



SMC GLOBAL POWER

# We Care

2018 Sustainability Report



A butterfly species in Malita Power Plant's Butterfly Sanctuary  
Scientific name: Idea leuconoe  
Common Name: Rice Paper

# About this report

(102-16,102-54,46,50)

## Scope and Boundaries:

This Sustainability Report covers the following power plants, unless stated otherwise, for the period of January 1 to December 31, 2018:

- Angat Hydroelectric Power Plant
- Limay Power Plant (Units 1,2, and 3)
- Malita Power Plant (Units 1 and 2)
- Masinloc Power Plant (Units 1 and 2)

In light of the growing relevance of sustainability and our efforts to go beyond simply making a profit, we, at SMC Global Power, have come to the conclusion that we need to develop a deeper understanding of our role in sustainability across all its major dimensions. This report has been prepared in accordance with the GRI Standards: Core Option. This is a testament to our commitment to sustainability, and in recognition of the work that has been done, particularly by the Angat Hydroelectric Power Plant; Units 1, 2, and 3 of the Limay Circulating Fluidized Bed (CFB) Power Plant; Units 1 and 2 of Malita CFB Power Plant; and Units 1 and 2 of the Masinloc Coal-fired Thermal Power Plant. This report covers the sustainability performance of the said plants from January to December 2018. Our sustainability initiative structure is composed of a Steering Council consisting of top management and key managers representing each of the functions who collectively decide on our sustainability direction, Technical Working Groups per site composed of subject matter experts and data owners, as well as a Sustainability Core Team who are primarily in charge of the development of this report and programming of sustainability initiatives.

Integrity, Service Excellence, Corporate Social Responsibility, and placing God Above All are values that serve as the backbone of our operations and activities. These values, ingrained in everything that we do, are what drive us to continue to respond to the country's need for reliable power to fuel the nation's growth. But what makes these four core values truly effective and make a lasting impact is our fifth value — malasakit. Malasakit is what enables us to genuinely listen, get to the heart of the matter, create holistic solutions, and constantly strive to do better in our work and ultimately, do better for our people.

Having malasakit in our operations, as manifested in our social development programs, has aided us in addressing and overcoming the challenges faced by our stakeholders. This way of doing business, paired with our investments in innovative technologies, enriches our stand to operate in a manner that balances economic, human, and environmental considerations. This report serves to document our Company's journey towards improving sustainability and transparency. For this report, we take a closer look at how malasakit is embedded throughout our operations:

### **Malasakit by Powering the Economic Progress of the Country**

We strive to supply reliable and affordable power through innovations and strategic investments in electricity. As we provide power, we also empower the nation's economy. Being in this business, we were able to light up the nation while setting up a bright future for many of the citizens living in it, too. Our continued work creates progress hand-in-hand with our communities, through creating more quality jobs, stimulating rural economies by giving a chance for businesses to thrive, and uplifting the quality of the lives of our countrymen through more affordable and accessible power, among others.

### **Malasakit through Constant Support to and Partnership with our Communities**

We create a lasting impact holistically. Our business uplifts the lives of our employees, our shareholders, and even the lives of the people in the communities we operate in and serve. We build partnerships with our stakeholders and show our malasakit through projects designed to address their core needs, with the ultimate goal of empowering them so they can empower themselves and their communities - creating endless ripples of positive and lasting change.

### **Malasakit as the Driving Force to Protect Employee Welfare**

We understand that when we take care of our people, we empower them to desire and strive for excellence, which is why we consider it a priority to make our employees feel the genuine malasakit that we have for them. Our employees are our first partners in business. Together, we all grow and progress as vital parts of a whole.

### **Malasakit as our Motivation to be a Responsible Steward of Nature**

Our malasakit for nature is reflected in our strategic, multi-fuel approach on technologies – all designed to create a balance that protects both the needs of the nation and our environment. Our various Corporate Social Responsibility (CSR) programs also show our desire to prudently protect, conserve, and rehabilitate the environment.





**PANGASINAN**

**San Roque Power Plant**  
Strategic Power Devt. Corp.  
*(SMC Global Power Subsidiary)*

**8%**  
SMC GLOBAL POWER CAPACITY



**PANGASINAN**

**Sual Power Plant**  
San Miguel Energy Corporation  
*(SMC Global Power Subsidiary)*

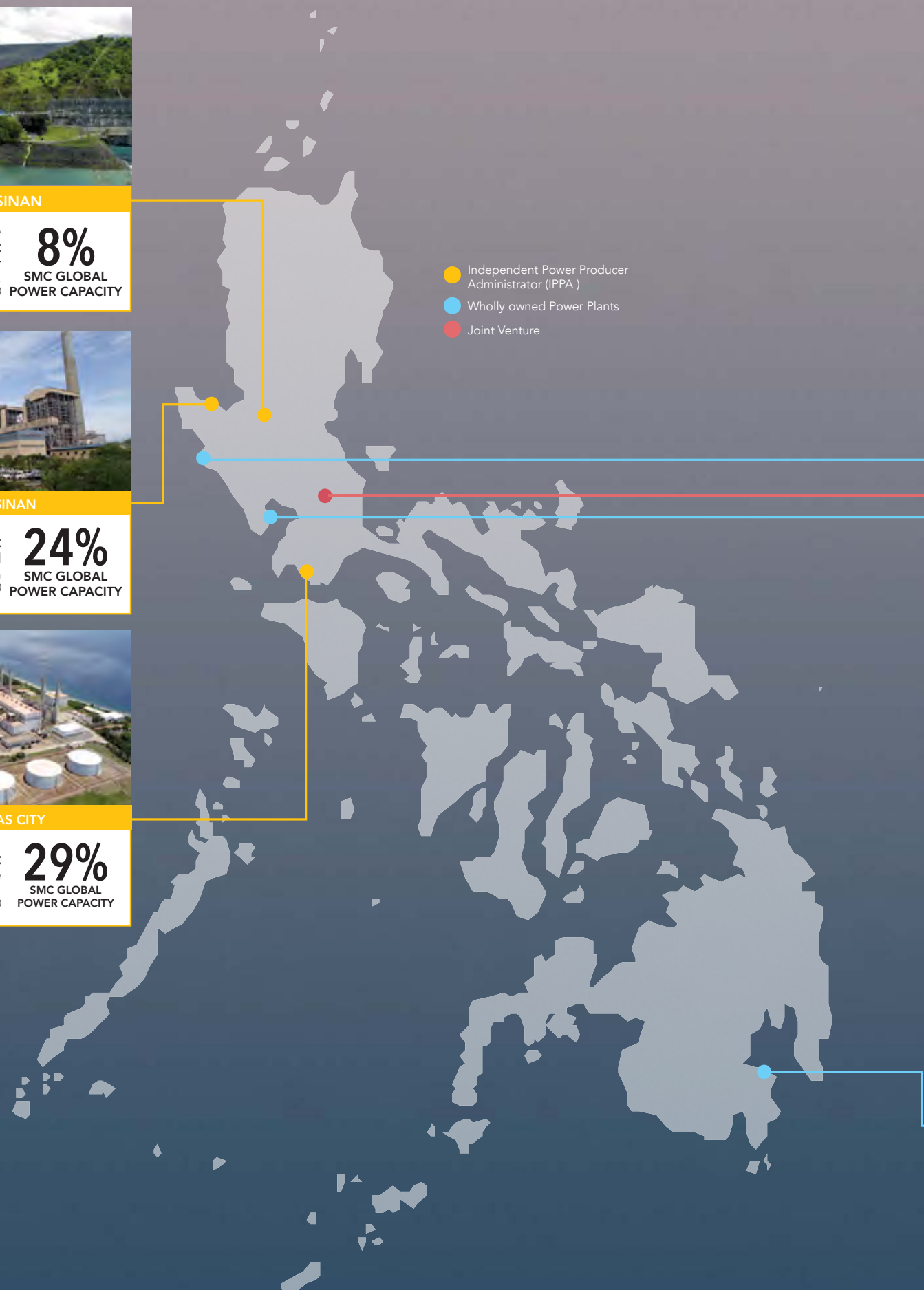
**24%**  
SMC GLOBAL POWER CAPACITY



**BATANGAS CITY**

**Ilijan Power Plant**  
South Premiere Power Corp.  
*(SMC Global Power Subsidiary)*

**29%**  
SMC GLOBAL POWER CAPACITY



**ZAMBALES**

**Masinloc Power Plant**  
Masinloc Power Partners Co. Ltd.  
*(SMC Global Power Subsidiary)*

**16%**  
SMC GLOBAL POWER CAPACITY



**BULACAN**

**Angat Hydroelectric Power Plant**  
Angat Hydroelectric Power Plant  
*(Joint Venture between SMC Global Power and K-Water)*

**5%**  
SMC GLOBAL POWER CAPACITY



**BATAAN**

**Limay Power Plant**  
SMC Consolidated Power Corporation  
*(SMC Global Power Subsidiary)*

**11%**  
SMC GLOBAL POWER CAPACITY



**DAVAO**

**Malita Davao Power Plant**  
San Miguel Consolidated Power Corporation  
*(SMC Global Power Subsidiary)*

**7%**  
SMC GLOBAL POWER CAPACITY

# Our Company

(102-1,2,5,6, EU2,EU3)

SMC Global Power Holdings Corp. (SMC Global Power) is a subsidiary of San Miguel Corporation (SMC), a diversified Philippine conglomerate founded in 1890 which has businesses in the food, beverage, packaging, fuel and oil, infrastructure, banking, and property industries. The entry to the electric power industry was ignited by a desire to provide stable, accessible, and affordable electricity that will also support the growth of the Philippine economy.

Since 2009, SMC Global Power, through its subsidiaries, has continually served as the power generation arm of SMC. We have become one of the largest power companies in the Philippines with a diversified portfolio of power plants utilizing a mix of coal, natural gas, and hydroelectric power. Our balanced multi-fuel portfolio of renewable and nonrenewable resources allows us to manage costs and offer competitive and affordable baseload electricity rates. Our company is also vertically integrated, with investments in Battery Energy Storage Systems (BESS) as well as complementary sectors such as distribution and retail supply

The power generated by our coal power plants is primarily used as baseload supply and is being sold to various distribution utilities, electric cooperatives, and industrial customers pursuant to offtake agreements. Meanwhile, the entire capacity of the 10 MWh Masinloc BESS project is contracted to the National Grid Corporation of the Philippines for ancillary services. On the other hand, the power produced from our hydropower plants is used primarily as peaking supply and sold through the Wholesale Electricity Spot Market (WESM), or as replacement power to our affiliates.

NUMBER OF ACCOUNTS BY TYPE AND POINT OF CONNECTION		
Type of Account <sup>1</sup>	Point of Connection	
	Transmission	Distribution
Residential	59 (Electric cooperatives)	0
Industrial Commercial	7	161
Institutional	0	34

<sup>1</sup>Accounts which have Distribution as Point of Connection refers to Contestable Customers as defined under the relevant Philippine regulation. Institutional Accounts herein refer to Contestable Customers who are government entities, or accounts served via other Retail Electricity Suppliers. Accounts which have Transmission as Point of Connection refers to Electric Cooperatives and Directly Connected Customers.





## Our Vision

To be the largest power company, with the biggest generation capacity, and a key player in Southeast Asia.

## Our Mission

Giving you the power to celebrate life

## Values

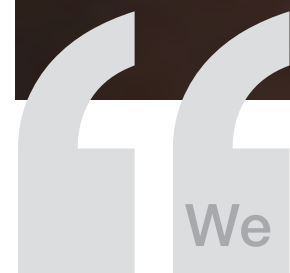
Integrity, Service Excellence, Malasakit, Corporate Social Responsibility, God Above All

### List of Membership Associations<sup>1</sup> (102-13)

- Retail Electricity Suppliers Association
- Philippine Independent Power Producers Association
- Philippine Electricity Market Corporation - Rules Change Committee
- Philippine Electricity Market Board
- Philippine Electricity Market Corporation (as participant in WESM)

<sup>1</sup>As a corporation or through its subsidiaries and officers





We entered the energy industry, through SMC Global Power, because we wanted more Filipinos to have access to affordable and reliable electricity.”

# We create a sustainable tomorrow

## To our dearest stakeholders,

In response to the demands of a fast-growing Philippine economy, we understand the significant role we play in helping the government address the challenges of our country today - poverty, lack of quality infrastructure, and traffic congestion. These motivate us to provide game-changing solutions, such as investing in fuel, cement, energy, water, and other infrastructure, while building a better future. Our investments are our answer to the question of how we can achieve our nation's goals. It is our ambition to make every part of this country and every Filipino flourish. Thus we construct roads that bring people to where they need to go; power homes, schools, hospitals, and businesses; provide water for domestic use; establish manufacturing facilities that create quality jobs that allow one to provide for their families; and build gas stations to mobilize people and to fuel the transport of goods. Our participation in these sectors allow us to be part of the daily activities of our countrymen, helping us to understand them and to better serve their needs. We continue to develop, operate, and maintain these assets because we believe that these are the fundamentals to the better country that we strive for.

The corporate culture of SMC is guided by our philosophy to profit with

honor, and it is reflected in our vision, purpose, and strategy. We have realized that we are more than just a business, and our strategy should be focused on creating value not just for our shareholders, but more importantly, for the greater society. In this regard, we live out our core values in every business, and integrate contributing to the socio-economic development of the country to each of our businesses. We strive to operate all our assets in a safe, sustainable, and efficient manner, and integrate world-class technologies to our operations.

Through our efforts, we see positive ripple effects on the lives of our stakeholders. From providing jobs to people, to small businesses thriving in the local economies in areas where we operate, our impact goes beyond our primary products and services. We have also implemented programs that help us meet the demands of our customers and contribute to effectively addressing various social, economic, and environmental issues.

As our businesses continue to expand, we develop a deeper understanding of our impacts on the environment and the communities we operate in. We refine our sustainability initiatives and seek to live out sustainability across the value chain throughout

all our business units. Sustainability remains at our core, and is key to ensuring the continuity of our operations and the balanced growth of our country.

We entered the energy industry, through SMC Global Power, to give more Filipinos access to affordable and reliable electricity. SMC Global Power, by providing stable and affordable power to more Filipinos throughout the country, has become one of the most outstanding energy companies in the Philippines. We recognize our responsibility to help the government reach the country's long-term power requirements, while reducing emissions and managing different energy sources. We have prioritized our investments in low emission combustion technologies as well as "frontier" technologies such as energy storage, renewables. This affirms our commitment to achieve renewables penetration of up to 10,000 MW over the long-term. We balance this expansion by investing in reliable but clean energy, particularly high efficiency low emission (HELE) technologies such as the Circulating Fluidized Bed (CFB) and Supercritical Steam Generation. These have significantly reduced our emissions to levels lower than those prescribed by the Philippine government and the World Bank. We

see proper stewardship of natural resources as something equally important to our financial success.

We develop synergies among all our subsidiaries to provide the best quality of services to our consumers. For instance, affordable electricity is important to us and is integral to the production of the goods and services we offer to the market. Thus, we ensure that we provide a reliable and competitive supply of electricity to our electricity customers and our own manufacturing companies to lessen the costs of products that Filipino households consume. We also have technical synergies such as reusing the ash from our power plants as basic materials for cement production.

As SMC continues its journey towards sustainability, we believe that we can create a better world, guided by our vision of a world worth celebrating – one that can be enjoyed by the people living today and by the generations to come.

RAMON S. ANG  
President



# Facing challenges with resilience



## To Our Valued Stakeholders,

Energy is vital to our everyday lives. It empowers us to pursue our greatest goals and create the life we want. With this in mind, SMC wanted to make energy more accessible and to meet the growing demand for power supply. Ten years ago, we entered the power industry when we became the Independent Power Producer Administrator of the Sual Power Plant. We embarked on this journey to enable every Filipino to lead a comfortable and productive life, one that allows them to achieve a bright future for themselves and the generations to come.

Ten years, seven power plants, and thirty-nine companies later, we are proud to say that we have become one of the largest power producers in the Philippines. Our vision is to continue to serve over generations, for the benefit of our shareholders and ultimately, the Filipino nation.

It was also in our 10th year when we decided to produce our first sustainability report to document our sustainability journey. The theme of our maiden report is Malasakit — an enduring Filipino value anchored on care and compassion. This value fuels our

commitment to the three sustainability pillars of our parent company, SMC. These are taking care of the environment, addressing the concerns of our stakeholders, and strengthening our economic performance. Through the leadership of our President, Mr. Ramon S. Ang, sustainability has been proactively integrated into our decision-making processes. We strive to balance the needs of the present with the ability of future generations to meet their own needs. Likewise, guided by his vision and foresight, we have aligned the expansion of our business with the flourishing Philippine economy, despite the growing challenges and regulatory uncertainties in the industry.

These challenges do not keep us from expanding our portfolio and elevating our practices to the global standard. We ensure that our operations are fully compliant with the relevant environmental and social regulations, and in various metrics even surpass expectations. We also align our expansion projects with the Power Development Plan of the Philippines. As one of the leading energy companies in the country, we recognize the critical role we play in providing the electricity needs of the country.

At SMC Global Power, we believe that an environmentally-conscious yet responsive power industry is possible and achievable. As a developing country with an ever-growing population, this future is one that can be achieved with time by efficiently and strategically

utilizing the available energy sources and technologies in the country. While our current portfolio mostly utilizes coal, we have engaged in conscious and active efforts to minimize the environmental impact and reduce carbon footprint. As proof of this, we employ a balanced portfolio of plants and the utilization of efficient, low-emission coal technologies such as Circulating Fluidized Bed (CFB) and Supercritical Steam Generation. Moreover, we have adopted a “multi-fuel” approach in our power plants to attain the most efficient generation mix that employs baseload, mid-merit, and peaking capacity.

Our renewable sources are integral to our portfolio. In support of this, we initiated the Angat Dam and Dykes Strengthening Project to ensure the structural integrity of the dam for the continuous fulfillment of its purpose and catering to the millions of people counting on its services.

To further mitigate our overall emissions, we have in the pipeline projects such as “Project 747” which aims to plant at least seven million trees in 4,000 hectares across the country through a combination of reforestation activities, protected forest reserves, biochar production, and mangrove rehabilitation. We continue to explore synergies with renewable energies to add to our existing power portfolio. We pioneered the first Battery Energy Storage System (BESS) in the Philippines with our Masinloc BESS. This provides regulating reserve services to cover

instantaneous variations in supply and demand in the Luzon grid while improving power quality and reliability.

Our work does not end with proper environmental stewardship. We also promote the welfare of our employees, local communities, and other stakeholders, as we grow together as partners.

The commitment and dedication of our employees is one of the main drivers in our long-term success. Consequently, as our Company continues to grow, we also want our employees to grow with us by developing their talents and expertise, and fostering a work environment designed to keep them driven, motivated, and safe at all times. We have strengthened the policies on occupational health and safety and doubled our efforts to promote diversity and inclusion. The Company gives opportunities to everyone, regardless of gender, to take on critical roles and responsibilities in decision-making. As a female engineer, I am proof that gender is not a barrier to leading this Company.

Over the past years, we have realized that partnership is one of the key components of our success. Our community engagement allows us to establish relationships borne from mutual *malasakit* with our stakeholders, especially the Indigenous Peoples (IPs) whose habitats are within the proximity of our operations in Angat and Malita. The social development projects that we implement focus on addressing the real needs of our stakeholders, with special attention to enhancing their skills towards employment and improving their quality of life.

As we continue to grow our business in the years ahead, our *malasakit* for the people and the environment will remain true. In this dynamic era of change, it is *malasakit* that keeps us grounded and reminds us of our mission – to keep giving you the power to celebrate life.

  
**ELENITA D. GO**  
General Manager

“We have aligned our expanding business with the flourishing Philippine economy despite the growing challenges and regulatory uncertainties in the industry.”



## SUSTAINABILITY FRAMEWORK:

# Embedding *Malasakit* in our Operations

As embodiment of our values and to fulfill our mission to give our stakeholders the power to celebrate life, we commit ourselves to practicing business excellence across our operations. Moreover, one of the unique features of our framework is embedding malasakit into all our business processes. Embracing the sustainability framework of our parent company, San Miguel Corporation (SMC), our sustainability approach follows a synergistic approach that is aligned with the United Nations Sustainable Development Goals (SDGs) that are significant to our stakeholders.

