹ Remuneration and benefits, provident fund contribution and employee development expenses

² All company taxes (corporate, income, property, etc.) and related penalties paid at the international, national, and local levels

³ Includes financing cost of loan and debenture from financial institutions, infrastructure funds and construction payables

⁴ In 2017-2019, the economic value distribution subjected on payment to suppliers and contractors were included in the Operating Cost

⁵ Environmental Management

⁶ Adjusted data from the previous report

Tax Payment – by Country

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Thailand					207-4	
• Net profit/(loss) before tax	Baht	6,079,803,394	6,093,772,867	5,711,562,393	5,671,566,156	
• Tax expense ¹	Baht	227,933,738	217,659,765	232,558,659	254,455,983	
• Corporate income tax paid	Baht	223,488,888	256,123,273	281,488,754	280,288,623	
Laos					207-4	
• Net profit/(loss) before tax	Baht	(19,284,463)	(190,567,727)	(225,951,996)	(280,538,276)	
• Tax expense ¹	Baht	13,153,629	5,780,658	5,443,559	825,566	
• Corporate income tax paid	Baht	-	-	-	-	
Vietnam					207-4	
• Net profit/(loss) before tax	Baht	75,129,541	36,299,601	792,924,630	1,018,200,461	
• Tax expense ¹	Baht	15,815,847	16,512,584	14,436,244	13,823,846	
• Corporate income tax paid	Baht	14,412,014	16,445,822	13,733,679	13,829,003	
Cambodia					207-4	
• Net profit/(loss) before tax	Baht		(264,925)	(354,851)	(34,050,687)	
• Tax expense ¹	Baht		-	-	-	
• Corporate income tax paid	Baht		-	-	-	

¹ Consisting of corporate income tax, withholding tax and deferred tax

Corporate Governance

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Number of meeting					102-18	1.1.5
• Board of Directors	Time	13	13	13	15	
• Audit Committee	Time	10	14	12	12	
• Corporate Governance Committee	Time		3	6	7	
• Nomination and Remuneration Committee	Time		2	3	5	
Meeting attendance ¹					102-18	1.1.5
• Board of Directors	%	88.89	91.54	89.74	97.50	
• Audit Committee	%	96.67	100	100	100	
• Corporate Governance Committee	%		100	100	100	
• Nomination and Remuneration Committee	%		87.50	100	100	

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Board Performance Review ²					102-28	1.1.5
• Group	Level	Excellent	Excellent	Excellent	Excellent	
• Individual	Level	Excellent	Excellent	Excellent	Excellent	
• Sub-committee	Level		Excellent	Excellent	Excellent	

¹ Minimum requirement for Board's meeting attendance is 75%

² Assessment criteria: score greater than 85% = excellent; 75-85% = very good; 65-75% = good; 50-65% = fair; lower than 50% = subject to improvement

Business Ethics

	Unit	2017	2018	2019	2020 GRI Standards		DJSI
Total Coverage of Company communicate on the anti-corruption policies and procedures					205-2		1.4.2
• Board of Directors	%		100	100	100		
• Employees	%		100	100	100		
• Business partners	%		100	100	100		
• Suppliers and Contractors	%		100	100	100		
Total Coverage of Company's training on anti-corruption policies and procedures					205-2		1.4.2
• Board of Directors	%		100	100	100		
• Employees	%		100	100	100		
• Business partners	%		-	-	-		
• Suppliers and Contractors	%		-	-	-		
Total Percentage of Employees that have passed test on Code of Conduct, Anti-corruption and Whistleblowing and Grievances Policy	%		100	100	100	205-2	1.4.2
Total number of significant business ethics breaches					102-17/205-3 /206-1		1.4.6
• Corruption & Bribery	Case	0	0	0	0		
• Discrimination	Case	0	0	0	0		
• Confidentiality of information	Case	0	0	0	0		
• Conflicts of interest	Case	0	0	0	0		
• Antitrust/anti-competitive practices	Case	0	0	0	0		
• Monopoly practices	Case	0	0	0	0		
• Money-laundering and/or insider trading/dealing	Case	0	0	0	0		
• Environment, health, and safety	Case	0	0	0	0		
• Whistleblowing	Case	0	0	0	0		
Fines and settlements related to anti-competitive business practices	THB	0	0	0	0	206-1	1.4.5

Risk and Crisis Management

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Coverage of Risk Management System	%	100	100	100	100 102-15	
Proportion of Business Units having Key Risk Indicators	%	100	100	100	100 102-15	
Coverage of employees trained on Enterprise Risk Management Principles	%			100	100 102-15	1.3.4
Coverage of employees acknowledged on Crisis Communications Policy	%			100	100	

Business Continuity Management

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Coverage of annual BCP exercise ¹	%	100	100	100	100 G4-EU21	

¹ Coverage of 15 Co-generation power plants in Thailand

Customer Relationship Management

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Number of Customers					G4-EU3	
• Industrial (IUs Thailand)	Number	166	178	186	182	
• Industrial (IUs Vietnam)	Number	222	243	252	250	
Customer Satisfaction Survey	%	87.38	88.06	88.44	88.24	1.5.1
• Total Coverage of Customers (both respondents and non-respondents)	%	94.96	93.39	93.75	90.30	
Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases					G4-EU25 ⁵	
• Injuries	Case	0	0	0	0	
• Fatalities	Case	0	0	0	0	
Total Number of Substantiated complaints concerning Customer breaches					416-2	1.11.3
• Customer Privacy	Case	0	0	0	0	
• Safety and environmental impact from using products and services	Case	0	0	0	0	

Information Security / Cybersecurity & System Availability

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Total Coverage of ISO/IEC 27001: 2013 Information Security Management Standards	%		100	100	100	1.8.3
Total number of Information Security/Cybersecurity breaches						
• Total number of Information Security/Cybersecurity breaches	Case			0	0 418-1	1.8.4
• Information security breaches or other cybersecurity incidents	Case			0	0 418-1	1.8.4
• Information security breaches involving customers' personally identifiable information	Case			0	0 418-1	1.8.4
• Customers affected by company's data breach	Case			0	0 418-1	1.8.5
Total amount of fines/penalties paid in relation to						
• Information security breaches or other cybersecurity incident.	Baht			0	0 418-1	1.8.4
• IT Infrastructure incidents	Baht			0	0 418-1	1.8.5