Building on the sustainability principles of SMC, we believe that doing business responsibly, being a good neighbor, and being stewards for future generations involve placing equal premium to the Five P's of Sustainability: Prosperity, People, Planet, Peace, and Partnerships. This defines economic growth as an occurrence that must also come with evident environmental flourishing and social development.

As we strive to become one of the key players in Southeast Asia, our approach to sustainability zeroes in on what directly affects our operations and our stakeholders. As we continue to practice value creation through profit generation, we also look at creating additional value for the environment and the overall well-being of our stakeholders.

Geese swim freely as they are cared for  
Malita Power Plant Eco Park

Scientific name: *Anser cygnoides*  
Common Name: Swan Goose





# Stakeholder Engagement

(102-40, 102-42, 102-43, 102-44)

For our maiden report, we consulted and collaborated with our stakeholders to translate malasakit into concrete sustainability priorities aligned with their concerns and needs. We commissioned a third party, the University of Asia and the Pacific - Center for Social Responsibility (UA&P-CSR) to conduct stakeholder consultations and materiality testing on our behalf and to help identify which of our stakeholder groups should be consulted. Our

stakeholder engagement process is aligned with the sustainability reporting standards that we adopted for this report namely the GRI Standards. UA&P-CSR visited our sites to conduct a survey among key representatives of the identified stakeholder groups to determine which sustainability indicators are significant in their daily lives. Moreover, UA&P-CSR facilitated focus group discussions (FGDs) to provide an avenue for our

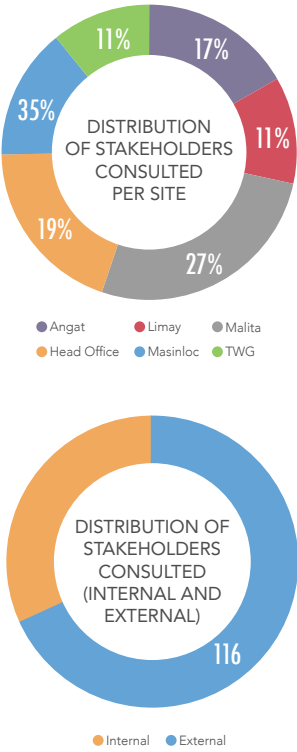
stakeholders to further explain their concerns and experiences related to our operations. Based on the FGDs, our stakeholders acknowledged the Company's efforts and determination in paying taxes responsibly, providing equal employment opportunities, and complying with the requirements of various government agencies, such as the Department of Environment and Natural

Resources (DENR) and Department of Labor and Employment (DOLE). With this, our stakeholders also provided suggestions to improve certain aspects of our operations, such as procurement practices, information dissemination, and waste management systems. The feedback helped us evaluate the impact of our businesses on their respective communities and understand their key priorities.



External Stakeholder Consultation in Malita, Davao Occidental

We consulted a total of 170 individuals, both internal and external stakeholders, representing various institutions and demographics. These individuals represent the interests relating to each of our plants, with breakdown as follows:



External Stakeholder Consultation in Angat, Bulacan



External Stakeholder Consultation in Limay, Bataan

## KEY STAKEHOLDER GROUPS CONSULTED DURING THE MATERIALITY TESTING PROCESS (102-40)

	Masinloc	Limay	Angat	Malita	Division Office
LGU	✓	✓	✓	✓	✓
Government Agencies	✓	✓	✓	✓	
Employees	✓	✓	✓	✓	✓
Associations	✓	✓			
Third-party service providers			✓	✓	✓
Local Communities	✓	✓	✓	✓	
Schools in Local Barangays	✓			✓	
Independent Electricity Market Operator					✓

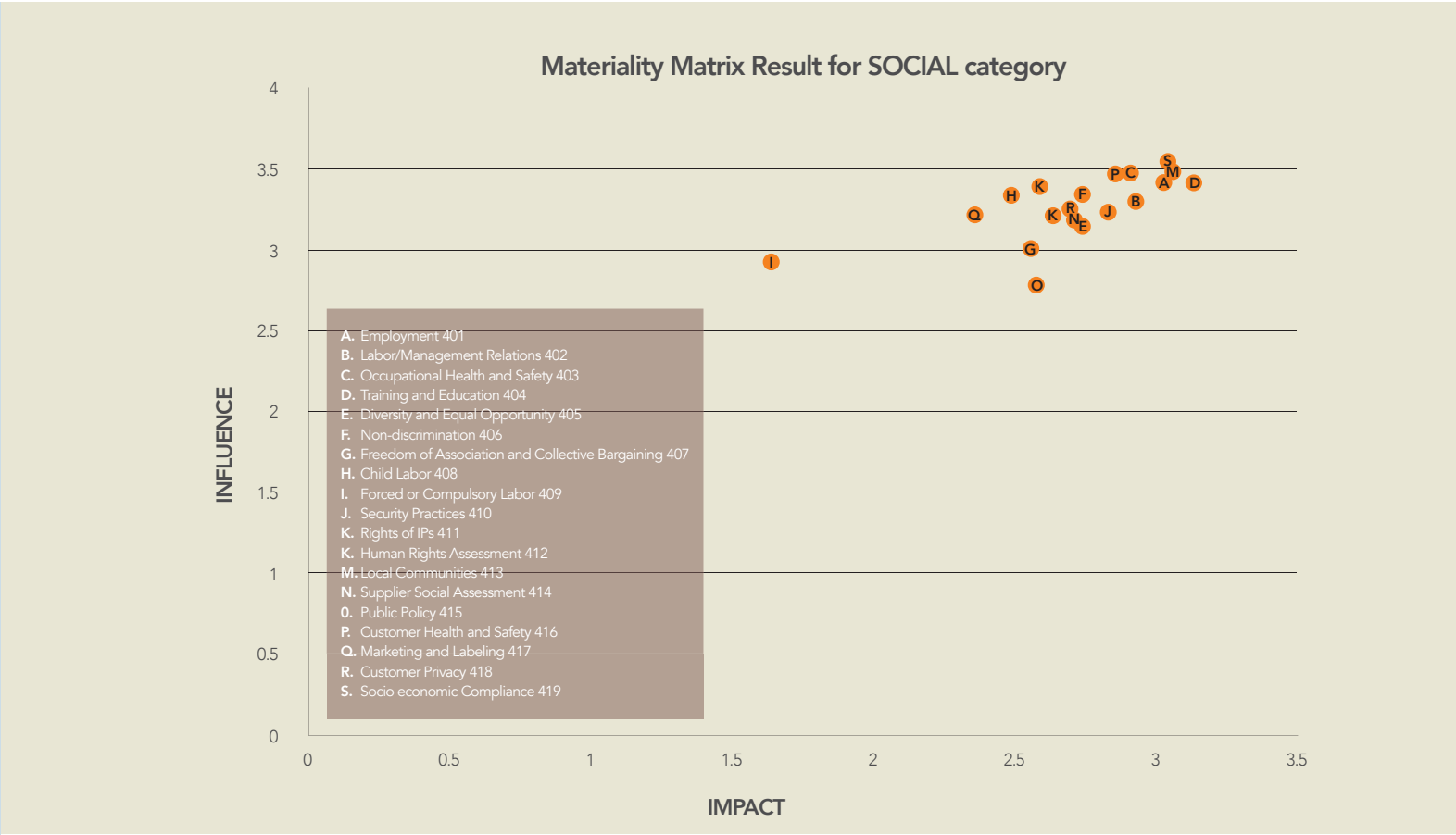
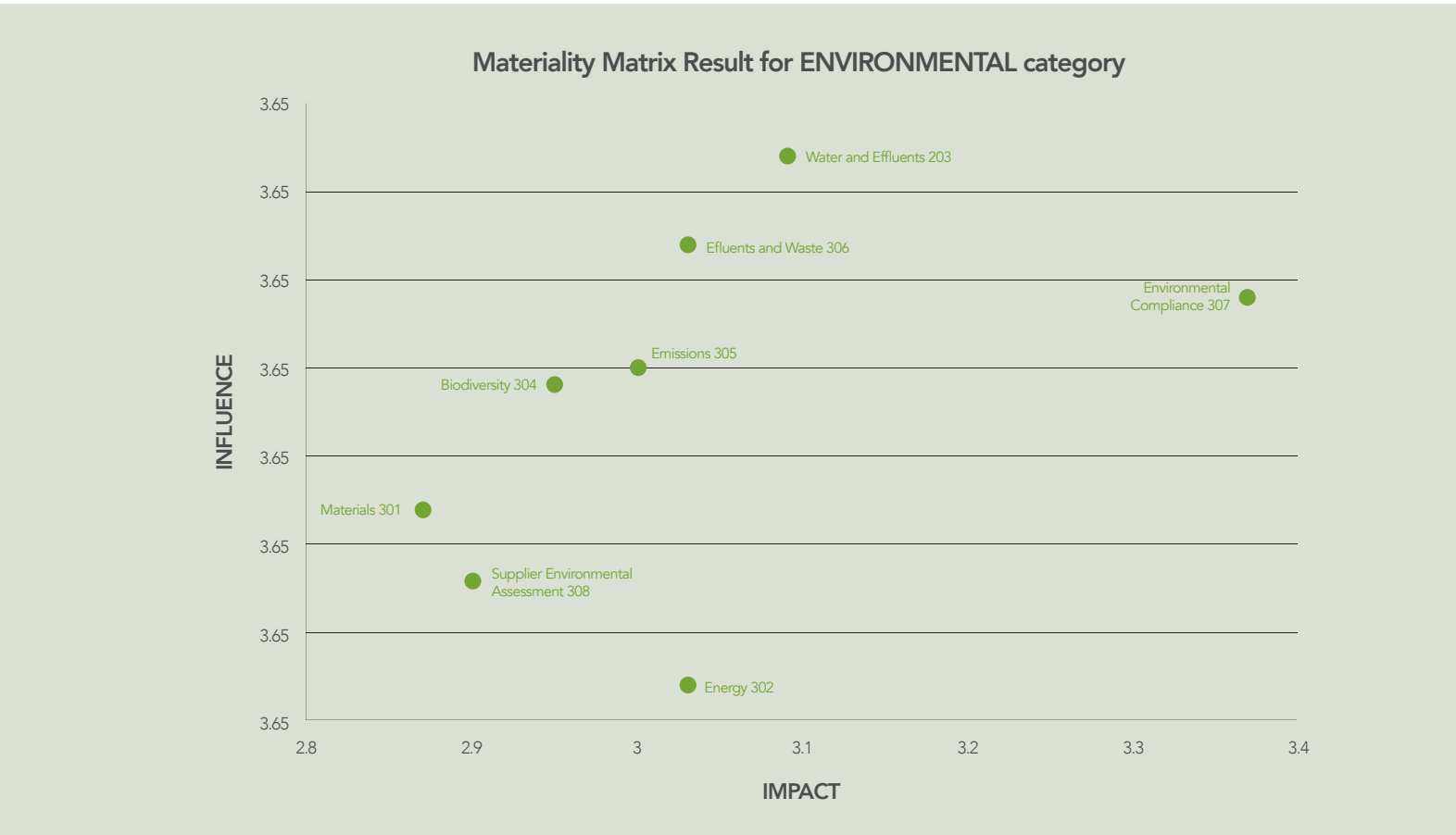


Based on the results of the surveys conducted, it was determined that 25 of the 33 GRI topics<sup>1</sup> are important to our stakeholders. (102-47)

Economic Category	Environmental Category	Social Category
GRI 201: Economic Performance GRI 202: Market Presence GRI 203: Indirect Economic Performance GRI 204: Procurement Practices GRI 205: Anti-competitive Behavior GRI 206: Anti-corruption	GRI 201: Materials GRI 202: Energy GRI 203: Water and Effluents GRI 204: Biodiversity GRI 205: Emissions GRI 206: Effluents and Waste GRI 207: Environmental Compliance GRI 208: Supplier Environmental Assessment	GRI 401: Employment GRI 402: Labor-Management Relations GRI 403: Occupational Health and Safety GRI 404: Training and Education GRI 405: Diversity and Equal Opportunity GRI 406: Non-discrimination GRI 407: Freedom of Association and Collective Bargaining GRI 408: Child Labor GRI 409: Forced or Compulsory Labor GRI 410: Security Practices GRI 411: Rights of Indigenous Peoples GRI 412: Human Rights Assessment GRI 413: Local Communities GRI 414: Supplier Social Assessment GRI 415: Public Policy GRI 416: Customer Health and Safety GRI 417: Marketing and Labeling GRI 418: Customer Privacy GRI 419: Socioeconomic Compliance

<sup>1</sup>Red texts are the material topics to our stakeholders

The materiality matrix below shows which topics have the greatest impact and influence to our stakeholders. We considered a threshold of at least 3.00 and above for both impact and influence for a topic to be considered as material. In addition, our Steering Council identified key topics of special interests which, while not qualifying under the threshold, were considered as material and added to this report.





# Operational Excellence

(EU2, EU11, EU30)

Showing *Malasakit* through Efficient and Valuable Operations



300 MW Malita Power Plant in Davao Occidental



We are steadfast in our commitment to serve our stakeholders well. We ensure that our plants continue to serve their needs by generating reliable power that contributes to the community and the economy. In line with this, we will create shared value, strategically utilize technologies and innovations, and ultimately, create an avenue for sustainable growth.

More than profit generation, our true mission is to provide holistic development and contribute to boosting national economic growth. We do this through our efforts to create quality jobs and improve local economies and industries. Simultaneously, we strive to ensure the protection of the environment and the promotion of health, safety, and the overall well-being of all our stakeholders, particularly our employees and the host community.

We practice responsible use of diversified fuel sources. Our energy fuel mix is composed of natural gas (28%), coal (59%), and hydroelectric power (13%). As a portfolio, we are able to produce reliable and affordable energy. This allows us to operate in a balanced and responsive way, which ensures the stability of the electricity supply of our customers. We constantly seek to improve our operations, and seek to grow our portfolio through the addition of baseload capacities, as well as renewable energies and the technologies that support it. These include pioneering technologies such as our 10 MWh Battery Energy Storage System located within the Masinloc Power Plant.

We are dedicated to following a holistic approach to business. We view the environment, health, safety, and overall well-being of all our

stakeholders as metrics of equal value to financial considerations. Our Malita Power Plant has been certified with ISO 50001 (Energy Management System) and was the first power plant to receive such a certification in the Philippines. The Masinloc Power Plant was also the first power plant to receive an ISO 55001 (Asset Management Systems). These environmental certifications are proof that our power plants have an effective and efficient energy management system (EnMS)—one that handles assets well and conserves overall use of resources. The Limay Power Plant and the Malita Power Plant is also certified with ISO 90001 (Quality Management). Moreover, all our power plants maintain the two (2) IMS Certifications ISO 14001 (Environmental Management System), and OHSAS 18001 (Occupational Health and Safety).

Our Company has adopted the Circulating Fluidized Bed (CFB) Technology in our Limay and Malita Power Plants. CFB technology has good thermal efficiency and supports a wide array of compatible emission and pollution control technologies. This makes CFB a more environmentally-friendly way of utilizing coal than traditional coal technologies.

Within the process, the Limay and Malita Power Plants constantly monitor emissions and employ various technologies to minimize emission levels. For example, injecting limestone into the boiler along with the coal reduces emissions by capturing the sulfur released. By-products

like fly ash are captured and recycled by our affiliate and partner companies as cement aggregate. Our emissions are consistently far below the limits imposed by the DENR, and even the estimates by the International Finance Corporation for the said technology.

We continue to explore technological improvements and more advanced methods of producing electricity using various fuels.

In recognition of our commitment to excellence, one of the most prestigious award giving bodies in the Asian power industry awarded us for our technological initiatives for the year.

2018 ASIAN POWER AWARDS	
Limay Power Plant	Environmental Upgrade of The Year
Malita Power Plant	Power Utility of The Year
Masinloc Power Plant	Innovative Power Technology of The Year





# Our power plants at a glance

As one of the leading energy companies in the country, we ensure the overall performance of our operations in terms of efficiency, flexibility, and sustainability. We also continuously seek technological solutions to maintain our provision of stable, reliable, and affordable electricity to our consumers.



# Angat

(102-2, EU1)

Angat Hydroelectric Power  
Plant (AHEPP)

The provision of a reliable and efficient source of energy to the Filipino people has always been our priority. We continuously explore new energy sources that can help us fulfill that goal responsibly and sustainably.



The Angat Hydroelectric Power Plant (AHEPP), located in the Angat Watershed Reservation in San Lorenzo, Norzagaray, Bulacan, was privatized through an asset purchase agreement between Power Sector Assets and Liabilities Management (PSALM) Corporation and Korea Water Resources Corporation (K-Water). In November 2014, through our subsidiary PowerOne Ventures Energy Inc. (PVEI), we acquired a 60% stake in Angat Hydropower Corporation (AHC). AHC's local technical team undertakes the operation and maintenance of AHEPP, while K-water provides the technical expertise.

AHEPP has a total electricity generating capacity of 218 MW, comprising of four main units and three auxiliary units. These units utilize Francis-type turbines, most commonly used in hydroelectric power generation.

Aside from AHC, water rights surrounding the AHEPP are co-owned and governed by the following entities with its respective purposes, pursuant to the Water Code of the Philippines and Angat Reservoir Operation Rules

issued by the National Water Resources Board (NWRB):

- Metro Manila Waterworks and Sewerage System (MWSS) – for domestic water supply to Metro Manila;
- Provincial government of Bulacan – for water supply and flood control structure of Bulacan Province; and
- National Irrigation Administration (NIA) - for irrigation of 30,000 hectares of land in Bulacan and Pampanga



83

Total employees

Plant Type	Hydropower Plant
Installed Gross Capacity	218 MW
Installed Net Capacity	165 MW
Installed Capacity by Regulatory Regime	Subnational (Luzon-Visayas Grid)
Net Generation	402.78 GWh
Number of Hours of Planned Outage	1,868.53 hours
Number of Hours of Forced Outage	186.16 hours
Average Availability Factor	75.66%
Energy Intensity	20.59 kJ/kWh



FEATURE STORY

# The Angat Strengthening Project: Strengthening Dam Structure for Sustainability

The fifty (50) year old multi-purpose Angat Dam is Metro Manila's lifeline in terms of water. Serving as its main source of water, the reservoir supplies about 97% of Metro Manila's domestic and industrial water requirements. The Angat Dam also provides water for irrigation of farmlands in 20 municipalities in the Pampanga and Bulacan provinces and is the source of water for the generation of Angat Hydroelectric Power Plant (AHEPP), which supplies power to the Luzon Grid. In addition, it performs flood control and management functions, reducing flooding incidents in the towns and cities downstream.

In 2015, SMC Global Power commissioned a third-party consultancy firm to evaluate the AHEPP and the Angat dam and dykes. It was found that the Angat Dam was highly susceptible to seismic hazards because of its proximity to the West Valley Fault. As a precautionary measure to preserve and protect this crucial source of water of the Metro Manila populace and as part of its commitment as the operators of the Angat Dam, SMC Global Power and K-Water initiated the Angat Dam and Dykes Strengthening Project (ADDSP). This Php 1.08 billion initiative included structural improvements to the dam, as well as the main and secondary dykes. This huge undertaking ensured the structural integrity of the Angat Dam. The project was completed in July 2018. It greatly mitigated the potential impact of natural calamities such as earthquakes and typhoons on the dam and ensured the continuous fulfillment of the dam's purpose – to supply the needs of close to 13 million people counting on its services.

The ADDSP involved the flattening of the downstream slopes and the widening of the dam and dykes base. It also placed stabilizing fill in the main dam and the main and secondary dykes which improved the stability of the structures. new and modern dam instrumentation and monitoring system (i.e. stand-pipe piezometers, elevation monuments and strong motion accelerators) were installed. In partnership with Metro Manila Waterworks and Sewerage System and the National Power Corporation, the ADDSP also put in place a flood forecasting and warning system, and included various flood protection works. During the construction of the project, Indigenous Peoples (IPs), specifically from the Dumagat Tribe, and local community members as workers. The ADDSP provided them an additional income stream while working towards the improvement of the dam





# Limay

(102-2, EU1, EU10)

Limay Circulating Fluidized Bed  
(CFB) Power Plant



In October 2013, we ventured into one of our first greenfield projects - the Limay CFB Power Plant (the Limay Power Plant). This project is a 4x150 MW CFB coal-fired power plant located in Limay, Bataan.

The Limay Power Plant started its commercial operations in May 2017 with the commercial operations of Unit 1. It further

expanded its operations with the commercial operations of Units 2, 3, and 4 in September 2017, March 2018 and July 2019, respectively.

Presently, the plant is being operated and maintained by one of SMC Global Power's subsidiaries, Mantech Power Dynamics Services Inc.



302

Total employees

Plant Type	Coal-Fired Thermal Plant
Technology	Circulating Fluidized Bed (CFB)
Installed Gross Capacity	450 MW
Installed Net Capacity	405 MW
Installed Capacity by Regulatory Regime	Subnational (Luzon-Visayas Grid)
Net Generation	2,490.25 GWh
Number of Hours of Planned Outage	486.15 hours
Number of Hours of Forced Outage	1,624 hours
Average Availability Factor	85.25%
Energy Intensity	11,344.25 kJ/kWh





# Malita

(102-2, EU1)

Malita Circulating Fluidized Bed  
(CFB) Power Plant







196

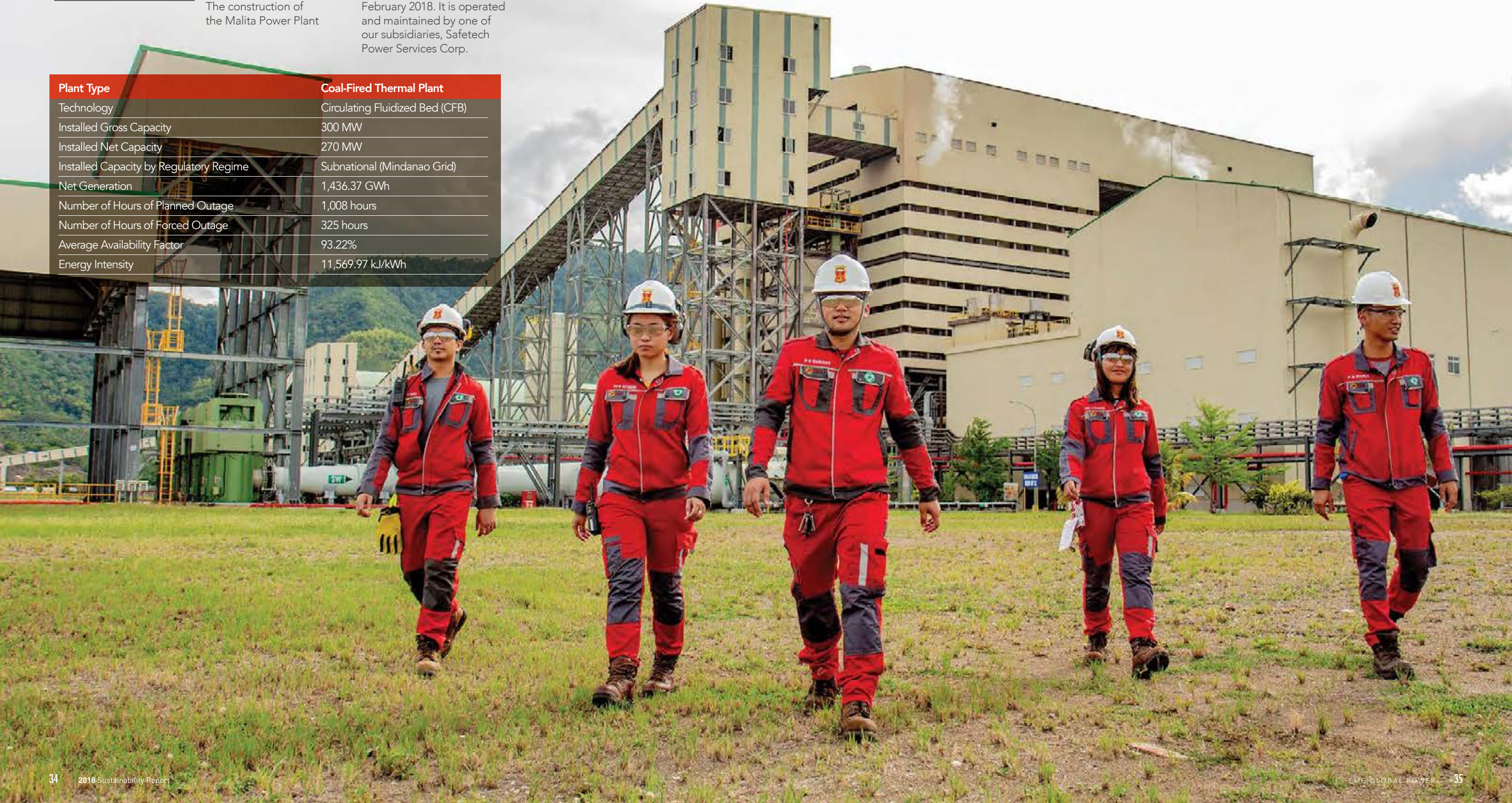
Total employees

To help address electricity shortages in the Mindanao grid, we embarked on the 300 MW CFB Malita Power Plant located in Malita, Davao Occidental. This plant makes use of the CFB technology. It is wholly-owned by SMC Global Power through our subsidiary, San Miguel Consolidated Power Corporation (SMCPC). The construction of the Malita Power Plant

commenced in September 2013, and achieved full commercial operations in February 2018. It is operated and maintained by one of our subsidiaries, Safetech Power Services Corp.

The construction of the Malita Power Plant commenced in September 2013, and achieved commercial operations in February 2018. It is operated and maintained by one of our subsidiaries, Safetech Power Services Corp.

Plant Type	Coal-Fired Thermal Plant
Technology	Circulating Fluidized Bed (CFB)
Installed Gross Capacity	300 MW
Installed Net Capacity	270 MW
Installed Capacity by Regulatory Regime	Subnational (Mindanao Grid)
Net Generation	1,436.37 GWh
Number of Hours of Planned Outage	1,008 hours
Number of Hours of Forced Outage	325 hours
Average Availability Factor	93.22%
Energy Intensity	11,569.97 kJ/kWh





(102-2, EU1,EU10)

# Masinloc

Masinloc Coal-Fired Thermal  
Power Plant





Plant Type	Coal-Fired Thermal Plant
Technology	Pulverized Coal
Installed Gross Capacity	659 MW
Installed Net Capacity	617 MW
Installed Capacity by Regulatory Regime	Subnational (Luzon-Visayas Grid)
Net Generation	3,956.35 GWh
Number of Hours of Planned Outage	945 hours
Number of Hours of Forced Outage	432 hours
Average Availability Factor	80.70%
Energy Intensity	10,321.77 kJ/kWh



In March 2018, SMC Global Power acquired the 659 MW Masinloc Coal-fired Thermal Power Plant and 10MW Masinloc Battery Energy Storage System. The Masinloc Power Plant is located in Masinloc, Zambales.

Units 1 and 2 of the Masinloc Power Plant started operations in 1998, with both units originally developed and owned by the National Power Corporation (NPC). These units have 315 MW and 344 MW capacity, respectively.

Meanwhile, Unit 3, with a capacity of 335 MW, shall start commercial operations on the first quarter of 2020.





# Economic Performance

## *Malasakit by Powering the Economic Progress of the Country*

As one of the leading energy companies in the country, SMC Global Power is a prime mover in supporting the nation's economic growth. Our commitment to bring about economic success is deeply rooted in our malasakit towards the people we serve. We aim to create a lasting, positive impact that will ripple to our customers and beyond, down to their end-consumers, our host communities, our employees, and ultimately the Philippine nation.

Construction site of the Masinloc Supercritical (Unit 3) Power Plant



## Direct Economic Impacts

# Energy as Catalyst for Nation-building

(102-45, 201-1)



demand for electricity grows with it. The Department of Energy has estimated that over the past ten years, energy demand has grown by 5.1% per year. They stated that there is a need for approximately 43,700 MW of additional capacity in the Philippines over the next 20 years. To help meet the electricity needs of the country, we embarked on various greenfield power ventures.

We are committed to contribute to the economic growth of the country through our energy operations. Aside from creating economic value, we ensure that the value we generate is distributed and shared fairly with our stakeholders. We consider their needs, and strive to live up to their confidence in us. We believe our continued investments in new technologies to consistently improve our operations and sustainability performance is our way of contributing to nation-building. We ensure that our presence contributes to the quality of life of our host communities by properly paying taxes to the government and providing adequate benefits, trainings, and ensuring the safety of our employees.

As of December 31, 2018, our business manages a total of 4,197 megawatts (MW) powering 19% of the National Grid, 25% of the Luzon Grid, and 9% of the Mindanao Grid, based on the total installed generating capacities reported by the Energy Regulatory Commission (ERC) of the Philippines.

Our entry into the power industry resulted from the reforms done to the Philippine power industry by virtue of the Electric Power Industry Reform Act (EPIRA) 2001. This law restructured the industry to promote competition in the generation sector, particularly by privatizing the power assets of the National Power Corporation (NPC). Our entry allowed us to help improve operations of

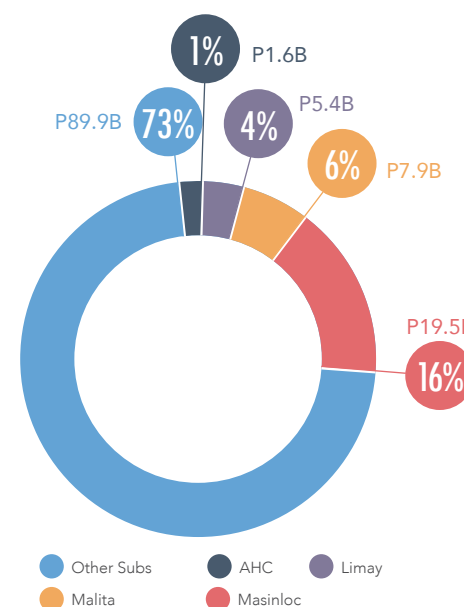
these power plants while aiding the government in managing its debts.

In 2008, we became the Independent Power Producer Administrators (IPPA) of the Sual, Ilijan, and San Roque Power Plants. These plants, along with the payments to the government under our IPPA contracts, still comprise majority of the economic value generated and distributed by our Company. In 2018, the total economic value we generated amounted to Php 124.2 billion, of which 27% is from company-owned and operated power plants. Of this, 73% is attributable primarily to these IPPAs and our other subsidiaries.

As the Philippine economy continues to grow, the

In 2018, our Company had economic value distributed amounting to Php 104.6 billion. About Php 5.1 billion of our distributed economic value is paid to the government in the form of taxes which are subsequently used to finance public services. We have also directly invested Php 297 million in the communities where we operate. Our operations created quality employment, with about Php 1.3 billion of our distributed economic value going to our employees. Aside from providing reliable energy, we recognize the extent of our indirect impact to the economy, particularly in our investments for our host communities and the effect it has in their development.

Direct Economic Value Generated  
(SMC Global Power)

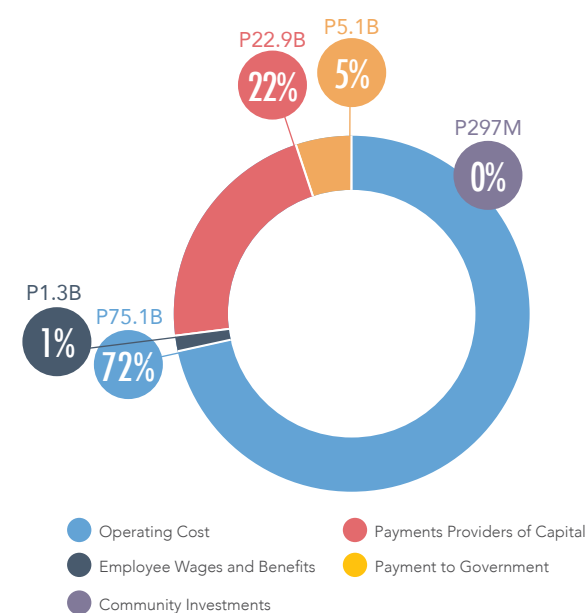


## Economic Impact<sup>1</sup>

# P124.2B

Direct Economic Value Generated (Revenues)

Economic Value Distributed Type  
(SMC Global Power)



# P104.6B

Economic Value Distributed

# P19.6B

Economic Value Retained

<sup>1</sup> Economic impact of all SMC Global Power subsidiaries



## Indirect Economic Impacts

# Powering Sustainable Local Communities (103-1,2,3, 203-1,2)

The energy sector is one of the industries with the largest contributions to economic growth. With this, we recognize the vital role we play in society. We take an active role in the development of the communities we serve,

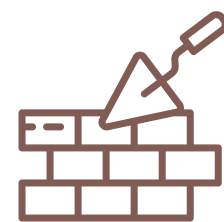
not only by providing reliable electricity at affordable prices, but also through our Corporate Social Responsibility (CSR) programs and partnerships with our host communities and customers.

In 2018, we conducted various infrastructure investments in partnership with our electric cooperative customers. These include infrastructure and services that promote safety and security, health

care, education, electricity, and employment. We also conduct CSR programs through the SMC Global Power Foundation, which focuses primarily on overcoming community challenges.



## Infrastructure Investments and Services in Support of Electric Cooperatives



### SAFETY AND SECURITY

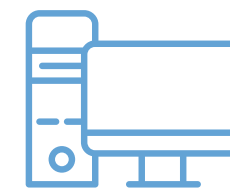
Expansion and construction of multipurpose hall/evacuation center

#### Beneficiaries

- Camarines Sur II Electric Cooperative, Inc. (CASURECO)

#### Impact

To secure the safety of the community before, during, and after a calamity



### EDUCATION

Donated desktop computers with printer to public schools and daycare centers in Tarlac Province

#### Beneficiaries

- Tarlac I Electric Cooperative, Inc.
- Dept. of Education - Tarlac Division
- Dept. of Social Welfare and Development - Tarlac

#### Impact

To provide assistance in lifelong learning for students, especially in today's technology



### EMPLOYABILITY

Provided and constructed PRESCO training center building

#### Beneficiaries

- Pampanga Rural Electric Service Cooperative (PRESCO)

#### Impact

To enhance and develop the skills of the local labor pool, increasing the number of skilled local workers who are readily available to respond to additional labor requirements



### HEALTH CARE

Donated medical and dental equipment for the community clinic

#### Beneficiaries

- Tarlac I Electric Cooperative, Inc. (TARELCO I)

#### Impact

To ensure access to quality and basic health care



### EDUCATION

Provided supplemental fund for the construction of PELCO I Knowledge Center Building

#### Beneficiaries

- Pampanga I Electric Cooperative, Inc. (PELCO I)

#### Impact

To provide assistance in the enhancement and development of facilities to engage students in learning



# Malasakit through Constant Support and Partnership with our Communities

As our Company grows, we support our host communities and help them grow alongside us. Guided by our thrusts in social development - Health, Education, Livelihood, and Environment (H.E.L.En.), we continuously partner and collaborate with our host communities in crafting and implementing

programs that are relevant and responsive to their needs.

Through our SMC Global Power Foundation, we are able to strategize and implement our H.E.L.En program in ways that will enhance the local economic and social conditions. This reflects our value of malasakit and



shows our commitment to create a positive and lasting impact in the communities we serve.

Our operations benefit not only our employees, but indirectly, their families and the local communities. In 2018 alone, we estimate an additional Php 200 million was spent by our employees on site, through consumption of products and services sold by small businesses in our host communities.





# Showing our *Malasakit* for our Local Communities

(103-1,2,3, 413-1)

Our commitment to the economic and social development of the communities we serve manifests on our Social Development Programs (SDP). These programs, implemented through our Foundation, have created a lasting positive impact to these communities in the areas of Health, Education, Livelihood, and Environment (H.E.L.En.).

We have aligned all our H.E.L.En programs with the United Nations Sustainable Development Goals (UN SDGs). Our SDPs are anchored on three pillars: commitment, empowerment, and effective stakeholder management. Our commitment is tied-up to our value of malasakit. We empower our employees and our host communities by promoting a sense of co-ownership of our programs with our stakeholders. Lastly, we actively engage all our stakeholders by maintaining an effective and open line of communication with the community members to



make sure their concerns are heard, recognized, and considered.

We conduct regular community visits, get involved in important community activities, and hold monthly coordination meetings with the Local Government Units (LGUs). These efforts help us holistically maintain good relationships with our host communities, LGUs, and partners.

We conduct regular medical and dental missions in the communities we serve. We also sponsor the construction of health clinics and upgrade of medical equipment to provide better healthcare access for our host communities.

Our education programs aim to enhance the skills of public school teachers as well as the reading

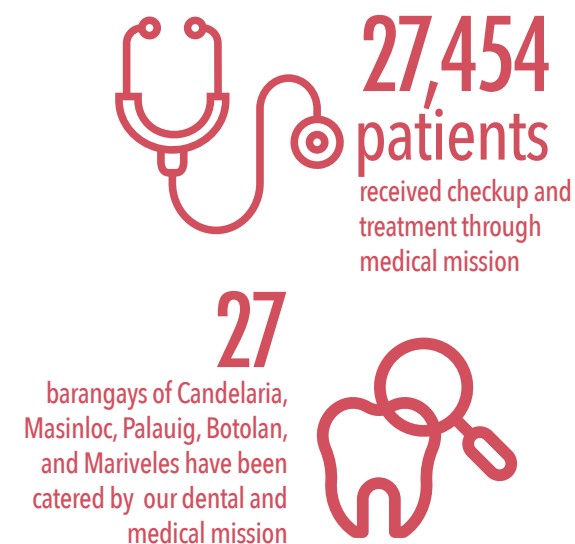
comprehension of pupils in Kinder and in Grades one to three, as these are the critical stages of development for reading and comprehension skills of children. We provide scholarship programs that develop young adults in our host communities by sponsoring their tertiary education to help prepare them to become professionals and productive members of the labor force.



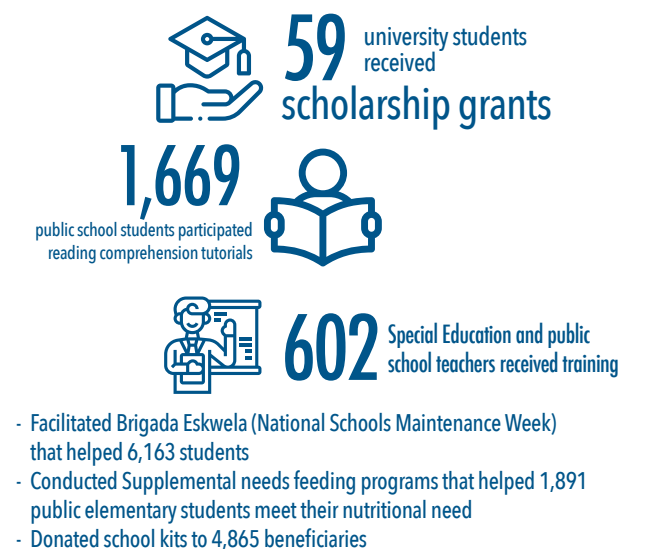
## SMCGP Philippines Power Foundation Programs

Our desire to create a positive impact on our partner communities has been our motivation to provide them with relevant programs on health, education, livelihood, and environment.

### HEALTH



### EDUCATION



### LIVELIHOOD



### ENVIRONMENT







# Upholding the Rights of Indigenous People

(103,1-2,3, EU22, 411-1)

For the communities we operate in, particularly in Malita and Angat, we share the land and natural resources with Indigenous Peoples (IPs). We strive to be good neighbors to all our host communities, and respect the unique cultures and beliefs that are being practiced, including those by minority groups. Our programs for IPs include human capital development programs that aim to hone their knowledge and skills and provide a better future for themselves, their families, and their tribes, in a sustainable manner.