Supply Chain Management

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Total suppliers by type					204-1	1.7.2
• Tier 1 suppliers	Number			1,275 ¹	1,278	
• Critical tier 1 suppliers	Number			16 ¹	26	
• Critical non-tier 1 supplier	Number			0	0	
Percentage of total procurement spent by type					204-1	1.7.2
• Tier 1 suppliers	%			1.76	1.15	
• Critical tier 1 suppliers	%			98.24	98.15	
• Critical non-tier 1 supplier	%			0	0	

¹ Adjusted data from the previous report

Operational Excellence Management

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Total Installed Capacity	MW	2,518	3,126	3,424	3,682 G4-EU1	2.6.1
• Capacity in operation	MW	1,651	2,083	2,896	3,058	
• Capacity under construction	MW	867	1,043	528	624	
Installed capacity in operation, broken down by primary energy source and by regulatory regime					G4-EU1	2.6.1
• Natural Gas	%	91	91	70	70	
• Oil ¹	%	0	0	0	0	

SUSTAINABILITY PERFORMANCE DATA

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
• Hydro	%	1	1	1	1		
• Solar	%	7	7	28	28		
• Other Renewable	%	0	1	1	1		
Net Energy Capacity	GJ	35,643,795	39,735,775	47,787,581	50,577,802	G4-EU2	
Net energy output broken down by primary energy source and by regulatory regime						G4-EU2	
• Natural Gas	%	99	99	94	91		
• Oil	%	0	0	0	0		
• Hydro	%	0	0	1	1		
• Solar	%	0	1	5	8		
• Other Renewable	%	0	0	0	0		
System efficiency ²						G4-EU11	
• Efficiency rate for electricity generation	BTU/kWh	7,628	7,640	7,460	7,488		2.6.3
• Efficiency rate for steam production	Kg/GJ	387	379	389	381		
• Availability factor	%	97.20	97.02	97.14	97.59		2.6.4
• Overall efficiency	%	44.73	44.66	45.74	45.57		
Planned outage ²							
• Planned outage frequency	Case/Year	17	33	28	28		
• Planned outage hour	Hours	687	2,037	2,414	2,107		
• Average planned outage duration	Hours/Case	40.40	61.73	86.20	75.26		
Unplanned outage ²							
• Unplanned outage frequency	Case/Year	169	186	127	118		
• Unplanned outage hour	Hours	2,047	1,202	1,201	1,086		
• Average unplanned outage duration	Hours/Case	12.11	6.46	9.53	9.21		
Total outage ²							
• Total outage frequency	Case/Year	186	219	154	146		
• Total outage hour	Hours	2,734	3,239	3,614	3,194		
• Average total outage duration	Hours/Case	14.7	14.79	24.47	21.88		
Electricity Transmission and Distribution Losses ²						G4-EU4	2.7.1
• Transmission losses	%	0.1	0.1	0.1	0.1		
• Distribution losses	%	0.1	0.1	0.1	0.1		
Electricity Transmission and Distribution Reliability ³						G4-EU4	2.7.2
• SAIDI Transmission Network	Hours	2.16	0.43	0.66	0.41		
• SAIDI Distribution Network	Hours	0.33	0.31	1.27	0.63		

¹ Non-operational diesel power plant turning business to reselling electricity bought from EVN's subsidiary to IUs in Amata City Bien Hoa Industrial Estate

² Consist of 15 combined cycle co-generation plants in Thailand

³ The Company use the calculation of ASAI is equivalent to 1 - (SAIDI /8760) and calculation of SAIDI [in hours] = 8760 - (ASAI [in%] /100 x 860)

Environmental Dimension

Environmental Policy & Management Systems

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Coverage of Certification on Environmental Management System (EMS) on ISO 14001 Environmental Management Standards	%		80	100	100	2.2.2
Fines or penalties related to the environment or ecological issues						2.2.3
• Number of violations of legal obligations/regulations.	Case			0	0	
• Amount of fines/penalties related to the above.	THB			0	0	
• Environmental liability accrued at year end.	THB			0	0	

Energy Consumption

	Unit	2017	2018	2019	2020 GRI Standards	DJSI	
A. Non-renewable fuels purchased and consumed – Natural Gas	GJ	81,298,885	90,185,913	96,142,015	93,946,348	302-1	2.3.3
B. Non-renewable electricity purchased	GJ	1,604	10,651	9,989	2,755	302-1	2.3.3
C. Steam/heating/cooling and other energy (non-renewable) purchased	GJ	0	0	0	0	302-1	2.3.3
D. Total renewable energy (wind, solar, biomass, hydroelectric, geothermal, etc.) purchased or generated.	GJ			5,713	6,142	302-1	2.3.3
E. Total non-renewable energy (electricity and heating & cooling) sold	GJ	36,365,793	40,276,925	43,969,868	42,809,381	302-1	2.3.3
TOTAL NONRENEWABLE ENERGY CONSUMPTION (A+B+C-E)	GJ	44,934,696	49,919,640	52,182,136	51,139,722		
Total costs of energy consumption ²	THB	18,208,404,040	22,237,317,424	27,097,268,115	23,793,500,102	302-1	2.3.3
Energy Intensity	GJ/MWh	4.56	4.54	4.31	4.32	302-3	

¹ Adjusted data from the previous report

² Consist of costs of natural gas and electricity purchase of 15 combined cycle co-generation power plants and 22 solar power plants in Thailand.

Water Consumption

	Unit	2017	2018	2019	2020 GRI Standards	DJSI	
Total Water Withdrawal from all areas	Million m³	15.56	16.10	16.50¹	18.73	303-3	2.3.4
• Total municipal water supplies (or from other water utilities)							
- Municipal water supply	Million m³		6.60	7.10	6.90		
- Wastewater from another organization supply	Million m³		9.50	9.40	11.83		
Total Water Discharged from all areas			2.94	2.81	3.73	303-4	2.3.4
• Surface water	Million m³		0	0	0		
• Ground water	Million m³		0	0	0		
• Seawater	Million m³		0	0	0		
• Total municipal water supplies (or from other water utilities) on wastewater treatment plant	Million m³		2.94	2.81	3.73		

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Total Net Municipal Water consumption (Water withdrawal - Water Discharge)	Million m ³		3.66	4.29	3.17 303-5	2.3.4
• Total municipal water supplies (or from other water utilities) on fresh surface water	Million m ³		6.60	7.10	6.90	
• Total municipal water supplies (or from other water utilities) for water discharged	Million m ³		2.94	2.81	3.73	
Average Number of Water Reuse Cycles ¹	Cycle		4 - 7	4 - 7	5 - 11	
Water Intensity	m ³ /MWh	0.63	0.68	0.73	0.63	

¹ Adjusted data from the previous report

Wastewater Quality Measurement

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Temp						
• Standard ¹	°C	45	45	45	45	
• min-max Concentration	°C	24.00 - 36.30	27.92 - 39.00	25.10 - 36.92	28.00 - 38.00	
pH						
• Standard ¹	pH	5.5 - 9.0	5.5 - 9.0	5.5 - 9.0	5.5 - 9.0	
• min-max Concentration	pH	6.80 - 8.90	7.00 - 7.96	7.20 - 8.20	6.70 - 8.30	
BOD						
• Standard ¹	Mg/L		500	500	500	
• min-max Concentration	Mg/L		2 - 24	2 - 38	2 - 15	
COD						
• Standard ¹	Mg/L		750	750	750	
• min-max Concentration	Mg/L		26.08 - 125.00	7.73 - 115.00	23.00 - 160.00	
TSS						
• Standard ¹	Mg/L	200	200	200	200	
• min-max Concentration	Mg/L	5.00 - 26.00	4.71 - 35.00	5.33 - 28.33	5.00 - 54.82	
Oil & Grease						
• Standard ¹	Mg/L	10	10	10	10	
• min-max Concentration	Mg/L	1.0 - 10.0	2.0 - 3.5	3.0 - 5.0	2.0 - 3.5	
Free Chlorine						
• Standard ¹	Mg/L	1	1	1	1	
• min-max Concentration	Mg/L	0.01 - 0.90	0.04 - 0.30	0.09 - 0.20	0.01 - 0.35	

¹ The standard specified in accordance with the Notification of the Industrial Estate Authority of Thailand No. 76/2017 Re: General Rules for Wastewater Discharge into the Central Wastewater Treatment System in Industrial Estates

Greenhouse Gas Emissions (GHG)

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Direct GHG Emissions (Scope 1)	Tonnes CO ₂ e	4,334,394	5,360,930	5,157,731 ¹	5,085,605	305-1/305-5	2.3.1
Indirect GHG emissions (Scope 2) from energy purchased and consumed without energy trading	Tonnes CO ₂ e			2,192	1,052	305-2/305-5	2.3.2
Total GHG emissions (Scope 1 & 2)	Tonnes CO ₂ e	4,334,394	5,360,930	5,159,922	5,086,657		
GHG emissions intensity		0.4529	0.4471	0.4266 ¹	0.4298	305-4	

¹ Adjusted data from the previous report

Ambient Air Quality Measurement

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Nitrogen Oxide (NO _x) average 24 hours						305-7	
• Standard ¹	PPM	0.17	0.17	0.17	0.17		
• Average Concentration	PPM	0.001 - 0.069	0.001 - 0.057	0.001 - 0.058	0.001 - 0.114		
Sulfur Dioxide (SO ₂) average 24 hours						305-7	
• Standard ¹	PPM	0.12	0.12	0.12	0.12		
• Average Concentration	PPM	0.001 - 0.024	0.001 - 0.038	0.001 - 0.024	0.001 - 0.034		
Total Suspended Particulate (TSP) average 24 hours						305-7	
• Standard ¹	Mg/M ³	0.33	0.33	0.33	0.33		
• Average Concentration	Mg/M ³	0.010 - 0.177	0.009 - 0.188	0.002 - 0.307	0.002 - 0.290		
Carbon Monoxide (CO)						305-7	
• Standard ¹	PPM	9	9	9	9		
• Average Concentration	PPM			0.40 - 6.80	0.10 - 1.50		
PM-10						305-7	
• Standard ¹	Mg/M ³	0.12	0.12	0.12	0.12		
• Average Concentration	Mg/M ³			0.015 - 0.120	0.010 - 0.138		

¹ The Standard specified in accordance with the Notification of National Environmental Board No. 24, B.E. 2547 (2004) Re: The Ambient Air Quality Standard.

Air Quality Measurement from Stack Emission

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Oxides of Nitrogen (NO _x)						305-7	
• Standard specified in the EIA ¹	PPM	60 - 120	60 - 120	60 - 120	60 - 120		
• Standard specified in accordance with the Notification of the Ministry of Industry ²	PPM	120	120	120	120		
• Average Concentration	PPM	4.5 - 41.5	5.04 - 47.0	3.92 - 49.2	1.06 - 81.1		

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Sulfur Dioxide (SO ₂)						305-7
• Standard specified in the EIA	PPM	10	10	10	10	
• Standard specified in accordance with the Notification of the Ministry of Industry ²	PPM	5	5	5	5	
• Average Concentration	PPM	0.02 - 0.43	0.5 - 1.3	0.5 - 1.3	0.5 - 2	
Total Suspended Particulate (TSP)						305-7
• Standard specified in the EIA	PPM	20	20	20	20	
• Standard specified in accordance with the Notification of the Ministry of Industry ²	PPM	20	20	20	20	
• Average Concentration	Mg/M ³	0.5 - 9.5	0.5 - 7.3	0.11 - 5.7	0.2 - 11.5	
Carbon Monoxide (CO)						305-7
• Standard specified in accordance with the Notification of the Ministry of Industry ³	PPM	690	690	690	690	
• Average Concentration	PPM		0.1 - 96	0.1 - 103	0.1 - 161	

¹ Standard specified in the EIA on Oxides of Nitrogen (NOx) for BLCP1 is 100 PPM, BLCP2 is 120 PPM, and BPAM is 108 PPM, while the rest was 60 PPM.

² The standard specified in accordance with the Notification of the Ministry of Industry Re: Quantity of Pollutants Discharged from a Factory that Produces, Transmits or Distributes Electricity B.E. 2549 (2006).

³ The standard specified in accordance with the Notification of the Ministry of Industry Re: Quantity of Pollutants Discharged from a Factory B.E. 2549 (2006).