In the Malita Power Plant in Davao Occidental, majority of the population belongs to various IP cultural groups. We promote and advocate inclusive growth through the implementation of culturally-sensitive CSR programs. We achieve this by involving the IPs and other stakeholders in the

design, implementation, monitoring, and evaluation of our projects. We regularly consult IP leaders through the LGUs for a more collaborative, meaningful, and participatory engagement.

In the case of Masinloc Power Plant, where operations do not directly affect IP groups, we implement programs for nearby areas where IP groups are located such as the municipalities of Palauig and Botolan in Zambales.

A number of IPs in Botolan collect wild honey from the forests as a source of income. However, they are forced to sell their harvest at low prices due to the absence of a processing facility for the wild honey. We donated a honey processing plant for use of IPs, which allows them to meet the high demand for wild honey in the local

and international markets, and increase their profit. Our Foundation also offers educational assistance to IP college students under the Tulong Dunong program. In support of our efforts dedicated to IPs, we also conducted the Biochar Community Enterprise Development Project, which converts forest organic material to fertilizers.

Following an assessment of a third-party service provider for the Angat Dam and Dykes Strengthening Project, 15 affected Dumagat families were relocated. We provided the affected families with new housing units with access to water supply, electricity, and appropriate drainage and sewage systems. We also provided them with transportation assistance when they moved to their new homes.





# Social Performance

*Malasakit* as our Way  
to Protect Employee Welfare







# Malasakit as the Driving Force to Protect Employee Welfare

One major contributor to our success is our employees. They play a vital role in our expansion and growth. We believe that it is only right to develop our employee's skills and give them career opportunities to allow them to grow and succeed with the Company. As one of our most important stakeholders, we provide our employees with fair compensation, just benefits, and work-life balance as part of our holistic approach to our human capital management.

To promote employee engagement, our sites conduct regular communication meetings to update them on organizational activities, changes in policies, guidelines, procedures, systems, and employee movements. Recognition is also given to outstanding achievements by employees during such sessions. Aside from these, each department in our power plants holds regular toolbox meetings, knowledge sharing sessions, and coffee table meetings. During these

sessions, employees are informed of new management directions and are given the opportunity to provide feedback. Generally, our employees are encouraged to raise their concerns and voice out their opinions so that our operations remain as collaborative as it is productive.



## Diversity & Equal Opportunity and Non-discrimination

# Promoting Equality in the Workplace (103-1,2,3, 405-1,2, 406-1)

We promote diversity in the workplace by hiring employees of different backgrounds. We believe that this practice makes the workforce more agile in responding to changing market dynamics. We strive to uphold human rights including that of the right to non-discrimination. We ensure that all potential employee candidates and our employees are given equal opportunities. Recruitment, hiring, training, and movements are strictly based on individual competencies and expertise.

We adhere to the Republic Act 6725 which protects

against the discrimination of women with respect to the terms and conditions of their employment. Due to the higher number of males in engineering courses, the current pool of our employees has more males than females. However, we make it a point to give equal opportunities to our employees, regardless of their gender, and strive to promote better representation. For example, our Malita Power Plant seeks to increase the proportion of women in the workforce by 4% in the coming years. The current number of male employees does not restrict opportunities for the

advancement of women. In fact, our General Manager, a licensed electrical engineer, is a woman.

Our Company also observes the Anti-Discrimination Act of 2017, which protects our employees from discrimination in all operations of our business. We do not consider age, gender, religious, nor ethnic affiliations as bases for prospective employment. Our target is to maintain our 2018 performance of zero records of discrimination. To support this goal, we ensure open communication between

the management and our employees through an open-door culture and open dialogue activities in various settings such as one-on-one employee-manager meetings, team building exercises, coffee table discussions, monthly communication meetings in the sites, or the regular toolbox sessions.

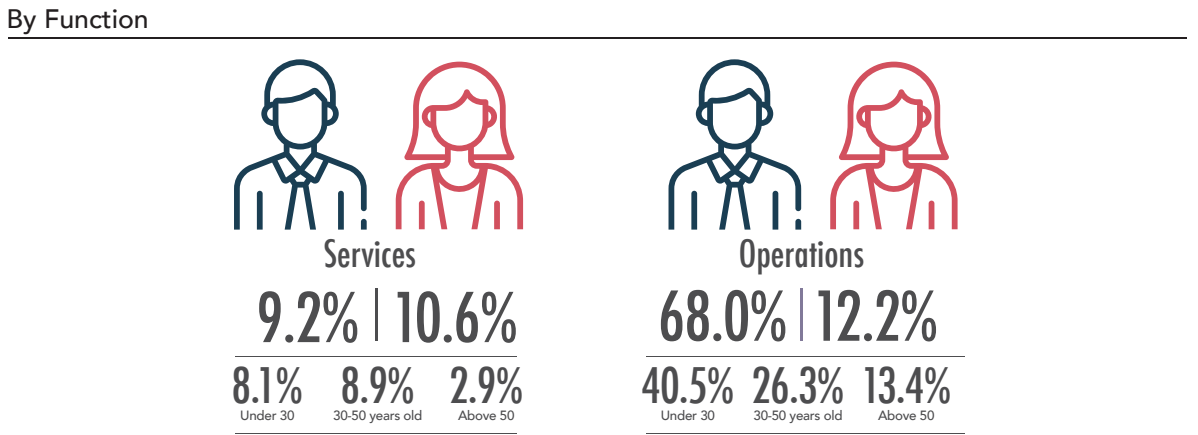
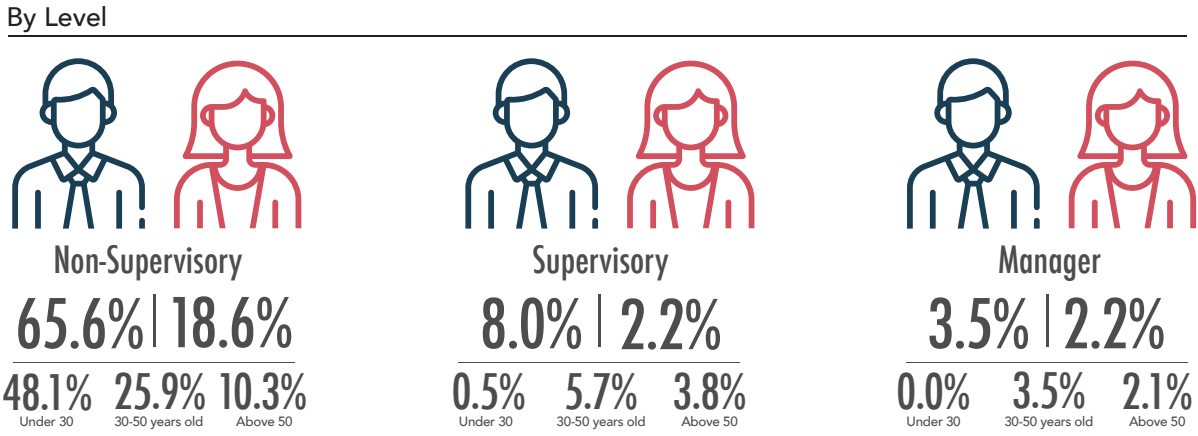
We also make sure that our business is free from risks of child labor, forced and compulsory labor, and violation of people's freedom of association.



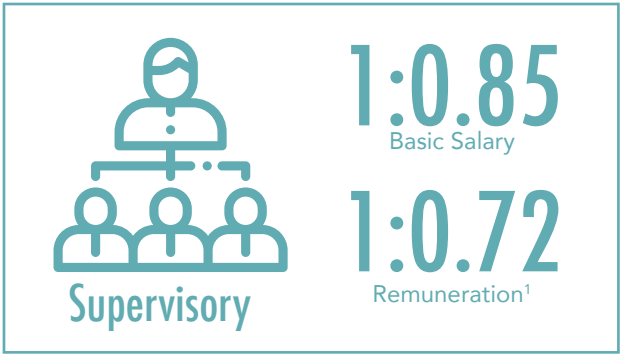




Percentage of employees per employee category in each of the following diversity categories by Gender & Age group



Ratio of the basic salary and remuneration of women to men for each employee category



<sup>1</sup>Includes basic salary, over time pays, and bonuses

While male employees account for 77% of SMC Global Power's total workforce in 2018, female employees, earn slightly higher than males in the supervisory and managerial levels, in terms of gross monthly basic pay and total remuneration. This is mainly influenced by the fact that our female employees, although fewer compared to males in these two employee groups, are composed of more senior employees or were hired at higher rates due to their more extensive work experience. However, the scenario is reversed in the non-supervisory employee group.



Women and Men are paid commensurate to their performance and experience. In 2018, women were actually paid more than men on average across employee category.



Gender equality and women empowerment is one of the priority areas of SMC Global Power.

Ms. Ruiz, who was the former Public Information Officer of Candelaria, now works as part of the SMC Global Power Foundation. Prior to her employment, she was trained under our Foundation's programs on community enterprise development in Masinloc, Zambales. She coordinates various projects to empower women in the host community of the Masinloc Power Plant. This includes the Bani Mothers' Club, which capacitated mothers through sewing and entrepreneurship trainings in partnership with the DTI and the donation of sewing machines. She also worked with local women leaders to develop a community-based water system to ensure safe water access for the municipalities of Candelaria and Masinloc. Her contribution to SMC Global Power cannot be equated to her being a woman, but by her sharing her malasakit to the people we serve and empowering other women to have malasakit for their communities as well.

In our power plants, women are not just employed as regular manpower but are actively involved in decision-making. Female leadership is showcased in crucial departments such as the SMC Global Power Foundation, in which 50% of the members are women. In the Masinloc Power Plant, the Human Resources, Community Relations, Planning, Safety and Environmental departments are all led by women.

“SMC Global Power is not looking at your gender, but your POTENTIAL.”

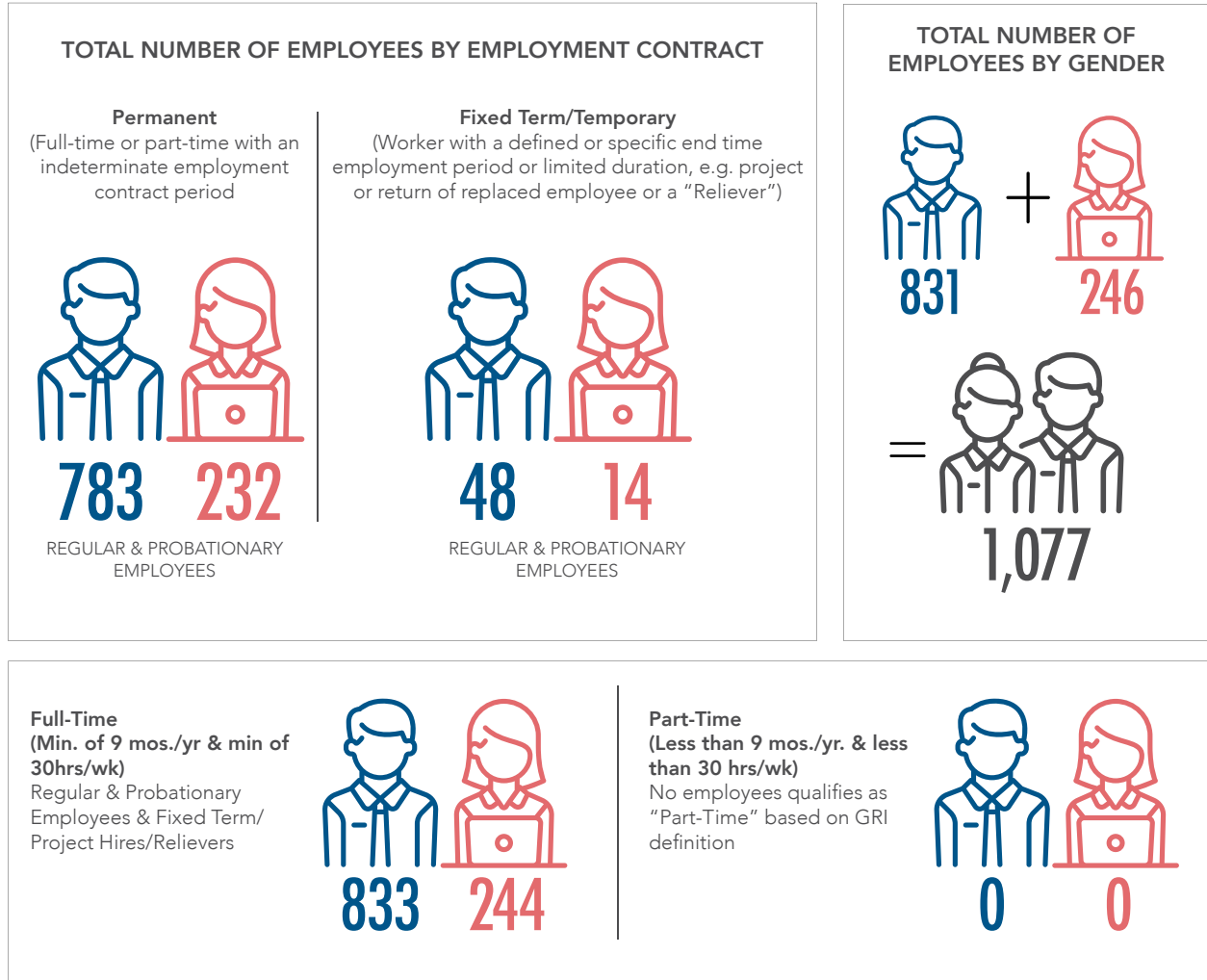
**Rosycris Ruiz**  
SMCGP Philippines Power Foundation



# Employment

(102-8, 103-1,2,3, 202-1,401-1,2,3)

The success of our Company can be attributed to the hard work and commendable skills of our employees. They are essential to our overall success, which is why we strive to recruit the best talents and continuously seek to improve our people management programs.



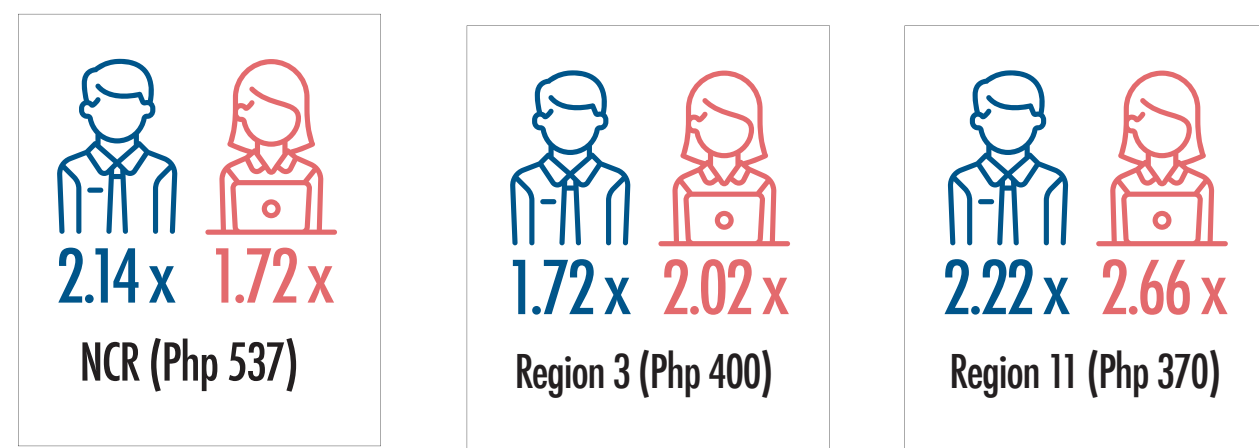


## Employment and Labor Management Relations

Parental leave is one of the standard benefits that a full-time employee is entitled to. As testament to their satisfaction with their work, **100%** of our 31 male and eight female employees who availed this benefit in 2018 returned to work.



## SMC Global Power entry level standard wage versus local minimum wage



Providing a better future for our employees starts with creating a workplace that offers a safe, healthy, and secure environment. We conduct an annual review based on available market data and trends in the Philippine energy industry to ensure our compensation and salary structures are competitive. We make sure that our employees are receiving above average

compensation by providing them more than the regional minimum wages set by the Department of Labor and Employment (DOLE).

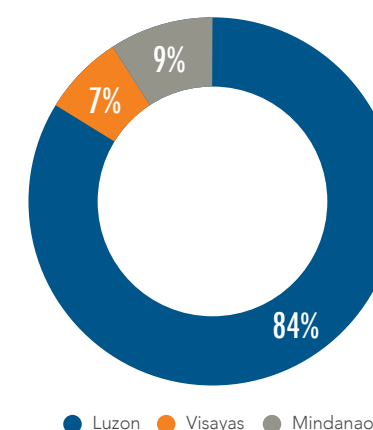
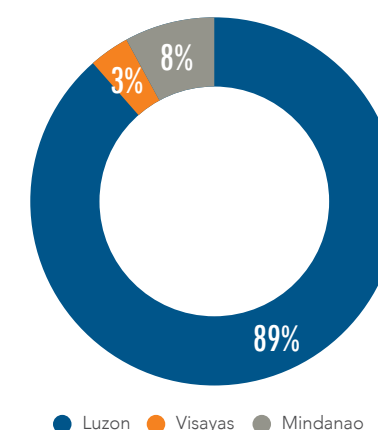
We are committed to further develop our employees' competencies by building and supporting their capabilities and providing opportunities for career advancement in consideration of

both current and future assignments. Our Manpower Selection and Placement Policy specifies that our selection process is based on merits and aptitudes.

The large share of recruitment in Luzon is primarily due to our expansion plans in the Luzon grid and hires for support functions based in the division office.

The higher turnover rate in Luzon versus other geographical regions is brought about by the number of opportunities outside of the Company in the National Capital Region. We seek to attract and retain new talent by offering competitive salary packages and through our holistic employee engagement programs.

EMPLOYMENT HIRES AND TURNOVER NUMBER AND RATE		New Hire		Employee Turnover	
		Number	Rate	Number	Rate
BY GENDER	Male	158	20.28%	49	6.29%
	Female	38	15.23%	39	15.63%
BY AGE GROUP	Under 30	27	12.25%	29	2.82%
	30-50 years old	61	5.93%	42	4.08%
	Above 50	9	0.88%	17	1.65%
BY REGION ASSIGNED	Luzon	175	14.14%	81	6.55%
	Mindanao	21	11.08%	7	3.69%

New Hires by Region<sup>1</sup>Employee Separations by Region<sup>1</sup>

<sup>1</sup>Breakdown of employees' hometowns per region



# Acquiring AES Philippines in 2018

(103-1,2,3,402-1)

As part of our growth strategy, we acquired various assets of The AES Corporation in the Philippines (AES), including the Masinloc Power Plant in 2018. This move was communicated to the affected employees in plenary sessions conducted in their former head office and in the Masinloc Power Plant.

During the initial stages, the former management team of AES and SMC Global Power formed integrated management and project teams to conduct small meetings with the affected employees. With the goal of achieving a smooth transition for all parties, we undertook a one-year transition period for these employees.

We reviewed, planned, and integrated the systems of the former AES Philippines Team with our own systems during the transition period. This transition period helped ensure that the concerns and issues raised by employees were addressed. We also provided enough time for these employees to examine their individual career plans and options beyond the one-year transition period from SMC Global Power's acquisition of AES Philippines. In 2019, the full integration of employees from AES Philippines to SMC Global Power was completed.



# Equipping our People with the Right Skills to Succeed

(103-1,2,3, 404-1,2,3, 410-1)



We recognize the importance of training and development of our workforce to maintain our competitive edge. We enact our Learning and Development (L&D) Policy which aims to equip our employees with the required knowledge, skills and competencies, and attitudes or behaviors, that will help them meet the

individual expectations for their role as well as achieve organizational goals. Opportunities are open to all employees who are interested in taking on new roles. Our career progression plan encourages our employees to undergo on-the-job training or cross-posting. Developmental or special assignments in areas

within or outside of their current job or function is practiced in order to hone their technical, functional, or leadership skills, and bring them closer to advancement.