Noise Intensity Measurement

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
• Standard	Decibel (A)	70	70	70	70	
• Average Intensity	Decibel (A)	48.80 - 69.70	46.70 - 67.60	48.10 - 68.00	42.70 - 69.30	

Waste Management

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
General Waste (Garbage)						
• Reuse	Tonnes		7.35	0	0.16	
• Recycle/Sold	Tonnes		20.31	12.22	12.80	
• Disposal ²	Tonnes		152.44	120.56	141.50	306-4
• Landfill ²	Tonnes		11.03	5.26	0	306-5
Non-Hazardous Waste						
• Reuse	Tonnes		0	0	0	
• Recycle/Sold	Tonnes		1.26	2.19	2.99	
• Disposal ²	Tonnes		43.59	60.00	35.18	306-4
• Landfill ²	Tonnes		8.27	0	0	306-5

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Hazardous Waste						306-3	2.3.11
• Reuse	Tonnes		0	0	0.57		
• Recycle/Sold	Tonnes		31.28	0	89.07		
• Disposal ²	Tonnes		141.58	398.23 ¹	58.92	306-4	
• Landfill ²	Tonnes		5.62	0 ¹	0	306-5	
Sludge							
• Reuse	Tonnes		0	0	0		
• Recycle/Sold	Tonnes		1,178.89	739.88	1,891.46		
• Disposal ²	Tonnes		506.02	1,512.40	0	306-4	
• Landfill ²	Tonnes		12.21	0	0	306-5	
A. Total waste generated	Tonnes		2,119.84	2,851.75 ¹	2,232.64	306-3	2.3.5
B. Total waste used/recycled/sold	Tonnes		1,239.08	754.29 ¹	1,997.04		2.3.5
TOTAL WASTE DISPOSED (A - B)	Tonnes		880.76	2,097.46	235.60		2.3.5

¹ Adjusted data from the previous report

² The waste management method on disposal and landfill of B.Grimm Power PLC. and subsidiaries were handled by the Third Parties

Social Dimension

Diversity and Equal Opportunity

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Total Employees	Persons	719	782	854	1,106	102-8	
Proportion of total employees by gender						405-1	
• Male	%	71	69	70	70		
• Female	%	29	31	30	30		
Proportion of Employment Type						405-1	
• Permanent	%	100	100	100	100		
• Contract	%	0	0	0	0		
Employees by Level						405-1	
• Management ¹	Person	27	29	41	50		
• Non-Management	Person	692	753	813	1,056		
Proportion of Management by gender						405-1	
• Male	%	85	80	78	70		
• Female	%	15	20	22	30		3.2.1

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Proportion of local senior management ²	%	7	10	7	5	202-2	
Employee by Nationality							
• Thai	%	100	100	100	86		
• Laos	%				7		
• Cambodian	%				0		
• Vietnamese	%				7		
Proportion by Age Group						405-1	
• Under 30 years old	%	28	23	23	17		
• 30-50 years old	%	66	70	70	73		
• Over 50 years old	%	6	7	7	10		
Proportion of Absence by Type						403-2	3.2.3
• Sick leave	%				1		
• Work-related leave	%				0		
• Others	%				99		

¹ Consisting of Senior Vice President and Up, except the Board of Directors

² Calculate from percentage of overseas senior management and supervisor over total overseas staff

New Employee Hire

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Total New Employee	Person	126	90	62	88	401-1	
New Employee by Gender						401-1	
• Male	Person	86	56	34	48		
• Female	Person	40	34	28	40		
New Employee by Country						401-1	
• Thai	Person	126	90	62	75		
• Laos	Person	-	-	-	4		
• Vietnamese	Person	-	-	-	8		
• Other	Person	-	-	-	1		
Proportion by Employment Type						401-1	
• Full-time	%	100	100	100	97		
• Contract	%	0	0	0	3		

Parental Leave

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Total number of employees that were entitled to parental leave, by gender					401-3	
• Male	Person	-	-	-	433	
• Female	Person	211	241	254	333	
Total number of employees that took parental leave, by gender						
• Male	Person	2	-	-	-	
• Female	Person	1	4	5	14	
Total number of employees that returned to work in the reporting period after parental leave ended, by gender					401-3	
• Male	Person	2	-	-	-	
• Female	Person	1	2	2	11	
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender					401-3	
• Male	Person	2	-	-	-	
• Female	Person	1	0	0	1	
Return to work rate ¹					401-3	
• Male	%	100	100	100	100	
• Female	%	100	100	100	100	
Retention rate ²					401-3	
• Male	%	100	0	0	0	
• Female	%	100	0	0	0	

¹ Return to Work Rate = (Total number of employees that did return to work after parental leave/Total number of employees due to return to work after taking parental leave) x 100

² Retention Rate = (Total number of employees retained 12 months after returning to work following a period of parental leave/Total number of employees returning from parental leave in the prior reporting period(s)) x 100

Employee Engagement and Turnover

	Unit	2017	2018	2019	2020 GRI Standards	DJSI
Employee Engagement ¹						3.5.4
• Level of Employee Engagement	%		65	65 ¹	77	
• Data Coverage of Total Employees	%		92	92 ¹	77	
Proportion of Total Turnover of Employees by Gender						401-1
• Male	%	77	57	54	61	
• Female	%	23	43	46	39	
Total Turnover Rate	%	5.42	4.09	4.37	3.25	401-1
Total Voluntary Turnover Rate	%	5.42	4.09	4.37	2.35 ²	401-1

¹ An employee engagement survey is conducted every two years. 2018 was the base year and the first year that the Company conducted the employee engagement survey.

² Exclude transferred employees

Human Capital Development

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Average Cost of Training	Baht	27,911,326	31,960,862	32,656,198	16,914,508		
Total Hours of Training	Hour	52,485	56,305	43,680	28,064		
Average hours of training per year per employee	Hour/Person	75	73	70	30	404-1	3.4.1
Average hours of training that the organization's employees have undertaken during the reporting period, by gender						404-1	
• Male	Hour/Person	22	51	55	30		
• Female	Hour/Person	46	40	43	23		

Occupational Health and Safety

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Accumulated Percentage of OHSAS 18001/ISO 45001:2018 standards	%		80	100	100		
Total Number of Hours Worked (Annually)						403-9	
• Employee	Hour		1,325,719	2,398,188	2,017,354		
• Contractor/Trainee	Hour		898,057	1,074,032	1,910,368		
Number of Work-related Injury						403-9	3.7.2
• Employee	Time	1	0	0	0		
• Contractor/Trainee	Time	0	0	0	1		
Lost Time Injury Frequency Rate (LTIFR) (n/million hours worked)						403-9	3.7.2
• Employee	%	0.08	0	0	0		
• Contractor/Trainee	%	0	0	0	0.52		
Number of Fatalities as a Result of Work-related Injury						403-9	3.7.1
• Employee	Time	0	0	0	0		
• Contractor/Trainee	Time	0	0	0	0		
Rate of Fatalities as a Result of Work-related Injury (n/million hours worked) ¹						403-9	3.7.1
• Employee	%	0	0	0	0		
• Contractor/Trainee	%	0	0	0	0		
Number of Recordable Work-related Injuries						403-9	
• Employee	Time	1	0	0	0		
• Contractor/Trainee	Time	0	0	0	1		
Rate of Recordable Work-related Injuries (TRIR) (n/million hours worked) ²						403-9	
• Employee	%	0.08	0	0	0		
• Contractor/Trainee	%	0	0	0	0.52		

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Total Hour of Employee Training on Occupational Health, Safety, Health and Environment	Hour		12,207	14,919	10,181		

¹ Rate of fatalities as a result of work-related injury = Number of fatalities as a result of work-related injury/Number of hours worked x 1,000,000

² Rate of Recordable Work-related Injuries = Number of recordable work-related injuries/Number of hours worked x 1,000,000

Community and Social Engagement

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Level of Satisfaction of the Socioeconomic Survey and Public Opinions							
• Government Agencies	%	80	63	75	69		
• Community Leaders	%	89	100	86	100		
• Community	%	75	75	97	58		
Number of Community Relations Complaints	Case	0	0	0	0		
Number of Resettlement Complaints	Case	0	0	0	0		

Contribution to External Organization and Association

	Unit	2017	2018	2019	2020	GRI Standards	DJSI
Trade associations or tax-exempt groups ¹	THB	5,148,148	3,718,937	16,106,038	8,762,669	203-1/415-1	1.6.1


¹ Membership fee of all external organizations and association

Membership of All External Organization and Association




Organization	Status	Role
The Federation of Thai Industries	Member	• Attend meetings and seminars on business operation
The Association of Private Power Producers (APPP)	Member	• Hold the position of Chairman of the Association of Private Power Producers • Attend meetings and drive the APPPs operation
IEEE Thailand Section (IEEE)	Member	• Support the IEEE's activities
Thai Institute of Directors (IOD)	Member	• Attend seminars on good corporate governance • Participate in the Corporate Governance Report of Thai Listed Companies
Thai Listed Companies Association	Member	• Attend meetings and seminars on business management • Participate in activities and projects
Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)	Member	• Declare an intent and become a certified CAC member
Thailand Responsible Business Network (TRBN)	Member	• Attend meetings and activities of TRBN
Little Scientists' House of Thailand	Member	• Little Scientists' House of Thailand Committee • Attend meetings and drive the Little Scientists' House of Thailand project
The Princess Mother's Charities Fund Foundation, under the Royal Patronage	Supporter	• Support activities and projects of the Foundation
World Wide Fund for Nature (WWF)	Supporter	• Support activities and projects of WWF

GRI AND UN SDGs CONTENT INDICES









Location: AR: 56-1 One Report 2020 (Annual Report)
SR: Sustainability Report 2020





	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
	GRI 101: Foundation 2016			
	GRI 102: General Disclosure			
	Organization profile			
102-1	Name of the organization	AR: Front Cover, 105 SR: Front Cover, 26		
102-2	Activities, brands, products, and services	AR: 5-9,22-23 SR: 24		
102-3	Location of headquarters	AR: Back Cover, 22,106 SR: Back Cover, 51, 102, 107		
102-4	Location of operations	AR: 25-28, 60-65 SR: 103-106		
102-5	Ownership and legal form	AR: 66		
102-6	Markets served	AR: 51-59		
102-7	Scale of the organization	AR: 12, 35-36, 93-104 SR: 25-27		
102-8	Information on employees and other workers	AR: 80,105 SR: 87-93, 117-120		
102-9	Supply chain	AR: 18, 60, 79, 343-345 SR: 11, 64-66		
102-10	Significant changes to the organization and its supply chain	AR: 60, 72-77, 79, 343-345 SR: 11, 64-66		
102-11	Precautionary Principle or approach	AR: 48-49, 69-77, 107-114		
102-12	External initiatives	AR: 21-59 SR: 31		
102-13	Membership of associations	SR: 121		
	Strategy			
102-14	Statement from senior decision-maker	AR: 5, 7-9 SR: 7		
102-15	Key impacts, risks, and opportunities	AR: 70-77 SR: 54-56, 110		
	Ethics and Integrity			
102-16	Values, principles, standards, and norms of behavior	AR: 15-19 SR: 5, 87		
102-17	Mechanisms for advice and concerns about ethics	AR: 16, 71-92, 106-113, 195-199, 397-399 SR: 47-51,109		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
	Governance			
102-18	Governance structure	AR: 114, 107-131 SR: 108		
102-19	Delegating authority	AR: 79-80, 115-131		
102-20	Executive-level responsibility for economic, environmental, and social topics	AR: 79-80, 114, 124-125		
102-21	Consulting stakeholders on economic, environmental, and social topics	AR: 79-80, 124-125		
102-22	Composition of the highest governance body and its committees	AR: 79-80, 114-131		
102-23	Chair of the highest governance body	AR: 79-80, 114		
102-24	Nominating and selecting the highest governance body	AR: 79-80, 114-131		
102-25	Conflicts of interest	AR: 101, 194-210, 376-396, 403-405		
102-26	Role of highest governance body in setting purpose, values, and strategy	AR: 15-28, 79-81		
102-27	Collective knowledge of highest governance body	AR: 79-89, 107-130		
102-28	Evaluating the highest governance body's performance	AR: 79-89, 120-127 SR: 109		
102-29	Identifying and managing economic, environmental, and social impacts	AR: 71-89, 120-127 SR: 35		
102-30	Effectiveness of risk management processes	AR: 5-9, 71-77 SR: 54-56		
102-31	Review of economic, environmental, and social topics	SR: 44-46, 54		
102-32	Highest governance body's role in sustainability reporting	AR: 124-125 SR: 35		
102-33	Communicating critical concerns	AR: 132 SR: 35		
102-34	Nature and total number of critical concerns	AR:132		
102-35	Remuneration policies	AR: 131-132 SR: 53, 107		
102-36	Process for determining remuneration	AR: 131-132		
102-37	Stakeholders' involvement in remuneration	AR: 131		
102-38	Annual total compensation ratio	AR: 130-131 SR: 53, 107		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
102-39	Percentage increase in annual total compensation ratio	-		
Stakeholder Engagement				
102-40	List of stakeholder groups	SR: 40-43		
102-41	Collective bargaining agreements	SR: 40-43		
102-42	Identifying and selecting stakeholders	SR: 40		
102-43	Approach to stakeholder engagement	SR: 40-43		
102-44	Key topics and concerns raised	SR: 41-43		
Reporting Practice				
102-45	Entities included in the consolidated financial statements	AR: 25-28, 60-65 SR: 103-106		
102-46	Defining report content and topic Boundaries	SR: 44-46, 101		
102-47	List of material topics	SR: 44-46		
102-48	Restatements of information	SR: 45		
102-49	Changes in reporting	SR: 45		
102-50	Reporting period	SR: 101		
102-51	Date of most recent report	SR: 101		
102-52	Reporting cycle	SR: 101		
102-53	Contact point for questions regarding the report	SR: 102		
102-54	Claims of reporting in accordance with the GRI Standards	SR: 101		
102-55	GRI content index	SR: 122-135		
102-56	External assurance	-		
Economic				
GRI 201: Economic Performance 2016				
103-1	Explanation of the material topic and its Boundary	SR: 52		
103-2	The management approach and its components	AR: 5-9, 16-18, 21-28, 71-77, 341-372 SR: 52-53		