At the center of our L&D Programs is our Career Discussion practice. By setting an occasion for a superior and subordinate

to engage and to sit down and deliberate on the latter's individual development and career plan, we encourage our employees to plan their futures in our Company. Both parties have a say on whether an incumbent is best suited for or has inclinations towards either a purely technical track or a management career track.



Basic Fire Fighting training for employees

In the same constructive dialogue, one's strengths and areas for improvement are thoroughly reviewed and discussed based on the superior's assessment. Such dialogues are conducted every year and after an employee's cross-posting, developmental or special assignment. This acts as another form of developmental intervention for our employees. Consequently, each employee should have a written and agreed Development Plan, which both parties commit to purposefully implement and monitor.

To keep our workforce updated with the latest trends and best practices in the industry, we have internal development programs and external training courses conducted by reputable institutions. We also have an Education

Program for qualified employees who wish to pursue higher education. These initiatives intend to deepen or advance their levels of expertise in their respective fields or functions. We promote a "pay for performance" policy in terms of compensation. Generally, a demonstration of one's competency that brings positive results to the organization is rewarded appropriately and competitively.

A Personal Development Program is also an avenue for our employees to grow. There are assessments in place to provide our employees with a comprehensive skill-gap analysis designed to improve the training opportunities that will be provided to them in the future. Complementing this program is our in-

house training led by internationally-accredited facilitators and coaches. This aims to enhance technical capabilities and capacity for cross-posting for leadership roles internally or across business affiliates. Overall, we believe that through these training programs, we can show our support to our employees' continuous and holistic development.

Continued expansion necessitates the growth of our workforce, which we see as more than just a process of recruitment. Instead, we view it as creating opportunities and developing people to become part of our Company. We hope that by investing in our people, they, in turn, will contribute to our greater mission.

For 2018, we conducted training programs to

equip new hires and fresh graduates, including many of our scholars, with the right technical skills and knowledge to become productive and to efficiently operate new power plants.

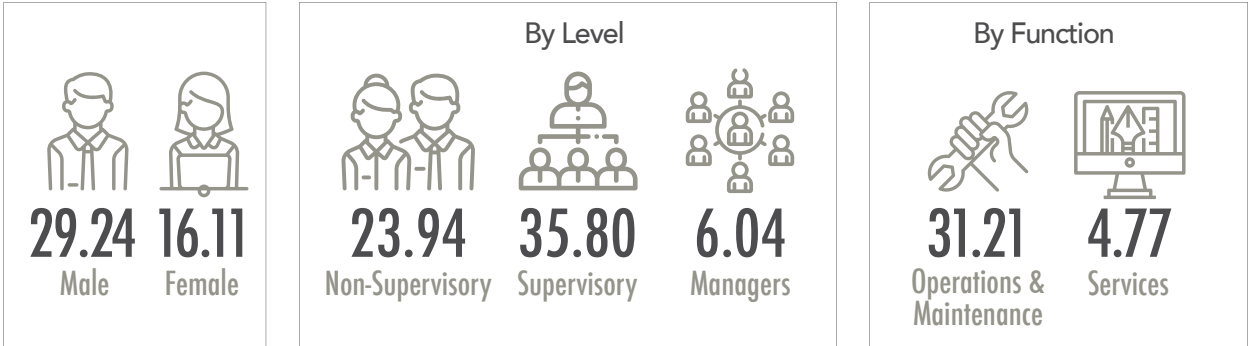
Newly-hired employees received classroom and hands-on training in our Limay Power Plant. We strive to provide equal number of training hours across all employee categories and ensure that they gain the skills that they need. However, this reporting year's data reveal that our male employees appeared to have received more training hours. This is primarily due to the larger number of technical trainings provided to the operators of our power plants, of which males represent majority of the population.





Training and Education

Average hours of training per year per employee



Masinloc Security Personnel Trainings for 2018			
Training Title	Participants	Training Provider	Month
General EHS Orientation	49 ESAC SG	MPPCL EHS	January
Gun Safety Training	49 ESAC SG	ESAC	February
Firing Proficiency Training	49 ESAC SG	PNP Candelaria	April
Basic Fire Fighting	49 ESAC SG	BFP Masinloc	May
Basic Fire Aid with BLS/CPR	2 ESAC Officer	Philippine Red Cross	September
Bomb Threat Awareness Seminar	49 ESAC SG	PNP Region III	September

From Enrollment to Employment:



Jireh Areniego is one of the scholars of SMC Global Power and now works at the Limay Power Plant. She is from Balanga, Bataan, and took up Mechanical Engineering at Bataan Peninsula State University as a scholar with the Department of Science and Technology. It was her childhood dream to become an engineer, but she worried about the opportunities available for women in her field. She thrived in the university and was active in student organizations while maintaining her place as a consistent dean’s lister.

On her last year at the university, their family experienced financial difficulties. Her review for the engineering board exams would have been delayed had it not been for the timely scholarship opportunity offered by SMC Global Power through the SMC Foundation. As a review scholar, her review center fees were fully sponsored by SMC Global Power on top of housing, book, and miscellaneous allowances.

With this support and her own hard work, she became a licensed Mechanical Engineer and joined the Limay Power Plant. She let go of other job opportunities in the area because of her desire to practice her engineering in a power plant. As a newly-licensed engineer, she underwent 10 months of rigorous learning sessions and hands-on training.

Her scholarship and eventually her job at the Limay Power Plant gives her a sense of security for her future. Her work now focuses on Engineering, with special attention to preparing for SMC Global Power’s expansion projects

Our scholarship program helps students from all walks of life achieve their dreams by assisting them in completing their studies and by providing quality employment. We offer scholarship programs to assist the families of our local community, including the Indigenous Peoples in the area. Scholars can receive financial assistance as early as university up to the review period for their board exams. Upon securing their professional licenses, they are given the opportunity to apply for and join our company.

Aside from developing the technical skills of our engineers, we try to ingrain our values such as malasakit to our employees by engaging them in our different CSR programs such as coastal clean-ups, blood drives, and medical and dental missions. The skills and values built during their onboarding program converge in hopes that the employee takes pride in their work, seeks to do it well, and realizes its impact on society.

“I am very grateful for San Miguel because without their financial support, I wouldn’t have gotten my Engineering license on time. The scholarship gave me chances to improve, the early career trainings equipped me for work, and now my job allows me to continuously learn.”

Jireh Areniego  
Mechanical Engineer, Limay Power Plant



# Providing a Safe and Secure Workplace for our Employees

(103-1, 103-2, 103-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10)



We employ a holistic view on employee safety. We believe that safety goes beyond security in the workplace and should also encompass their health and overall welfare.

While our leaders remain responsible for implementing, maintaining, and overseeing safety and health regulations along with programs that support it, we believe that it is

equally important to foster a culture of safety. We view health and safety as a collective responsibility.

We ensure that all areas of our operations and all our employees are covered by an Occupational Health and Safety (OHS) Plan. This covers laws, standards, and programs on health, safety, and welfare in the workplace. This plan specifies the control

measures that are used by our business to mitigate risks and ensure that our employees and visitors to our facilities are kept safe and healthy within the premises of our power plants.

All of our power plants are certified with the OHSAS 18001:2007 Occupational Safety and Health Management Systems. All policies, rules, and

regulations are aligned with the international and local standards governing occupational health and safety in the workplace.

We instill proactive safety practices by conducting Leadership Safety Walks, peer-to-peer work activity observations, safety inspections, and reporting of near misses and workplace hazards.

We also identify possible OHS hazards, assess risks, and determine necessary control measures. All these are considered when maintaining our OHS System. This procedure covers all persons from employees and contractors to visitors at the power plant, and all OHS-related possibilities with respect to equipment, processes, work areas, materials, and human capabilities—whether routine or non-routine, permanent or temporary, inside the plant or within the vicinity. With these processes, we were able to achieve zero work-



**1.8million**  
SAFE-MAN HOURS FOR  
EMPLOYEES



**2.2million**  
SAFE-MAN HOURS FOR  
CONTRACTORS



related ill health within our reporting period for all sites.

Prior to deployment in our power plants, our employees undergo comprehensive OHS trainings before and during their stay. Upon joining the Company, these employees must attend a safety orientation to educate them on the basics of plant safety practices. This is supplemented by talks about various safety topics during monthly safety meetings. Periodical training programs on hazardous work processes are also provided and customized to the needs and requirements of the plant. These include protocols on permits to work, confined space entry, work at heights, and hot work safety. All contractors and visitors of our facilities are also required to undergo a thorough safety orientation that must be renewed annually, prior to commencing their work contracts.

We also follow an incident management procedure that outlines how to investigate work-related incidents and illnesses. This is further conducted using a root-cause analysis approach to identify the causes of incidents and determine corrective actions to prevent recurrence of the incident.

To encourage best practices, the Malita Power Plant has pioneered an Environment, Health, and Safety (EHS) Committee. The EHS Committee is composed of members from different departments at the plant. Specific EHS concerns are raised by the members during the regular committee meetings. Mitigating actions are developed collaboratively and are cascaded across the organization by the EHS Committee.

To help our employees prevent, control, and manage illnesses and

diseases, we conduct awareness programs to share relevant health information. Such programs are implemented through our company clinics and in coordination with local health care providers.

To ensure the integrity, safety, and security of our offices and power plants, we developed various internal policies aligned with relevant laws to ensure that no human rights will be violated by security personnel in the discharge of their functions. We outsource our security workforce through security agencies that are duly-accredited by the Supervisory Office for Security and Investigation Agencies (SOSIA) and require them to follow all relevant human rights and safety policies. These include:

1. Rules of Engagement (Firearms Policy) - defines the specific conditions in which the security personnel may justify the use of coercion or intimidation as an act of self-defense to save their lives or that of others during situations of danger and imminent threat.
2. Warrantless Arrest, Search, and Seizure - defines the legal parameters on the conduct of legal warrantless search and arrest procedure for security personnel to

ensure that individual rights of the suspects were not violated during the conduct of legal warrantless search and arrest.

The security agencies have standard protocols and security procedures which the security personnel are required to strictly uphold and implement. For the reporting year, all of our security guards in our power plants were given proper training on the rules of engagement and comply with our policies.

While the strict implementation of policies is of utmost importance and, we believe, must be followed at all costs, we strive to maintain checks-and-balances in every situation. The advocacy on the UN Guiding Principles for Business and Human Rights has encouraged us to adhere to human rights policies, specifically by training our security personnel to protect and respect human rights in all our areas of operations. To strengthen our support for this effort, we implemented a grievance mechanism to monitor any human rights violations that may arise in the conduct and implementation of our policies. In 2018, we recorded zero complaints on security abuses or human rights violations.



# Environmental Performance

*Malasakit* as our Motivation for Proper Stewardship of Nature

Nursery site for seedlings at Sioasio East, Sual, Pangasinan with our partner People's Organization (East Forest Developers Association, Inc.)





**We ensure that our environment impacts are within government limits and standards to maintain compliance with applicable laws and regulations:**

- Philippine Clean Air Act
- Philippine Clean Water Act
- Ecological Solid Waste Management Act
- Toxic Substances and Hazardous and Nuclear Wastes Control Act
- Revised Rules on Prevention, Containment, Abatement, and Control of Oil Marine Pollution
- Department of Energy's Circular for Operator of Oil Rigs or Platforms, Power Plants, Tankers and Barges

There is a global need to change the way we treat the environment. The need to understand and control our environmental impact in all its forms, whether it be our impact on biodiversity, our use of resources, or the effects of climate change is imperative. We must do our part to ensure that our natural resources will be enjoyed now and in the future. Our malasakit for the next generation and the generations to come drives us to become responsible stewards of nature.

As one of the largest energy companies in the country, we know that we play a vital role in influencing this change. We

want to act as an institution that shows sustainability is a collaborative and balanced process, where economic growth can go hand-in-hand with proper stewardship of nature. We seek to be an example for our peers when it comes to the role of an energy company in sustainable development.

We balance economic considerations and environmental factors while meeting the need for reliable and competitively priced power. We utilize advancements in technologies to minimize our potential environmental impact and ensure that emission levels are in

accordance with the standards set by the local and national government, as well as multilateral international organizations such as the World Bank.

For our potential environmental impact, we strive for transparency and collaboration. We work closely with a Multipartite Monitoring Team (MMT)—stakeholders from the government and the community—who monitor our impact on the environment and ensure compliance to environmental best practices. We have developed Environmental Management and Monitoring Plans which outline our policy on

protecting and preserving the environment of our host communities, validated by the MMTs on a quarterly basis. We align our power expansion plans and environmental policies with the Department of Energy (DOE)'s Power Development Plan and the Department of Environment and Natural Resources (DENR)'s regulations.

Our first partners in environmental protection are our host communities. We help equip them with sufficient knowledge and skills to contribute to our joint efforts to protect the environment and conserve natural resources in our communities.

Carbon Sink and Bioindicator "Eco Park" Project inside the Malita Power Plant





# Handling our Materials Sustainably

(103-1,2,3,301-1,301-2)

We strive to keep sustainability ingrained in all of our efforts, even in the way we utilize raw materials to produce energy. In 2018, we utilized more renewable resources than non-renewable resources in our operations.

Water is the foremost renewable natural resource that we use. In 2018, 1,544 Million MT of water was utilized by our operations—the bulk of which is attributable to our Angat Hydroelectric Power Plant (AHEPP). Majority of the

water utilized flows down for domestic use and irrigation.

For non-renewable resources, these are primarily composed of coal and other materials such as limestone, diesel and silica sand. These altogether represent about 50% of our production costs. In 2018, our consumption of these non-renewable materials only amounted to 4 Million MT.

We find ways to incorporate malasakit for the environment and our stakeholders

to our operations. We continuously implement reliability and efficiency improvement programs which simultaneously minimize the environmental impact we create. We practice coal-mixed firing, which combines a certain ratio of high-grade and low-grade coal that improves operational performance and delivers significant savings in generation costs. This optimized consumption considers the plant's technical capabilities and performance, resulting costs, and our

environmental impacts. Overall, these initiatives help us provide power efficiently at affordable rates. We practice zero-waste efforts. Our Circulating Fluidized Bed (CFB) power plants intrinsically recycle bottom ash produced by reusing it within its system as bed materials for the furnace or as silica sand. We also collaborate with our other San Miguel Corporation affiliates by providing bottom and fly ash for use as sand and cement aggregates, respectively.



4 Million MT

NON-RENEWABLE MATERIALS  
(includes coal, limestone, silica sand and diesel for start-up )



1,544 Million MT

RENEWABLE MATERIAL  
(includes water)

Limay Power Plant launched a program in 2017 for the disposal of its fly and bottom ash, synergizing with its San Miguel Corporation affiliates and partners such as Eagle Cement Corporation (ECC), Northern Cement Corporation (NCC), and Petron Corporation. Dry bottom ash is hauled and used by Petron Corporation's CFB power plant as an alternative for silica sand, which serves as bed material for its CFB boiler. Meanwhile, ECC and NCC recycle fly ash by using this as a component for cement production.

	Angat	Limay	Malita	Masinloc	Total
Non-Renewable Materials	Not applicable	1,592,388 MT	923,280 MT	1,693,009 MT	4,208,677 MT
Renewable Materials	1,541,830,000 MT	792,948 MT	521,210 MT	665,667 MT	1,543,809,825 MT



# Promoting Energy Conservation in our Operations

(103-1,2,3, 302-1)

As part of our malasakit for the environment, we strive to responsibly utilize the energy in the fuels we use to produce electricity and to manage our energy consumption.

We leverage on new technologies and upgrade our facilities to burn less coal while meeting the electricity requirements of our customers. We also employ energy management systems to reduce energy consumption through initiatives like the reduction of diesel consumption during start-up and the reduction of electricity requirements of power plant equipment such as the primary and secondary air and draft fans, water pumps, air compressors, among others. Such initiatives allow us to effectively and reliably provide more electricity to the nation.

Our Malita Power Plant implemented an Energy Management System and have developed an energy use policy covering its operations. This led to their certification under the ISO 50001: Energy Management System. The Malita Power Plant was the first power plant in the Philippines to be ISO 50001 certified. These initiatives allowed the Malita Power Plant to cut down on their energy intensities, optimize their consumption, and establish methods and procedures in implementing best practices for the industry.

**As a result, Malita Power Plant was able to reduce its energy consumption by 645,013 GJ,** which allowed them to achieve an average 13% per month reduction

against baseline, equivalent to approximately Php 80 Million in savings.

We utilize technological innovations to improve our energy utilization. In our Masinloc Power Plant, we upgraded the steam turbine of Unit 2. The upgrade modernized the steam turbine by installing new High Pressure (HP)/ Intermediate Pressure (IP) and Low Pressure (LP) high efficiency rotors with internal casings. This allowed us to improve the thermal efficiency of Unit 2 by about 8%, increase its dependable capacity by an additional 29 MW, and achieve an equivalent forced outage factor of less than 3%. **The upgrade also allowed us to reduce our energy consumption by 729,414 GJ.**





## FEATURE STORY

# Turbine Retrofit: Enhancing Efficiency for Producing Greater Energy

"New technology = more efficient operations + improved environmental performance. That is our equation," said Mar Tuazon, Technical Services Unit Manager of Masinloc Power Plant. This strong statement materialized into action through our turbine retrofit initiative, which now serves as tangible proof of our commitment to excellence.

In 2018, the turbine of Unit 2 of the Masinloc Power Plant was upgraded, resulting in total energy savings of 729,414 GJ. This upgrade helped reduced carbon dioxide emissions by 375,349 MT, and paved the way for a more efficient and responsible method of utilizing coal. With this upgrade, we increased energy output while maintaining the same fuel input, effectively using less fuel for each KWh of energy generated.

With the Turbine Retrofit Project, the Masinloc Power Plant's environmental performance has improved significantly versus the prior year, particularly with regard to its energy output, fuel efficiency, and emission levels. The Masinloc Power Plant's retrofit is a prime example of our Company's efforts to increase stakeholder confidence while maintaining compliance with environmental standards. We see new technologies like this as ways to increase our grid reliability, lessen maintenance cost, and further improve our operational performance.





# Utilizing Water Responsibly

(103-1, 103-2, 103-3, 303-1, 303-2, 303-3, 303-4, 303-4, 306-1, 306-5)



Malasakit towards our communities drives our efforts to responsibly utilize water and to be good stewards of the bodies of water that surround us. We aim to use water responsibly to preserve the ability of the community members and the other businesses in the areas where we operate to utilize water now and for future generations. We recognize that as the population grows and the local economy is developed, the demand for water grows with it. Meanwhile, there are areas in the country where safe and potable water remains inaccessible. Our parent company has committed to reduce its water consumption by 50% over the next five years. We also constantly strive to reduce our water consumption, which stands at 328 megaliters (MI) for 2018.

For our Limay Power Plant, groundwater is the main source of water supply. Prior to construction, we identified that one of the potential impacts of the power plant is the discharge and potential pollution to the surrounding bodies of water. To mitigate the potential impact, we built wastewater treatment facilities in our power plants and employ other measures such as regular water quality testing to maintain the quality of water discharged within regulatory standards. We also implement regular maintenance of the wastewater treatment facility to maintain the reliability of our treatment facility. We also conduct efforts to reduce our overall consumption of water such as the recycling

of processed water for other uses – landscaping irrigation, and the regular monitoring and maintenance of our facilities to prevent leaks.

We ensure that our water use is in compliance with all relevant laws. For example, our Masinloc Power Plant extracts raw and potable water from the Luis River, while the water for the condenser cooling is being sourced out from the nearby Oyon Bay. These water extraction activities are duly permitted by the National Water Resources Board (NWRB). Likewise, the effluents being discharged into Oyon Bay are covered by the necessary discharge permits from the pertinent regulatory agencies.