	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
103-3	Evaluation of the management approach	AR: 400-405 SR: 52		
201-1	Direct economic value generated and distributed	AR: 79-89 SR: 53, 107	    	
201-2	Financial implications and other risks and opportunities due to climate change	AR: 12-13 SR: 77-79		
201-3	Defined benefit plan obligations and other retirement plans	-		Under Company rules and regulations
201-4	Financial assistance received from government	AR: 44, 317		
GRI 203: Indirect Economic Impacts 2016				
103-1	Explanation of the material topic and its Boundary	SR: 52-53		
103-2	The management approach and its components	AR: 71-77 SR: 52-53		
103-3	Evaluation of the management approach	AR: 400-405 SR: 52-53		
203-1	Infrastructure investments and services supported	SR: 52-53, 107		
203-2	Significant indirect economic impacts	-		
GRI 204: Procurement Practices 2016				
103-1	Explanation of the material topic and its Boundary	SR: 64-66		
103-2	The management approach and its components	SR: 64-66		
103-3	Evaluation of the management approach	SR: 111		
204-1	Proportion of spending on local suppliers	-		
GRI 205: Anti-Corruption 2016				
103-1	Explanation of the material topic and its Boundary	SR: 49-51		
103-2	The management approach and its components	SR: 49-51		
103-3	Evaluation of the management approach	SR: 49-51		
205-1	Operations assessed for risks related to corruption	SR: 49-51, 109		
205-2	Communication and training about anti-corruption policies and procedures	SR: 49-51, 109		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
205-3	Confirmed incidents of corruption and actions taken	SR: 109		No case found
GRI 206: Anti-Competitive Behavior 2016				
103-1	Explanation of the material topic and its Boundary	SR: 49-51		
103-2	The management approach and its components	SR: 49-51		
103-3	Evaluation of the management approach	SR: 49-51		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	AR: 343 SR: 109		
GRI 207: Tax 2019				
103-1	Explanation of the material topic and its Boundary	SR: 53		
103-2	The management approach and its components	SR: 53		
103-3	Evaluation of the management approach	SR: 53		
207-1	Approach to tax	AR: 100, 244 SR: 53		
207-2	Tax governance, control, and risk management	AR: 45, 318 SR: 53		
207-3	Stakeholder engagement and management of concerns related to tax	AR: 100, 244 SR: 53		
207-4	Country-by-country reporting	AR: 45 SR: 108		
Environment				
GRI 302: Energy 2016				
103-1	Explanation of the material topic and its Boundary	SR: 74		
103-2	The management approach and its components	SR: 74		
103-3	Evaluation of the management approach	SR: 74-76		
302-1	Energy consumption within the Organization	SR: 75, 113	   	
302-2	Energy consumption outside the Organization	SR: 75, 113	   	
302-3	Energy intensity	SR: 75, 113		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
302-4	Reduction of energy consumption	SR: 75		
302-5	Reductions in energy requirements of products and services	SR: 75	   	
GRI 303: Water and Effluents 2018				
103-1	Explanation of the material topic and its Boundary	SR: 74-76		
103-2	The management approach and its components	SR: 74-76		
103-3	Evaluation of the management approach	SR: 74-76		
303-1	Interactions with water as a shared resource	SR: 84-86		
303-2	Management of water discharge-related impacts	SR: 84-86		
303-3	Water withdrawal	SR: 29, 86, 113		
303-4	Water discharge	SR: 29, 86, 113		
303-5	Water consumption	SR: 86, 113		
GRI 304: Biodiversity 2016 and GRI G4 (Electric Utilities Sector)				
103-1	Explanation of the material topic and its Boundary	SR: 81-83		
103-2	The management approach and its components	SR: 81-83		
103-3	Evaluation of the management approach	SR: 81-83		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR: 81		
304-2	Significant impacts of activities, products, and services on biodiversity	SR: 81		
304-3	Habitats protected or restored	SR: 81		
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SR: 81		
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	SR: 81		

Disclosures and Description		Location (AR, SR)	UN SDGs	Disclosure/ Comment
GRI 305: Emissions 2016				
103-1	Explanation of the material topic and its Boundary	SR: 77-79		
103-2	The management approach and its components	SR: 77-79		
103-3	Evaluation of the management approach	SR: 77-79		
305-1	Direct (Scope 1) GHG emissions	SR: 78, 115	    	
305-4	GHG emissions intensity	SR: 77-115		
305-5	Reduction of GHG emissions	SR: 77-78	  	
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	SR: 79, 115		
GRI 306: Waste 2020				
103-1	Explanation of the material topic and its Boundary	SR: 77-79		
103-2	The management approach and its components	SR: 77-79		
103-3	Evaluation of the management approach	SR: 77-79		
306-1	Water generation and significant waste-related impacts	SR: 85		
306-2	Management of significant waste-related impacts	SR: 75, 116-117	  	
306-3	Waste generated	SR: 29, 75, 116-117		
306-4	Waste diverted from disposal	SR: 29, 75, 116-117		
306-5	Waste directed to disposal	SR: 29, 75, 116-117		
GRI 307: Environmental Compliance 2016				
103-1	Explanation of the material topic and its Boundary	SR: 72-76		
103-2	The management approach and its components	SR: 72-76		
103-3	Evaluation of the management approach	SR: 72-76		



	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
307-1	Non-compliance with environmental laws and regulations	SR: 76, 79, 103		No significant non-compliance with environmental laws and regulations in 2020
GRI 308: Supplier Environmental Assessment 2016				
103-1	Explanation of the material topic and its Boundary	SR: 64-66		
103-2	The management approach and its components	SR: 64-66		
103-3	Evaluation of the management approach	SR: 64-66		
308-1	New suppliers that were screened using environmental criteria	SR: 66		
308-2	Negative environmental impacts in the supply chain and actions taken	-		No case found
Social				
GRI 401: Employment 2016 and GRI G4 (Electric Utilities Sector)				
103-1	Explanation of the material topic and its Boundary	SR: 87-93		
103-2	The management approach and its components	SR: 87-93		
103-3	Evaluation of the management approach	SR: 87-93		
401-1	New employee hires and employee turnover	SR: 118-119		
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	-		Employment contract of temporary or part-time employees
401-3	Parental leave	SR: 119		Under Company rules and regulations
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	-		
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	SR: 94		
GRI 402: Labor/Management Relations 2016				
103-1	Explanation of the material topic and its Boundary	-		Not a material topic
103-2	The management approach and its components	-		








	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
103-3	Evaluation of the management approach	-		
402-1	Minimum notice periods regarding operational changes	-		Under Labor Protection Act
GRI 403: Occupational Health and Safety 2018 and GRI G4 (Electric Utilities Sector)				
103-1	Explanation of the material topic and its Boundary	SR: 94-97		
103-2	The management approach and its components	SR: 94-97		
103-3	Evaluation of the management approach	SR: 94-97		
403-1	Occupational health and safety management system	SR: 94-97, 118		Under Thai OH&S Law, at least 50% of workers at operational level must join Safety Committees
403-2	Hazard identification, risk assessment, and incident investigation	SR: 94-97, 118	 	
403-3	Occupational health services	SR: 94-97	 	
403-4	Worker participation, consultation, and communication on occupational health and safety	SR: 94-97		
403-5	Worker training on occupational health and safety	SR: 94, 121		
403-6	Promotion of worker health	SR: 97		
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR: 94-97		
403-8	Workers covered by an occupational health and safety management system	SR: 94-97, 117		
403-9	Work-related injuries	SR: 94, 120		
403-10	Work-related ill health	SR: 94		
EU25	Number of injuries and fatalities to the public involving company assets, including legal judgements, settlements and pending legal cases of diseases	SR: 94,120		
GRI 404: Training and Education 2016				
103-1	Explanation of the material topic and its Boundary	SR: 92-93		
103-2	The management approach and its components	SR: 92-93		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/Comment
103-3	Evaluation of the management approach	SR: 92-93		
404-1	Average hours of training per year per employee	SR: 93-120	  	
404-2	Programs for upgrading employee skills and transition assistance programs	SR: 93-120		
404-3	Percentage of employees receiving regular performance and career development reviews	-	 	
GRI 405: Diversity and Equal Opportunity 2016				
103-1	Explanation of the material topic and its Boundary	SR: 87, 91		
103-2	The management approach and its components	SR: 87, 91		
103-3	Evaluation of the management approach	SR: 87, 91		
405-1	Diversity of governance bodies and employees	SR: 29, 117-118		
405-2	Ratio and basic salary and remuneration of women to men	-		
GRI 406: Non-discrimination 2016				
103-1	Explanation of the material topic and its Boundary	SR: 87, 91		
103-2	The management approach and its components	SR: 87, 91		
103-3	Evaluation of the management approach	SR: 87, 91		
406-1	Incidents of discrimination and corrective actions taken	SR: 109	  	No incidents of discrimination and corrective actions taken in 2020
GRI 407: Freedom of Association and Collective Bargaining 2016				
103-1	Explanation of the material topic and its Boundary	SR: 87, 91		Not a material topic
103-2	The management approach and its components	SR: 87, 91		
103-3	Evaluation of the management approach	SR: 87, 91		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	-		No case found