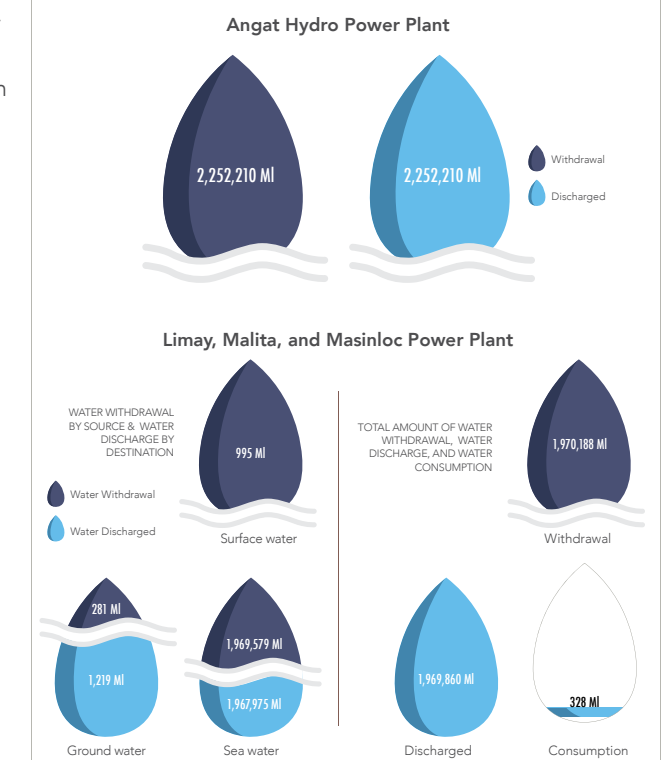
Certain features of our power plant were put in place to ensure the quality of water we withdraw and discharge. In Masinloc Power Plant, we have a discharge channel made of rubber stone, armor stone, and accropode. This design helps return the cooling water to the acceptable temperature levels prior to release into Oyon Bay. Our Malita Power Plant draws water from the Malita River. A canal was put into place to connect the bulk water facility to the river. Water is drawn from it primarily for the production of steam to be used in generating power. This water is also intended for emergency purposes, as well as plumbing inside the power plant. The effluent water is treated by our wastewater treatment plant and returned into the Davao Gulf compliant with standards set by

the Environmental Management Bureau of the DENR (DENR-EMB).

Water is the primary fuel utilized by the Angat Hydroelectric Power Plant (AHEPP). Water from the Angat Dam passes through the turbines of the main generators, producing electricity. The water is then released through the main tailrace down to the Bustos Dam, and eventually supplies the irrigation requirements of the farms in Bulacan and Pampanga provinces. Water also passes through the turbines of the auxiliary generators, producing electricity. This water then flows through the auxiliary tailrace to the Ipo Dam, which provides 97% of the requirements of Metro Manila.

We show our malasakit through the rigorous mechanisms we put in place to monitor and manage the impacts of our power plant operations. We regularly evaluate our water management system in both the upstream and downstream areas of our facilities to determine and ensure the mitigation of potential effects to the environment and neighboring communities. We gather water samples from nearby bodies of water and the water we discharge. These are brought to DENR-EMB-accredited laboratories for analysis, to determine the conditions and potential solutions and mitigating measures, if necessary. Our stakeholders are involved in monitoring the air and water impacts through our regular Multipartite Monitoring Team (MMT) meetings.

TOTAL AMOUNT OF WATER WITHDRAWAL, WATER DISCHARGED, AND WATER CONSUMPTION IN MEGALITERS (MI)





# Strengthening our Biodiversity and Conservation Initiatives (103-1,2,3, 304-1,2,3)



Wild monkey found in Angat Watershed, Bulacan

Biodiversity is a primary indicator of the health of an ecosystem. When we preserve biodiversity, we help ensure the balance in the environment and protect ourselves in the process because of our inherent interconnectedness and reliance to nature. We rely on a healthy biodiversity as a source of food, water, and livelihood. Our malasakit

translates to proper stewardship of nature because of its necessity to the communities and to our business itself.

In support of this, we always strive to minimize the potential impact on the aquatic and terrestrial ecosystem surrounding our power plants. We established environmental action plans that include

regular monitoring of ambient water and commissioning third-party studies for terrestrial and aquatic life.

We launched our Project 747 which aims to plant at least seven million trees in four thousand hectares in seven provinces, which include initiatives such as upland and coastal rehabilitation programs,

“adopt-a-river” initiatives, and biochar production. We also conduct conservation projects such as, coastal cleanups, safe water access, and coral reef rehabilitation. These projects are done through our partnership with and the empowerment of the communities where we operate.

We regularly consult the communities where we operate and the Community Environment and Natural Resources Office of the DENR (DENR-CENRO) to identify locations that are suitable for reforestation and coral reef rehabilitation. We monitor our marine ecology on a quarterly basis through third-party organizations



Masinloc Oyon Bay

To improve survivability, we partnered with 20 community farmers assigned to manage the 54-hectare parcel of land where the seedlings were planted. We have also partnered with the Peoples’ Organizations (POs) of the three host barangays, the Provincial Environment and Natural Resources (PENRO), and Department of Environmental and Natural Resources-Environmental Management Bureau (DENR-EMB) for the protection of these areas. The POs provided incentives and monetary assistance while the PENRO continues to provide regular technical assistance to the farmers to ensure the success of the program.

We also take care of the water that surrounds our power plants. For example,

To preserve the ecosystems around our power plants, we installed air pollution control facilities that minimize the potential impact on biodiversity.

Additionally, in 2018, we commissioned the Natural Ecosystem Managers Organization (NEMO) to establish 10 artificial reefs (Ars) to add to the existing 16 Ars in Oyon Bay. We rehabilitated the corals

with the supervision of the members of the multipartite monitoring team (MMT). The results of these assessments are submitted to Environmental Management Bureau of the DENR (DENR-EMB).

Our Angat Hydropower Plant is situated within the Angat Watershed Reservation. This reservation is one of the remaining well-forested and managed watersheds in the country. The National Power Corporation has administrative control over the reservation area through its watershed management department.

During the construction of the Angat Dam and Dykes Strengthening Project, we recorded 165 terrestrial flora species belonging to 94 genera and 64 families, and 51 terrestrial vertebrate species in the Angat Watershed through

the terrestrial and flora monitoring conducted by our contractors.

Within our Masinloc Power Plant are five hectares of natural habitats for around 200 endangered Philippine ducks, roaming mostly within the vicinity of the ash pond. The ash pond is adjacent to the Masinloc Oyon Bay Marine Reserve (MOBMR) and is located around three kilometers from the San Salvador Fish Sanctuary. The MOBMR is a Category V maritime ecosystem classified by the International Union for Conservation of Nature (IUCN). Ecosystems under this category are defined by IUCN as protected areas where the interaction of people and nature over time creates areas of distinct character with significant ecological, biological, cultural, and scenic value.



Municipality of Malita in Davao Occidental

in 500 sqm of seabed by planting about 2,000 coral fragments through coral transplantation.

Several forest rehabilitation programs were initiated in the vicinity of the Malita Power Plant. In 2018, a total of 43,560 seedlings were planted in the area, achieving a survival rate of 47% or 20,487 of planted forest and fruit trees.

in the Malita Power Plant, we partnered with the DENR-EMB Region XI and the Barangay Council of Culaman, Malita, to “adopt” a one-kilometer stretch of the Malita River. Quarterly initiatives are being held to conduct clean-ups and monitor its physiochemical properties. This helped us maintain the river water’s attained dissolved oxygen at levels greater than 7mg/L, which aids in the survival of fish and other aquatic organisms.





# Minimizing our Emissions through Technologies

(103-1,2,3, 201-2, 305-1,2,4,5,7)

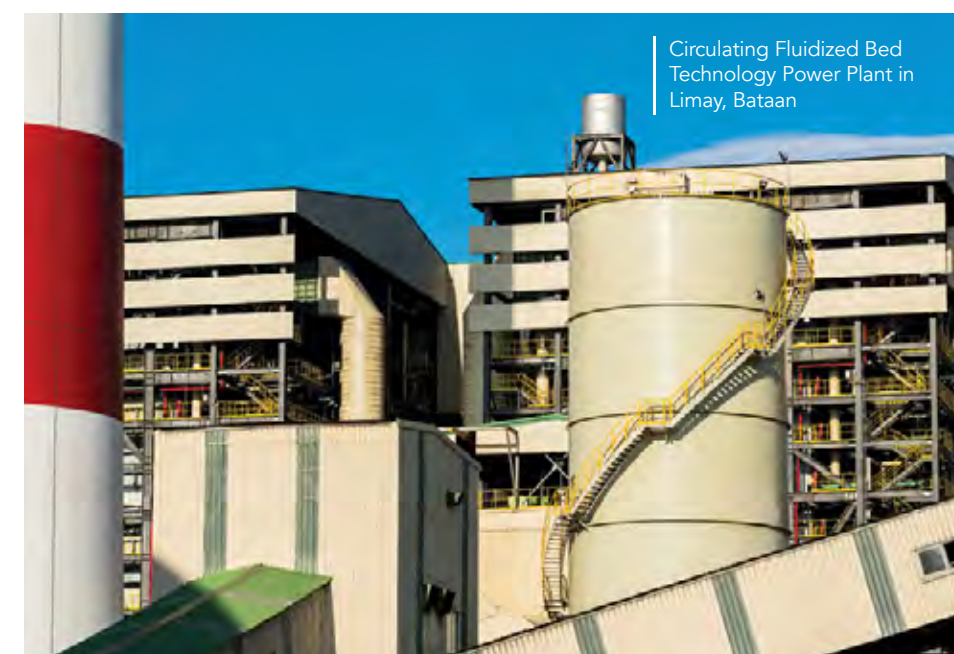
Supercritical Technology Power Plant (Unit 3) in Masinloc, Zambales



Circulating Fluidized Bed Technology Power Plant in Malita, Davao Occidental



Circulating Fluidized Bed Technology Power Plant in Limay, Bataan



Our malasakit extends not only to the land and water but also to the air. We recognize the need to monitor and control our emissions, and consequently protect the quality of the air the residents of our partner communities breathe. We conduct regular ambient

air monitoring activities to ensure the quality of the air and the levels of emissions are at acceptable levels set by the DENR-EMB. We leverage on technologies by our installation of new and state-of-the-art pollution control and monitoring devices, which help us consistently comply with

local emission standards and international emission benchmarks.

We adopted high efficiency, low emission technologies in our Circulating Fluidized Bed (CFB) and Supercritical power plants to provide quality services to our customers while minimizing

our emissions. These power plants have significantly lower emissions compared to traditional thermal technologies, particularly for sulfur dioxide, nitrogen oxide, carbon monoxide, and particulate matter. The CFB technology, with its complementary technologies and processes, achieves low emissions. Its lower combustion temperatures help reduce NOx. Limestone injection and electrostatic precipitators help reduce SOx and PM. Supercritical technologies on the other hand, use higher temperature and higher pressure to maximize thermal efficiency, thereby using less fuel and producing less emissions to generate the same amount of electricity. We also employ Flue Gas Desulfurization systems to reduce NOx of our Pulverized Coal power plants. Our investments in HELE technologies show our commitment to provide reliable and affordable energy while ensuring environmental preservation.

For the year 2018, we significantly reduced the greenhouse gas (GHG) emissions of the Masinloc Power Plant by 357,349 metric ton (MT) of carbon dioxide (CO2) through the turbine retrofit of Unit 2. Our use of good quality coal with lower sulfur content also helped reduce emissions. We also implemented a carbon sink program by planting trees within the buffer zone along the power plant's perimeter to reinforce our emission reduction initiatives.



## Other significant emissions by type of technology

### Circulating Fluidized Bed technology power plants:

	Limay	Malita	Department of Environmental and Natural Resources (DENR) Limit	International Finance Corporation (IFC) Limit
NOX	99 ppm	88 ppm	487 ppm	248 ppm
SOX	105 ppm	85 ppm	245 ppm	314-523 ppm
Particulate Matter	3 mg/ncm	7 mg/ncm	200 mg/ncm	50 mg/ncm

### Pulverized Coal power plant:

	Masinloc	Department of Environmental and Natural Resources (DENR) Limit	International Finance Corporation (IFC) Limit <sup>1</sup>
NOX	239 ppm	573 ppm	365 ppm
SOX	348 ppm	797 ppm	700 ppm
Particulate Matter	59 mg/ncm	200 mg/ncm	50 mg/ncm

### Mass equivalent:

	Limay	Malita	Masinloc
NOX	2,518 MT	2,353 MT	7,402 MT
SOX	3,076 MT	3,157 MT	16,241 MT
Particulate Matter	40 MT	92 MT	956 MT

### Greenhouse Gases Emissions

Site	Scope 1 (Direct) MT CO <sub>2</sub>	Scope 2 (Indirect) t-CO <sub>2</sub>	Emissions Intensity t-CO <sub>2</sub> /MWh	IFC Estimated Emissions Intensity <sup>2</sup>
Angat	0	0	0	
Limay	2,603,6512	6,479	0.9200	0.807-0.907
Malita	1,555,488	160,480	0.9500	0.951-1.362
Masinloc	3,610,295	556,273	0.8624	0.796-0.970
Total	7,769,434	716,753	0.8555	

<sup>1</sup>Pollution prevention and abatement handbook 1998 : toward cleaner production (English) | The World Bank

<sup>2</sup>IFC Environmental, Health and Safety Guidelines, CO<sub>2</sub> Efficiency @ % Net LHV; Others @ Solid Fuels >50 <600 MWh, NDA

Our significant air emissions are **lower than the prescribed limit of the DENR and within the estimate for comparable technologies as published by the International Finance Corporation.**

Climate Change is a reality for us, and is something that is factored into our corporate strategies. As a company that relies on natural resources for our operations, we can be directly affected by changes in climate. For instance, natural disasters such as typhoons, may result to interruptions in our ability to supply electricity. A single incidence of interruption may have opportunity costs of as much as Php 205 million in lost revenues which translates to Php 92 million in lost gross contribution. Prolonged dry seasons also affect the water levels in our hydroelectric power plants. A 10% reduction in the ability of our hydropower plant to generate electricity may result in an estimated loss in revenues of Php 157 million per year.

We do not only consider the impact of climate change on our finances but also on the stability of power supply. Interruptions in water supply of hydroelectric plants, or the impact of extreme weather conditions, can negatively impact the stability of the grid, and ultimately the supply of electricity in the country. We are constantly on the look out for renewable energy and other transition technologies to minimize the carbon footprint of the country while ensuring reliability, affordability, and stability of the its power supply.





# Managing our Wastes through Proper Disposal

(103-1,2,3, 306-2,4,5)

As part of our holistic approach to environmental stewardship, we have a variety of programs to manage our waste.

We manage the disposal of any hazardous wastes, which may include used oils and batteries. We secure the relevant government permits to properly dispose these wastes, such as Permits to Transport, Waste Manifests, Certificates of Treatment, and Certificates of Final Disposal, through our service providers. In 2018, our Masinloc Power Plant safely transported 75 metric tons of hazardous wastes in full compliance with relevant laws and with the required permits and certificates. Our Masinloc Power Plant has also partnered with Motolite for their “Balik-Bateria” program where certain

hazardous wastes are properly disposed of and recycled.

Most of our hazardous wastes are stored on-site and are treated by an accredited DENR-EMB service provider in compliance with Republic Act 6969 Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990.

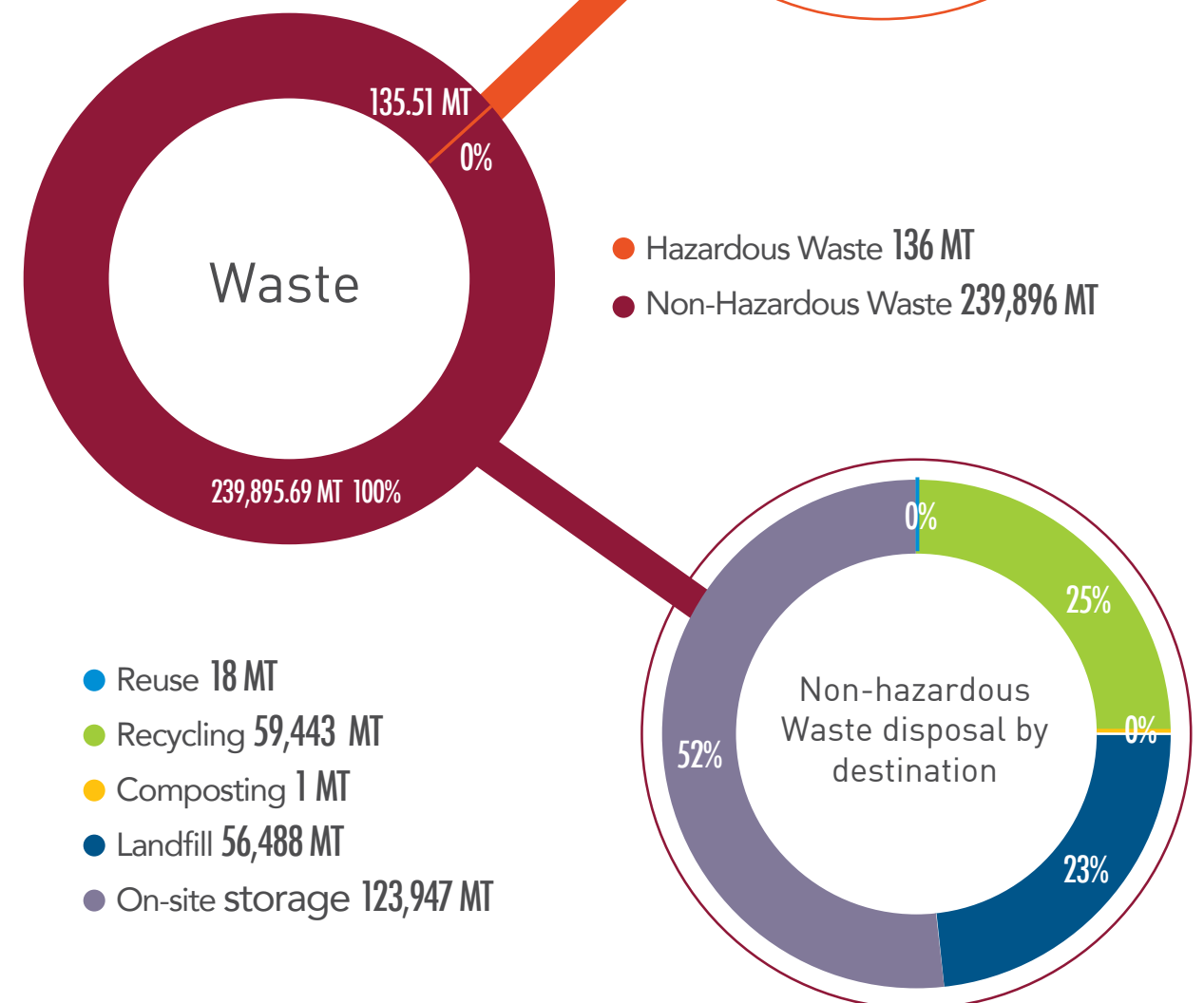
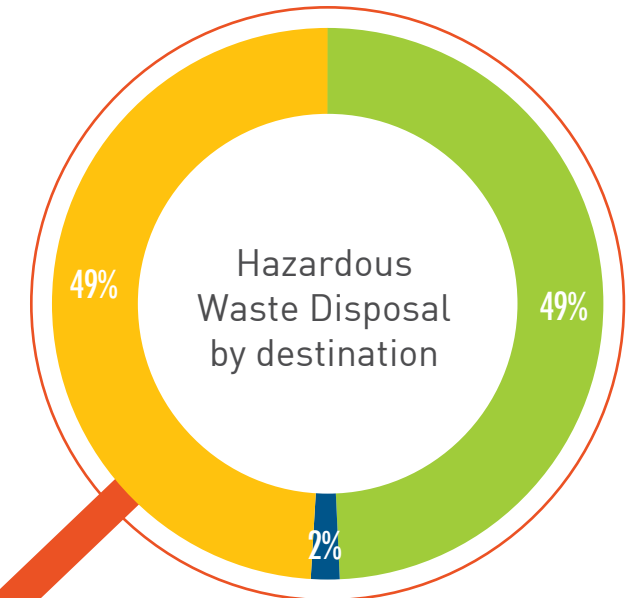
We dispose of our non-hazardous materials in various ways, with special efforts made to recycle and reuse. We donate our empty metal drums to the municipality to be reused as trash bins. These metal drums undergo proper washing and handling before they are donated to the municipality. Composting is also done for biodegradable wastes. Other materials are sold for recycling to scrap traders.

For the Angat Hydroelectric Power Plant, the non-hazardous wastes are segregated in a material recovery facility by a contractor. Wastes are recycled or reused, with residual wastes disposed by the contractor in coordination with the local community, in compliance with the Ecological Solid Waste Act of 2000.

For the Limay Power Plant, non-hazardous wastes are transported to an accredited sanitary landfill for final disposal. The disposal of recyclable wastes of the Malita Power Plant is done through a duly licensed contractor. All disposals are done in compliance with relevant laws and regulations.

## Waste by type and disposal method

- Recycling 67 MT
- Landfill 2 MT
- Composting 66 MT





A photograph of three children sitting on a large, weathered log in a lush, green forest. The child on the left is a boy wearing a white t-shirt and blue jeans, holding a large, colorful book. The child in the middle is a girl wearing a white t-shirt and a patterned skirt, holding a book with a colorful cover. The child on the right is a boy wearing a white t-shirt and dark shorts, holding a book. They are all looking down at their books. In the background, there are dense green trees and a body of water with a white cow grazing on the grass.

# Corporate Governance

How We Do Our Business

We believe that good and effective corporate governance is key to the long-term success of any business. We believe an effective corporate governance must have *malasakit* at its core.

We conduct our business practices in a responsible and ethical manner and aim to create value for our customers, employees, communities, and other stakeholders. These good governance practices have helped us achieve a competitive advantage in the energy industry.



# Our Board Members and Stockholders (102-5,18)

As a commitment to good corporate governance, we ensure that the members of our Board of Directors can deliver the best results not only for our Company and shareholders, but also for our stakeholders. We value their role as the main stewards of the business.

Since August 2010, our Company has been spearheaded by our Board Chairman and Chief Executive Officer, Mr. Ramon S. Ang. Concurrently, he has also been the President and Chief Operating Officer of the Company since April 2017; Chairman of the Executive Committee since September 2011; and Chairman and President of the subsidiaries of SMC Global Power such as San Miguel Energy Corporation (SMEC), San Miguel Electric Corp. (SMELC), South Premiere Power Corp. (SPPC), Strategic Power Devt Corp. (SPDC), SMC Consolidated Power Corporation (SCPC), and San Miguel Consolidated Power Corporation (SMCPC), among others.



As of December 31, 2018, the main governance bodies are as follows:

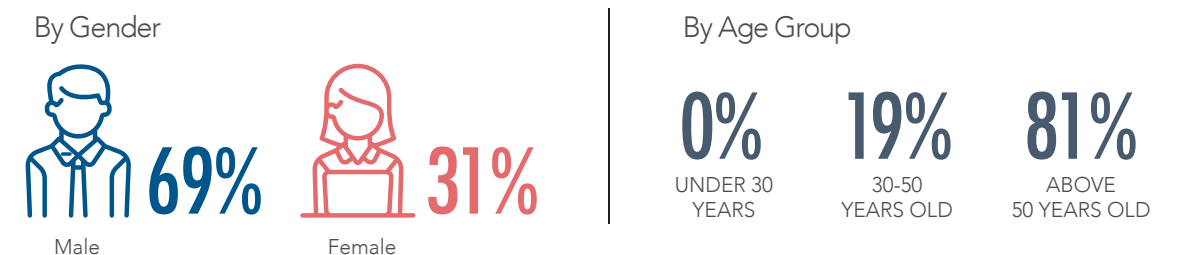
## Board of Directors

Name	Position
Ramon S. Ang	Chairman
Ferdinand K. Constantino	Director
Aurora T. Calderon	Director
Virgilio S. Jacinto	Director
Jack G. Arroyo, Jr.	Independent Director
Consuelo M. Ynares-Santiago	Independent Director
Josefina Guevara-Salonga	Independent Director

## Executive Officers

Name	Position
Ramon S. Ang	Chairman, Chief Executive Officer, President and Chief Operating Officer
Ferdinand K. Constantino	Vice Chairman
Virgilio S. Jacinto	Corporate Secretary and Compliance Officer
Elenita D. Go	General Manager
Paul Bernard D. Causon	Vice President and Chief Finance Officer
Ramon U. Agay	Assistant Vice President and Comptroller
Irene M. Cipriano	Assistant Corporate Secretary
Jeciel B. Campos	Assistant Vice President and Sales and Marketing Manager
Jose Ferlino P. Raymundo	Assistant Vice President and Energy Sourcing & Trading Manager
Danilo T. Tolarba	Assistant Vice President and Human Resources Group Manager
Reynaldo S. Matillano	Internal Audit Manager
Lorens R. Defensor	Data Protection Officer

Gender and age group distribution of the members of SMC Global Power's governance bodies





## Strengthening the Power of Integrity in the Workplace (103-1,2,3)

Our values are what drive us to succeed in this industry. Our values motivate us to conduct business with integrity and competence in everything that we do. We instill our corporate values to each of our employees through various means such as regular values formation workshops. All employees are expected to conduct their work in accordance with our Code of Business Conduct and Ethics.

We have strict financial controls in the form of internal and external audits. Such audits are conducted regularly. All of our procurement transactions are transparent

and subject to workflow approvals by management at various levels, up to top management. Based on the risk assessment conducted in our power plants, there are no significant risks identified related to corruption. We also adhere to a “no gift” policy, in which we refuse to accept gifts that might be construed as a form of bribery by individuals or entities that are doing businesses with our Company.

In 2018, there were no reported incidents of corruption in all of our power plants or among our employees.



## Maintaining our Adherence to Environmental and Social Protection (103-1,2,3, 307-1, 419-1)

We are committed to create a positive impact on our surrounding communities. For us, operational excellence goes beyond providing steady and reliable power. It also means taking care of the environment and empowering our communities through responsible and efficient operations of our facilities.

We comply with the standard parameters set by relevant government agencies. We ensure that permits and certificates of our power plants

are complete and valid at all times. We also constantly monitor any new legal requirements or international standards, including technological advances and international best practices. We strive to adapt these to improve our financial, social, and environmental performance.

In 2018, there were no fines or non-monetary sanctions imposed on the Company due to non-compliance with any laws or regulations.



## Putting Premium to Ethical Behavior (103-1,2,3, 206-1)

Our corporate value of Service Excellence drives us to foster a productive and service-oriented business environment. Our vision for the power industry is rooted in better serving the Philippines through our business operations. The primary goal is to provide affordable and reliable electricity to our stakeholders and help spur the growth of the economy. As a member of the San Miguel group, we provide electricity to our sister facilities in various industries

such as food, packaging, properties, and beverages. Providing power to our affiliates and our customers helps them create products that are more affordable and accessible for the Filipino people.

Our goal is to make electricity more affordable and reliable. While the Masinloc Power Plant, along with other market players, were subject to investigation for alleged market collusion or anti-competitive behavior due

to the Wholesale Electricity Spot Market (WESM) price hike in November and December 2013, and the WESM prices during the relevant period were reversed through the release of corrected pricing and settlement by the market operator, investigations yielded no findings against the Masinloc Power Plant.

We view market collusion as a practice that goes against our ethical code and governance policy,

and would ultimately be detrimental to our stakeholders including our affiliates. Market collusion would also negatively impact our business operations, because of the potential exposure arising from large contractual commitments to our customers at fixed tariffs. We view fair and affordable prices in the energy sector as an advantage because it promotes continued growth in the industry thus increasing our own opportunities.

## Upholding our Precautionary Principle (102-11)

Aspects of the precautionary principle are aligned with our risk management and decision-making processes. The decision to put up our greenfield power plants using state-of-the-art High Efficiency Low Emission (HELE) technologies balances the immediate and future needs and concerns of our stakeholders with potential risks and uncertainties. These technologies embody our vision to apply the best technologies

available to provide affordable and reliable electricity while heeding the imperative to address environmental concerns.

A standard part of our expansion process is a comprehensive due diligence prior to construction. These projects are carefully coordinated and consulted with the relevant government agencies such as the Department of Environment and Natural Resources (DENR),

Department of Energy (DOE), and the Energy Regulatory Commission (ERC). Our projects are aligned with national investment priorities, development plans, and the current needs of the country.

The studies we conducted for our operating facilities include an Environmental and Social Impact Assessments for the Limay Power Plant and Angat Hydroelectric Power Plant, and Environmental Impact

Assessment in Malita Power Plant and Masinloc Power Plant. These evaluate the potential impact of the power plants through methods such as air dispersion modelling and thermal plume. The information provided by these reports guide us in ensuring that the potential impacts of our power plants are within the relevant standards set by the government and do not cause degradation to the environment.





# Giving Importance to our Supply Chain

(102-9, 103-1,2,3)

We consider our suppliers as key stakeholders. Our suppliers are our partners in meeting the electricity needs of our customers and of the nation. We develop and maintain a sound relationship with our suppliers to maintain a robust supply chain process—one that has helped us operate our power plants efficiently and in line with our Corporate values.

We ensure that we partner with qualified

entities whose operations are aligned with our values. We screen our suppliers in two ways: (1) supplier accreditation through a third-party accreditor, and (2) internal evaluation through the SMC Vendor Portal. We validate their financial capacity, business ethics, environmental impacts, and compliance with Environment, Health, and Safety (EHS) measures through an extensive background check. Such screening is done prior

to conducting business transactions with the supplier.

For example, our Masinloc Power Plant has a Contractors Environment, Safety and Health Management Program to ensure compliance of their service contractors with all relevant Environment and Occupational Health and Safety laws and standards. We conduct regular review of the suppliers which covers a supplier's historical EHS

performance, Occupational Safety and Health policies and programs (such as programs for machine guarding, electrical and construction safety, fire prevention and control, among others), environmental policies and programs (solid waste management, hazardous waste management, and spill prevention and response), and their compliance with relevant certifications as required by law.



# Moving forward: Our Sustainability Commitments

As one of the largest power companies in the Philippines, we are committed to our mission – giving you the power to celebrate life. It serves as our drive in providing reliable, accessible, and affordable electricity to our country. This mission can only be achieved by committing to sustainability in all aspects of our operations.

- **Powering the Economic Progress of the Country**

We will ensure that our operations contribute to the economy of the country. We are growth-focused, and seek to expand as a Company in line with the thriving Philippine economy. At the same time, we will ensure that the economic value we generate is fairly distributed and shared with our stakeholders. We will constantly invest in new technologies to improve our operations in all aspects. We shall duly pay our financial obligations to the government. We shall continue to do our part to build economic value both directly and indirectly.

- **Constant Support and Partnership with our Communities**

We will partner and genuinely collaborate with our local communities in designing and implementing our programs. Our socioeconomic development and environmental stewardship programs shall be relevant to our stakeholders' needs and aligned with our holistic sustainability framework. Our work shall create a positive and lasting impact on the communities we serve, and allow them to grow alongside us.

- **Protecting Employee Welfare**

We commit to treat our employees well as they are one of our most important stakeholders. We shall provide them with competitive compensation, just benefits, a safe and conducive workplace, constant learning opportunities, work-life balance, and a culture that promotes diversity and acceptance. We shall create a Company that our employees can imagine a future with.

- **Responsible Stewardship of Nature**

We will find the right balance between providing reliable electricity and the preservation of the environment. We shall strive to continuously improve our emission levels, responsibly use our resources, and invest in technological innovations to improve environmental performance without sacrificing the needs of today. We commit to empower our partner communities by equipping them with the right skills and knowledge to contribute to our joint-stewardship of the natural resources in the areas where we operate.







# External Review Committee Assurance Statement

## A. General Disclosures

The SMC Global Power Holdings Corp. (SMC Global Power) tapped three experts in the fields of economics, environment, and society to comprise its External Review Committee (ERC) members to review the Company's 2018 Sustainability Report (SR). The Company has one joint venture (Angat Hydroelectric Power Plant) and three wholly owned power plants (Masinloc Power Plant Units 1 and 2, Limay Power Plant Units 1, 2 and 3, and Malita Davao Power Plant Units 1 and 2) that participated in the consolidated SR.

The role of the members of the ERC is to review the SR in terms of the GRI Standards and its content and quality.

SMC Global Power shouldered the expenses of the site visits including the honorariums of the ERC members and the support provided by the Center of Social Responsibility of the University of Asia and the Pacific (CSR-UA&P). The Company pre-selected the individuals interviewed and provided the data and information during the course of the assurance review. The ERC was also requested to identify such individuals and to request such information as it found necessary.

## B. Level of Assurance and Methodology

This SR 2018 is SMC Global Power's maiden issue covering the operating period January 1 to December 31, 2018. A total of 25 GRI topics were presented, composed of five (5) for the economic category, eight (8) for the environmental category, and twelve (12) for the social category. The ERC reviewed these topic disclosures considered material by the Company. Nevertheless, the Company provided more topic disclosures than those that were considered as material topics. Since these were not presented to the ERC during the site visits, these were not thoroughly reviewed as those considered material. The GRI Content Index of SR 2018 shows the general disclosures, the additional topic disclosures, and their specific management approaches. This Content Index also indicates the eight (8) sector disclosures specific to electric utilities.

The assurance process kicked off with a visit at the corporate headquarters last July 8, 2019 and ended upon the submission of the draft SR last March 19, 2020.

The members of the ERC conducted the assurance process through a series of site visits and on-site presentations, interviews of key stakeholders, and review of documents. The following four (4) power plants were visited:

Plant Site	Date of Visit
Limay Circulating Fluidized Bed (CFB) Power Plant (Bataan)	July 1, 2019
Angat Hydroelectric Power Plant (Bulacan)	July 12, 2019
Masinloc Coal-Fired Thermal Power Plant (Zambales)	July 16, 2019
Malita Circulating Fluidized Bed (CFB) Power Plant (Davao Occidental)	July 17, 2019

During these visits, plant personnel and various stakeholders were interviewed and questioned on the material topic disclosures. Along the course of these visits, the ERC members were giving suggestions on the GRI disclosures and best practices to enhance the firms' operations, to better manage and enhance the positive impacts, and to mitigate the negative internal and external impacts.

The four (4) plants that were visited defined the boundary of the SR 2018. The topic specific disclosures, together with the electric utilities' disclosures, were assessed according to the requirements of the GRI standards. Since this is the first time that the SMC Global Power has reported its economic, social, and environmental performances and its impacts using the GRI standards, the ERC members shared to the steering committee responsible for data gathering and report preparation last August 6, 2019 their respective comments and suggestions that were gathered during the visits in order to enhance the content and quality of SR 2018.

The Assurance Statement of the ERC should not be construed as the views of the organizations where the ERC members belong nor that of UA&P and CSR-UA&P. The same does not provide a guarantee of data and information accuracy, as well as an endorsement of firm's approaches, strategies, and core beliefs. The assurance process assumed that all data and information provided by the Company were complete and true.

## C. Findings

The ERC is of the opinion that the report is in accordance with the GRI Standards on report content and quality on the disclosures for economic, social, and environmental topics. All data and information in the SR are readily accessible and verifiable, clear, and easily understandable. Since the materiality tests were conducted prior to the preparation of the report, this SR provides an opportunity for the SMC Global Power to start working on the baseline data for monitoring of performance and impact, as well as setting performance and impact goals in the future.

A significant share of the country's energy needs has come to rely on SMC Global Power ensuring the reliable supply of power generated by its base load, fossil-fed power plants. One of its generating facilities, the Angat Hydroelectric Power Plant, has ancillary functions that have indirect but very significant impacts on Metro Manila and on the surrounding communities – irrigation, flood control, water supply, and fishing grounds. This SR communicates the Company's unwavering commitment as a responsible and caring (malasakit) member of the society.

The report demonstrates SMC Global Power's commitment to preserving the natural environment and the well-being of the surrounding communities, especially in areas where the power plants are operating, allocating substantial group resources on monitoring, and spending on up-to-date technology, processes, and activities. These initiatives are not just to meet the safe limits set by regulatory bodies, but even to surpass the demands of these mandated standards.

Cognizant that the economic life of the communities, institutions, and the local government units (LGUs) in Malita, Masinloc, Angat, and Bataan are invariably linked to the activities of the power plants, SMC Global Power's subsidiaries continue to explore ways and means to enhance their engagement with their immediate stakeholders. These include the local spending of their employees in the community, on the local suppliers, institutions, and LGUs in the area in order to participate in the plants' economic activities and to improve the immediate stakeholders' plight and prospects in life.

These initiatives include looking into its social investments such as livelihood, health, wellness, education projects, among others that are delivered either directly by its subsidiaries or through partners in the area like people's organization and LGUs. In fact, the Company's impacts can likely be more significant than what is disclosed in the SR. This is because the report discloses its economic performance at the parent level and in the process excludes the other significant economic performances and impacts of the subsidiaries at the local areas of their operations such as community investments, wages and benefits paid to employees, to suppliers, and even to the LGUs.

## D. Recommendations

To further enhance the effectiveness of future initiatives related to performance and impact monitoring, planning and management, the ERC recommends to the SMC Global Power the following:

1. Alignment of sustainability goals to national or global agenda. SMC Global Power's activities have significant national and local impacts that the Company can consider in the future to commit and align its activities and initiatives to certain local (i.e., health, nutrition, etc.), national (i.e., medium term development plan, policy agenda, etc.) or international (i.e., among the 17 United Nations Sustainable Development Goals or SDGs, etc.) standards.
2. Uniform environmental monitoring. The Company can adopt a more consistent and regular set of indicators across the different plants in order to monitor their environmental footprints. For instance, other plants particularly in Angat, Malita, and Limay can adopt the regular monitoring done in Masinloc on biodiversity disclosures (GRI 304). This may in fact entail revisiting the geographical extent of the direct impact area of each power plant, as well as highlighting Company initiatives elsewhere relative to GRI 304-3 (Habitats protected or restored).



3. Human capital development program. Due to the technical nature of the operations, the Company continues to rely on and source talent from highly urbanized areas where competition for young talent is intense. Succession planning, which includes recruitment, competency training, formation, and evaluation, to ensure that the young talent pool is readily available to replace the natural attrition expected especially at the businesses' highly technical operations is one area the Company should focus on. It may consider closely dialoguing with universities and colleges, as well as local communities on aligning talent development with the future human demands of the Company. SMC Global Power may also respond with programs to ensure more female participation as well as talent retention and development exposing them to as much as possible training and all facets of the plants' operations and map out their career paths within the group.
4. Regular dialogues with communities. SMC Global Power's extensive community projects can be more aligned to the needs of the community. The Company's regular consultations with its immediate stakeholders and communities can offer insights on transformative and impactful social initiatives that the Company can consider. It will allow key stakeholders in and around the area of operation to participate in the planning and implementation of social initiatives activities.

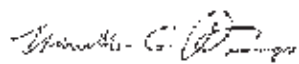
## Certification

We, the members of the External Review Committee, have validated via external assurance activities the SMC Global Power Corporation 2018 performance, as presented in its sustainability report, based on Global Reporting Initiative Standards (GRI Standards) and disclosure guidelines and requirements and relying on relevant data or information disclosed to and/or received by us during the validation process.

This certification does not extend to matters beyond the coverage of such data or information and/or outside the scope of such process. More so, nothing in our assurance statement should be construed as a position or opinion of the organizations where we are presently connected.

Our collective external assurance statement is attached hereto.

IN WITNESS WHEREOF, we have hereunto set our hands this 25th of March 2020 at the University of Asia and the Pacific.