Disclosures and Description		Location (AR, SR)	UN SDGs	Disclosure/ Comment
GRI 408: Child Labor 2016				
103-1	Explanation of the material topic and its Boundary	SR: 91-92		Not a material topic
103-2	The management approach and its components	SR: 91-92		
103-3	Evaluation of the management approach	SR: 91-92		
408-1	Operations and suppliers at significant risk for incidents of child labor	-		No case found
GRI 409: Forced or Compulsory Labor 2016				
103-1	Explanation of the material topic and its Boundary	SR: 91-92		Not a material topic
103-2	The management approach and its components	SR: 91-92		
103-3	Evaluation of the management approach	SR: 91-92		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	SR: 91-92		No case found
GRI 411: Rights of Indigenous Peoples				
103-1	Explanation of the material topic and its Boundary	SR: 91-92		Not a material topic
103-2	The management approach and its components	SR: 91-92		
103-3	Evaluation of the management approach	SR: 91-92		
411-1	Incidents of violations involving rights of indigenous peoples	SR: 94-109		No case found
GRI 412: Human Rights Assessment 2016				
103-1	Explanation of the material topic and its Boundary	SR: 91		
103-2	The management approach and its components	SR: 91		
103-3	Evaluation of the management approach	SR: 91		
412-1	Operations that have been subject to human rights reviews or impact assessments	Code of Conduct		No case found
412-2	Employee training on human rights policies or procedures	SR: 91		
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	SR: 91		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
GRI 413: Local Communities 2016				
103-1	Explanation of the material topic and its Boundary	SR: 99-100		
103-2	The management approach and its components	SR: 99-100		
103-3	Evaluation of the management approach	SR: 99-100		
413-1	Operations with local community engagement, impact assessments, and development programs	SR: 74, 78, 81, 99-100, 110		
413-2	Operations with significant actual and potential negative impacts on local communities	SR: 74, 110, 121		No operations with significant actual and potential negative impacts on local communities in 2020
GRI 414: Supplier Social Assessment 2016				
103-1	Explanation of the material topic and its Boundary	SR: 61-66		
103-2	The management approach and its components	SR: 61-66		
103-3	Evaluation of the management approach	SR: 61-66		
414-1	New suppliers that were screened using social criteria	SR: 66, 111		
414-2	Negative social impacts in the supply chain and actions taken	SR: 66, 111		No negative social impacts in the supply chain and actions taken in 2020
GRI 415: Public Policy 2016				
103-1	Explanation of the material topic and its Boundary	SR: 47-51		
103-2	The management approach and its components	SR: 47-51		
103-3	Evaluation of the management approach	SR: 47-51		
415-1	Political contributions	SR: 49, 121		
GRI 416: Customer Health and Safety 2016 and GRI G4 (Electric Utilities Sector)				
103-1	Explanation of the material topic and its Boundary	SR: 61-63		
103-2	The management approach and its components	SR: 61-63		
103-3	Evaluation of the management approach	SR: 61-63		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
416-1	Assessment of the health and safety impacts of product and service categories	SR: 61-63, 110		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	SR: 61-63, 110		No incidents on non-compliance concerning the health and safety impacts of products and services
EU25 ^F	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	SR: 110, 120		No case found
GRI 418: Customer Privacy 2016				
103-1	Explanation of the material topic and its Boundary	SR: 61-63		
103-2	The management approach and its components	SR: 61-63		
103-3	Evaluation of the management approach	SR: 61-63		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Code of Conduct, SR: 110-111		No case found
GRI 419: Socioeconomic Compliance 2016				
103-1	Explanation of the material topic and its Boundary	SR: 61-63		
103-2	The management approach and its components	SR: 61-63		
103-3	Evaluation of the management approach	SR: 61-63		
419-1	Non-compliance with laws and regulations in the social and economic area	SR: 29, 49, 109, 121		No non-compliance with laws and regulations in the social and economic area
GRI-G4 Sector Disclosure: Electric and Utilities				
G4-EU1	Installed capacity, broken down by primary energy source and by regulatory regime	AR: 21, 23 SR: 111-112		
G4-EU2	Net energy output broken down by primary energy source and by regulatory regime	AR: 95-97 SR: 111-112		
G4-EU3	Number of residential, industrial, institutional and commercial customers accounts	AR: 35-36, 51-52 SR: 61, 110		
G4-EU6	Management approach to ensure short and long-term electricity availability and reliability	AR: 7, 15-19 SR: 57-60		

	Disclosures and Description	Location (AR, SR)	UN SDGs	Disclosure/ Comment
G4-EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	AR: 51-59 SR: 67-68	   	
G4-EU8	Research and development activity and expenditure aimed at providing reliable electricity and promote sustainable development	AR: 7, 16-18 SR: 67-68		
G4-EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and by regulatory regime	AR: 21, 23-28		
G4-EU11	Average generation efficiency of thermal plants by energy source and by regulatory regimes	SR: 56, 110, 112		
G4-EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	SR: 54-56, 110	 	
G4-EU25 ^E	Number of injuries and fatalities to the public involving company assets, including legal judgements, settlements and pending legal cases of diseases	SR: 94, 120		
G4-EU28	Power outage frequency	SR: 112		
G4-EU29	Average power outage duration	SR: 112		
G4-EU30	Average plant availability factor by energy source and by regulatory regime	SR: 112		
N/A	Cyber Security	SR: 69-71		

SUSTAINABILITY REPORT 2020 SURVEY

B.GRIMM POWER PUBLIC COMPANY LIMITED

1. Which group of readers are you?

- | | | |
|--|---|--|
| <input type="checkbox"/> Employee | <input type="checkbox"/> Creditor/Financial Institution | <input type="checkbox"/> Government Agency |
| <input type="checkbox"/> Supplier/Contractor | <input type="checkbox"/> Community | <input type="checkbox"/> Media |
| <input type="checkbox"/> Shareholder | <input type="checkbox"/> Business Partner | <input type="checkbox"/> Scholar/Student |
| <input type="checkbox"/> Customer | <input type="checkbox"/> Investor | <input type="checkbox"/> Others |

2. What is your main purpose of reading our Sustainability Report?

- ☐ To understand the Company's business
- ☐ To support investment decisions
- ☐ For research and education
- ☐ To prepare your own Sustainability Report

3. Which sustainability issue of the Company are you interested in?

- ☐ Economic dimension (Please specify)
- ☐ Social dimension (Please specify)
- ☐ Environmental dimension (Please specify)

4. Please rate your satisfaction towards our Sustainability Report 2020

- | | | | | |
|---|----------------------------|--------------------------------|---------------------------|----------------------------|
| <input type="checkbox"/> Completeness | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Low | <input type="radio"/> Poor |
| <input type="checkbox"/> Materiality | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Low | <input type="radio"/> Poor |
| <input type="checkbox"/> Attractive content | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Low | <input type="radio"/> Poor |
| <input type="checkbox"/> Report design | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Low | <input type="radio"/> Poor |
| <input type="checkbox"/> Use of simple language | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Low | <input type="radio"/> Poor |
| <input type="checkbox"/> Overall satisfaction | <input type="radio"/> High | <input type="radio"/> Moderate | <input type="radio"/> Low | <input type="radio"/> Poor |

5. In your opinion, does the report cover all material sustainability issues of the Company?

- ☐ Yes
- ☐ No (please specify issue(s) that should be included).....

6. Please provide suggestions for further improvement

.....

.....

.....

.....



Please submit the survey in person or by post at the address below

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