**Prof. Nanette Dungo, Ph.D.**  
Former Chairperson,  
Department of Sociology  
University of the Philippines,  
Diliman



Dr. Nanette G. Dungo – served as the Chairperson of the Department of Sociology, College of Social Sciences and Philosophy (CSSP), University of the Philippines, Professional Development Associate, Institutional Linkages Office of the Vice President, Professional Development Associate, Office of University of Instruction, Office of the Vice-Chancellor; Coordinator, Office of Extramural Studies and Program Development, CSSP. She was a Research Fellow in Sociology, University of Wisconsin, Madison, and an Exchange Professor in Virginia Polytechnic Institute and State University (Virginia Tech) Blacksburg, Virginia. As Coordinator of Extramural Studies, she conducted training seminars for social science teachers in State Colleges and Universities. Her researches and papers read in International Conferences are in the areas of Development Studies, Filipino Family, Women and Children, Urban and Rural Studies, and Migration. She was part of a research on "The Social Costs of Migration", funded by UN Women in Bangkok, Thailand.

She also has experiences in GRI Sustainability Review in several energy companies under the Center for Social Responsibility of the University of Asia and the Pacific (CSR-UA&P) Team under Director Colin Lagarde Hubo since 2010.

She is currently teaching in the Political Economy Program of the School of Law and Governance, UA&P.




**Dr. Winston Conrad Padojinog, DBA**  
President, University of Asia & the Pacific Chair



Dr. Winston Padojinog or Stan – an associate professor of industrial economics and strategic management – is the fourth (4th) President of the University of Asia and the Pacific (UA&P). Before being appointed as President, he occupied various positions in the university – from graduate staff member to the more recent ones of which are the School Secretary and Vice Dean of the School of Economics and the Dean of the School of Management.

He lectures and undertakes researches in the fields of industry dynamics, strategic management, finance and business sustainability courses in the graduate programs of UA&P. His extensive experience and researches in the field as an industry economist and business strategist

makes him a sought-after expert and consultant by industry associations, policy makers, and companies for their industry policy, corporate strategy, business sustainability, and governance requirements. He is frequently invited to speak in international and local fora to discuss issues related to competitive strategy, leadership, business sustainability, and industry-based policies. Since 2011, he has served as a member of the External Review Committee of various companies that pioneered and subjected their sustainability reports for external assessment.

Dr. Padojinog has a seat on the board of non-government organizations (NGOs) that promote good governance and education for the less privileged. He is a founding member of the Center for School Governance – an NGO aimed at promoting good governance in universities and colleges. He is also a board member of the Center for Research and Communication Foundation, Inc. – a think tank that promotes an enlightened private and public sector that should work for economic and business policies that bring about inclusive growth and development; the Jose Jon Tiamsuy Foundation that extends scholarships to deserving students in schools in Iloilo City; and the Association of Southeast Asian Institutions of Higher Learning – National Council of the Philippines.



**Dr. Rene N. Rollon**  
Professor, Institute of Environmental Science and Meteorology (IESM) College of Science University of the Philippines, Diliman



Dr. Rene N. Rollon – serves as a professor of the Institute of Environmental Science and Meteorology (IESM) of the College of Science, University of the Philippines – Diliman for 22 years. He was appointed as the Director of the IESM for two (2) consecutive terms (June 2009 to May 2012 and June 2012 to May 2015). He specializes in the fields of aquatic ecosystem, coastal marine biology and ecology, mangrove and seagrass ecology, coastal resource management, environmental impact assessment, and environmental sciences. Aside from working as a faculty member of the IESM, he also gives technical advice to graduate thesis/dissertation students.

As a member of the DENR-EMB Technical Review Committee – ECC, Dr. Rollon works mostly as a resource person for Marine Biology and Ecology aspects. Through his expertise, he served as a resource person for project proposals with potential significant impacts on the environment, projects on Aquatic Ecology, and on different lecture series in the country. Since 1990, he has been involved in different consultancy projects in the field of environment.





Sustainability Report Council



**Ramon S. Ang**  
Sustainability Champion  
President and CEO



**Elenita D. Go**  
Sustainability Chairperson  
General Manager



**Paul D. Causon**  
Sustainability Co-Chair  
Chief Finance Officer



**Ramon U. Agay, Jr.**  
Sustainability Vice-Chair  
Finance Comptroller



**Danilo T. Tolarba**  
Sustainability Vice-Chair  
Human Resources Head



**Robert G. Balderas**  
Sustainability Vice-Chair  
Technical Plant Operations  
Manager



**Warren Patrick G. Belvis**  
Sustainability Vice-Chair  
Regulatory and Compliance  
Manager



# Steering Council Members

			
Lauro B. Andrade, Jr. Power Expansion	Armando V. Bañes Security	Atty. Jupiter M. Cabaguio Legal	Roland R. Cabasa Plant Manager Lima Power Plant
			
Jeciel B. Campos Sales & Marketing	Roque V. De Guzman Operations Angat Hydro Power Plant	Kim de Leon-Morgan Corporate Affairs	Atty. Julie Ann B. Domino Legal
			
Saturnino C. Espiritu Technical Services Angat Hydro Power Plant	Atty. Arlene B. Evangelio Office of the Chief Financial Officer Angat Hydro Power Plant	Dennis I. Ilan Finance	Jon B. Julian, Jr. Sales & Marketing

			
Nelson M. Makalintal Procurement	Mathias R. Mancira Plant Manager Malita Power Plant	Reynaldo S. Matillano Audit	Rene R. Mendoza Expansion
			
Pablito Pahamtang, Jr. Finance Angat Hyro Power Plant	Melvin G. Rabanes Billing & Settlement	Jose Ferlino P. Raymundo Energy Sourcing & Trading	Alberto B. Reyes III Utility Economics
			
Jenifer Ann R. Sauco Finance	Mar Tuazon Plant Manager Masinloc Power Plant		



# Sustainability Report Core Team

		
	<b>Danilo T. Tolarba</b> Human Resources	<b>Kim de Leon-Morgan</b> Sustainability Report Project Director
		
<b>Myka Keziah O. Marinda</b> Corporate Affairs	<b>Raphael C. Diaz</b> Office of the General Manager	<b>Cynthia V. Pantoñal</b> Corporate Affairs Foundation

# Technical Working Group

Angat Hydro Power Plant

		
<b>Christian B. Alcantara</b> Technical Services	<b>Kevin P. Asiao</b> Technical Services	<b>Aileen S. Dela Cruz</b> Human Resources

# Technical Working Group

Masinloc Power Plant

			
<b>Louella J. Campos</b> Finance	<b>Joel T. Cantalejo</b> Procurement	<b>Michael Brian B. Eliseef</b> Technical Services	<b>Mariel T. Maya</b> Technical Services
			
<b>Geraldine P. Ronquillo</b> Community Relations	<b>Evangeline O. Serrano</b> Quality, Environment, Safety and Health	<b>Romualdo M. Verzosa, Jr.</b> Human Resources	<b>Noralyn T. Zepeda</b> Human Resources



# Technical Working Group

Limay Power Plant

 <p><b>Jean D. Almoquira</b> Procurement</p>	 <p><b>Cherry C. Bobadilla</b> Community Relations</p>	 <p><b>Jennifer B. Cariño</b> Finance</p>
 <p><b>Lovely Ann T. Castro</b> Logistics</p>	 <p><b>Rose Ann B. Daet</b> Technical Services</p>	 <p><b>Gary M. Francisco</b> Quality, Environment, Safety and Health</p>

 <p><b>Rajyl P. Loria</b> Technical Services</p>	 <p><b>Heidee V. Mañalac</b> Quality, Environment, Safety and Health</p>	 <p><b>Erika Mae S. Olaya</b> Office of the Plant Manager</p>
 <p><b>Jhedan B. Saquilabon</b> Security</p>	 <p><b>Anna Marie N. Sarmiento</b> Human Resources &amp; Administration</p>	 <p><b>Rowan C. Velonta</b> Human Resources &amp; Administration</p>



# Technical Working Group

Malita Power Plant

		
<b>Suzette M. Agad</b> Quality, Environmental, Safety and Health	<b>Marisa E. Baduya</b> Human Resource and Administration	<b>George Calvin Z. Basa</b> Logistics and Procurement
		
<b>Cleonante A. Capiloyan</b> Community Relations	<b>Nicholjim G. Conales</b> Technical Services	<b>April Rose D. Filipino</b> Logistics and Procurement

		
<b>Audrey Clemen B. Salvador</b> Quality, Environmental, Safety and Health	<b>James Ivory M. Serrania</b> Quality, Environmental, Safety and Health	<b>Roland Paul P. Saquilon</b> Technical Services
		
<b>Ronie P. Suyo</b> Security	<b>Annabee G. Tiangson</b> Dispatch, Billing and Settlement	<b>Aljebeth D. Tura</b> Technical Services



# Technical Working Group

SMC Global Power Corporate Office

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 <p>Clarissa S. Dizon Sales &amp; Marketing</p>	 <p>Peniel J. Elamparo SMCGP Philippines Power Foundation</p>	 <p>Atty. Beatriz Irina Garcia Legal</p>

 <p>Mary Grace G. Ladao Sales &amp; Marketing</p>	 <p>Ronell Carlitos C. Manalo Procurement</p>	 <p>Myka Keziah O. Marinda Corporate Affairs</p>	
 <p>Ferdinand M. Medina Technical Plant Operations</p>	 <p>Tyrone M. Quicoy Legal</p>	 <p>Patricia A. Saronhilo Human Resources</p>	 <p>Sherene M. Tamayo Procurement</p>



## GRI Content Index

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report.

GRI Standard	Disclosure	Page number(s), direct answer and/or URLs	Reason for Omission
GRI 101: Foundation 2016			
General Disclosures			
GRI 102: General Disclosures 2016	Organizational Profile		
	102-1	Name of the organization	SMC Global Power Holdings Corp.
	102-2	Activities, brands, products, and services	pp. 2-3
	102-3	Location of headquarters	No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City 1550
	102-4	Location of operations	Philippines
	102-5	Ownership and legal form	pp. 2-3
	102-6	Markets served	SMC Global Power, through its subsidiaries, sells power, through PSAs, either directly to customers (e.g. distribution utilities, electric cooperatives and industrial customers) or through the Wholesale Electricity Spot Market.
	102-7	Scale of the organization	pp. 23-29, 42-43
	102-8	Information on employees and other workers	p. 58
	102-9	Supply chain	pp.96-97
	102-10	Significant changes to the organization and its supply chain	The commercial operations of the following units/acquisition of Masinloc was the only significant change to the corporation in relation to the priority sites
	102-11	Precautionary Principle or approach	p. 95
	102-12	External initiatives	SMC Global Power does not subscribe to any charters or other external initiatives.
	102-13	Membership of associations	p. 5
	Strategy		
	102-14	Statement from senior decision-maker	pp. 6-9
	Ethics and integrity		
	102-16	Values, principles, standards, and norms of behavior	p. 5

GRI 102: General Disclosures 2016	Governance		
	102-18	Governance structure	pp. 92-93
	Stakeholder engagement		
	102-40	List of stakeholder groups	pp. 12-13
	102-41	Collective bargaining agreements	SMCGP does not have collective bargaining agreements but provides avenues for employees to raise their concern on company policies and other relevant matters.
	102-42	Identifying and selecting stakeholders	p. 12
	102-43	Approach to stakeholder engagement	p. 12
	102-44	Key topics and concerns raised	p. 12
	Reporting practice		
	102-45	Entities included in the consolidated financial statements	p. 42
	102-46	Defining report content and topic Boundaries	p. 1
	102-47	List of material topics	p. 14
	102-48	Restatements of information	This is the first sustainability report of SMCGP.
	102-49	Changes in reporting	This is the first sustainability report of SMCGP.
	102-50	Reporting period	January – December 2018
	102-51	Date of most recent report	This is the first sustainability report of SMCGP.
	102-52	Reporting cycle	SMCGP will evaluate and decide on the reporting cycle upon publishing of its maiden report.
	102-53	Contact point for questions regarding the report	Corporate Affairs Group corporateaffairs@smcgph.sanmiguel.com.ph
	102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option. p.1
	102-55	GRI Content Index	pp. 114-126
	102-56	External Assurance	pp. 112-113



Material Topics				
GRI Standard	Disclosure		Page number(s), direct answer and/or URLs	Reason for Omission
Economic Category				
Economic Performance				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 42-43	
	103-2	The management approach and its components	pp. 42-43	
	103-3	Evaluation of the management approach	pp. 42-43	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distribute	pp. 42-43	
	201-2	Financial implications and other risks due to climate change	p. 87	
Market Presence				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 58-61	
	103-2	The management approach and its components	pp. 58-61	
	103-3	Evaluation of the management approach	pp. 58-61	
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	pp. 60	
Indirect Economic Impacts				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 44-49	
	103-2	The management approach and its components	pp. 44-49	
	103-3	Evaluation of the management approach	pp. 44-49	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	pp. 45	
	203-2	Significant indirect economic impacts	pp. 44-49	

Anti-corruption				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	p. 94	
	103-2	The management approach and its components	p.94	
	103-3	Evaluation of the management approach	p. 94	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	SMCGP has no current assessments of risks related to corruption.	
	205-3	Confirmed incidents of corruption and actions taken	There are no incidents of corruption and actions taken.	
Anti-competitive Behavior				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	p.94	
	103-2	The management approach and its components	p.94	
	103-3	Evaluation of the management approach	p.94	
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	p.94	
Environmental Category				
Materials				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	p.74	
	103-2	The management approach and its components	p. 74	
	103-3	Evaluation of the management approach	p. 74	
GRI 301: Materials 2016	301-1	Material used by weight or volume	p. 74	
	301-2	Recycled input materials used	Only our Malita Power Plant has used recycled input materials with 0.26% recycled input materials used.	



Energy				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	p. 76	
	103-2	The management approach and its components	p. 76	
	103-3	Evaluation of the management approach	p. 76	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	p. 76	
	302-3	Energy intensity	SMCGP has an energy intensity of 33,256.58 KJ/kWh. pp.76-77	
	302-4	Reduction of energy consumption	pp.76	
	302-4	Reduction of energy consumption	pp.76	
Water and Effluents				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 80-81	
	103-2	The management approach and its components	pp. 80-81	
	103-3	Evaluation of the management approach	pp. 80-81	
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	pp. 80-81	
	303-2	Management of water discharge-related impacts	pp. 80-81	
	303-3	Water withdrawal	pp. 80-81	
	303-4	Water discharge	pp. 80-81	
	303-5	Water consumption	pp. 80-81	
Biodiversity				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 82-83	
	103-2	The management approach and its components	pp. 82-83	
	103-3	Evaluation of the management approach	pp. 82-83	
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	pp. 82-83	
	304-2	Significant impacts of activities, products, and services on biodiversity	pp. 82-83	
	304-3	Habitats protected or restored	pp. 82-83	
	304-3	Habitats protected or restored	pp. 82-83	

Emissions				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 84-87	
	103-2	The management approach and its components	pp. 84-87	
	103-3	Evaluation of the management approach	pp. 84-87	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	pp. 84-87	
	305-2	Energy indirect (Scope 2) GHG emissions	pp. 84-87	
	305-4	Other indirect energy (Scope 2) GHG emissions	pp. 84-87	
	305-5	Reduction of GHG emissions	pp. 84-87	
	305-7	Nitrogen oxides, sulfur oxides, and other significant air emissions	pp. 84-87	
	305-7	Nitrogen oxides, sulfur oxides, and other significant air emissions	pp. 84-87	
Effluents and Waste				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 88-89	
	103-2	The management approach and its components	pp. 88-89	
	103-3	Evaluation of the management approach	pp. 88-89	
GRI 306: Effluents and Waste 2016	306-1	Water discharge by quality and destination	pp. 80-81	
	306-2	Waste by type and disposal method	pp. 88-89	
	306-3	Significant spills	There are no significant spills during the reporting period.	
	306-4	Transport of hazardous waste	pp. 88-89	
	306-5	Water bodies affected by water discharges and/or runoff	pp. 80-81, 88-89	
Environmental Compliance				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 95	
	103-2	The management approach and its components	pp. 95	
	103-3	Evaluation of the management approach	pp. 95	
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations.	pp. 95	



Supplier Environmental Assessment				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 97	
	103-2	The management approach and its components	pp. 97	
	103-3	Evaluation of the management approach	pp. 97	
GRI 308: Supplier Environmental Assessment 2016	308-2	Negative environmental impacts in the supply chain and actions taken	SMCGP has no current environmental impact assessment with respect to the suppliers.	
Social Category				
Employment				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 58-61	
	103-2	The management approach and its components	pp. 58-61	
	103-3	Evaluation of the management approach	pp. 58-61	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	pp. 58-61	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	pp. 58-61	
	401-3	Parental leave	p. 60	
Labor/Management Relations				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 62-63	
	103-2	The management approach and its components	pp. 62-63	
	103-3	Evaluation of the management approach	pp. 62-63	
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	At least a month's prior notice is given to employees when it concerns major organizational changes. This gives them a chance to raise their concerns and submit to management their ideas on the changes that are being discussed.	

Occupational Health and Safety				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 68-69	
	103-2	The management approach and its components	pp. 68-69	
	103-3	Evaluation of the management approach	pp. 68-69	
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	pp. 68-69	
	403-2	Hazard identification, risk assessment, and incident investigation	pp. 68-69	
	403-3	Occupational health services	pp. 68-69	
	403-4	Worker participation, consultation, and communication on occupational health and safety	pp. 68-69	
	403-5	Worker training on occupational health and safety	pp. 68-69	
	403-6	Promotion of worker health	pp. 68-69	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	pp. 68-69	
	403-8	Workers covered by an occupational health and safety management system	100% of our employees are covered by an occupational health and safety management system.	
	403-9	Work-related injuries	pp. 68-69	
	403-10	Work-related ill health	pp. 68-69	
Training and Education				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 64-67	
	103-2	The management approach and its components	pp. 64-67	
	103-3	Evaluation of the management approach	pp. 64-67	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	pp. 64-67	
	404-2	Programs for upgrading employee skills and transition assistance programs	pp. 64-67	
	404-3	Percentage of employees receiving regular performance and career development reviews	100% of employees are subjected to performance & career development reviews, regardless of gender, level and function. 'Probationary and new employees' performance are reviewed on their 3rd or 5th month. Regular employees' performance is reviewed on bi-annual and annual basis.	



Diversity and Equal Opportunity				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 55-57	
	103-2	The management approach and its components	pp. 55-57	
	103-3	Evaluation of the management approach	pp. 55-57	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	pp. 55-57	
	405-2	Ratio of basic salary and remuneration of women to men	p.56	
Non-Discrimination				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 55-57	
	103-2	The management approach and its components	pp. 55-57	
	103-3	Evaluation of the management approach	pp. 55-57	
GRI 406: Non-Discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	There are no reported cases of incidents of discrimination during 2018.	
Security Practices				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 64-67	
	103-2	The management approach and its components	pp. 64-67	
	103-3	Evaluation of the management approach	pp. 64-67	
GRI 410: Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	pp. 67	
Rights of Indigenous Peoples				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 50-51	
	103-2	The management approach and its components	pp. 50-51	
	103-3	Evaluation of the management approach	pp. 50-51	
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	There are no reported cases of incidents of discrimination on the rights of the indigenous people in 2018.	

Local Communities				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	pp. 48-49	
	103-2	The management approach and its components	pp. 48-49	
	103-3	Evaluation of the management approach	pp. 48-49	
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	pp. 48-49	
Supplier Social Assessment				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	p. 97	
	103-2	The management approach and its components	p.97	
	103-3	Evaluation of the management approach	p. 97	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	SMCGP has no current social impact assessment with respect to the suppliers.	
Socio-economic Compliance				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	p. 95	
	103-2	The management approach and its components	p. 95	
	103-3	Evaluation of the management approach	p. 95	
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	p. 95	



Electric Utilities Sector Disclosures				
	EU1	Installed capacity, broken down by primary energy source and by regulatory regime	pp. 23-39	
	EU2	Net energy output broken down by primary energy source regulatory regime	pp. 23-39	
	EU3	Number of residential, industrial, institutional, and commercial customer accounts	p. 3	
	EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	pp. 23-39	
	EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	pp. 23-39	
	EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	There was no offset habitat as there was no requirement on additional areas for the project.	
	EU22	Number of people physically or economically displaced and compensation, broken down by type of project	pp. 50-51	
	EU30	Average plant availability factor by energy source and by regulatory regime	pp. 23-39	





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