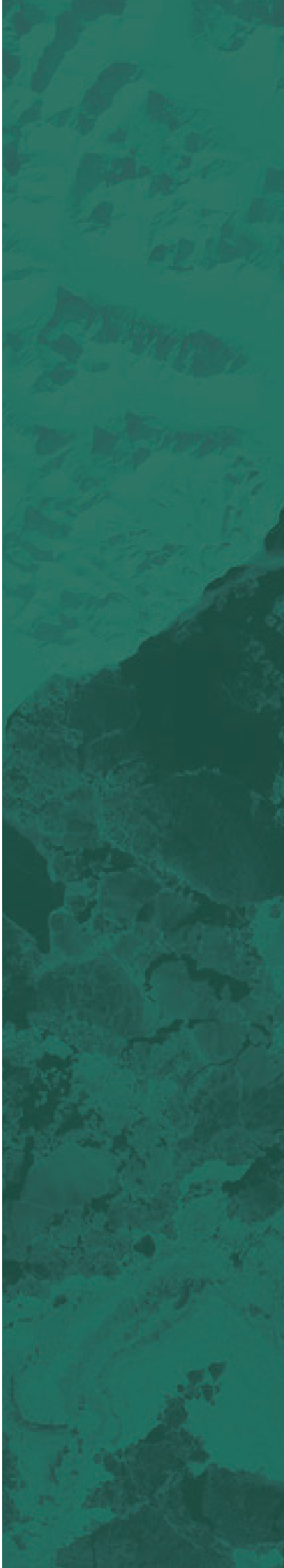
First Gen
100% GREEN POWER.
100% GOOD POWER.

# FORGING COLLABORATIVE PATHWAYS FOR A DECARBONIZED AND REGENERATIVE FUTURE.

## 2019 INTEGRATED REPORT

# Contents





# About the Report

The First Gen Corporation ("First Gen", "the Company") Integrated Report (IR) provides an overview of the Company's value creation process by examining its use and impact to the financial, manufactured, intellectual, natural, human, and social and relationship capitals. It presents the Company's financial, governance, environmental and social strategies and performance from January 1 to December 31, 2019.

It also details the management of First Gen and its a) natural gas power plants in Batangas City; b) hydro power plants in Nueva Ecija and Bukidnon; c) geothermal plants in Leyte, Negros Oriental, Bicol and North Cotabato; d) solar power plants in Ilocos Norte, Iloilo, Leyte, Cebu and Sorsogon; and e) wind power plant in Ilocos Norte on the external factors affecting the Company's capitals, risks and opportunities, and challenges that led to outcomes and outlook. Refer to the Portfolio of Assets in page 6 for the complete list of power plants. Complementary to this IR is the First Gen's microsite **(2019integratedreport.firstgen.com.ph)** which details other topics determined as material for the Company.

This report was prepared in line with the principles and content elements of the International Integrated Reporting <IR> Framework and in accordance with the GRI Standards: Comprehensive option and the Electric Utilities Sector Disclosures. The framework of First Gen's IR is coherent with the Sustainability Reporting Guidelines for Publicly Listed Companies approved by the Securities and Exchange Commission (SEC).

Disclosures and data included in this report were consolidated by First Gen's IR Technical Working Group, reviewed for accuracy and completeness by First Gen's management, and approved by First Gen's Board of Directors.

For general inquiries or feedback on this IR, kindly contact:

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**REPORTING FRAMEWORK:**
International Integrated Reporting <IR> Framework and GRI Standards

**APPROACH TO GRI:**
In accordance - "Comprehensive"

**REPORTING PERIOD:**
January 1 to December 31, 2019

**REPORTING CYCLE:**
Annual

# Statement of the President

The President is accountable for the integrity and completeness of the IR and any supplementary information, and is assisted by the Management of the Corporation.

The Management of the Corporation has applied its collective mind to the preparation and presentation of the IR and concluded that it is presented in accordance with the International <IR> Framework. Considering the completeness of the material items dealt with and the reliability of information presented, based on the combined assurance process followed, the President approved the 2019 IR on 25 June 2020.

**FRANCIS GILES B. PUNO**
President and Chief Operating Officer

GRI 102-1 102-32 102-50 102-52 102-53

# Materiality Determination Process

In order for the disclosures or matters to be included in First Gen's IR, the information needs to be of importance in terms of its known or potential effect on value creation.

First Gen's operations lead to a diverse set of stakeholders, namely, our customers, the planet, government, investors, co-creators (employees, partners, suppliers and service providers), host communities, civil society and non-governmental organizations. This stakeholder diversity compels us to assess our performance through multiple standards to fully address their needs and expectations. Thus, First Gen, in collaboration with First Philippine Holdings' Corporate Sustainability Group (FPH-CSG) and University of Asia and the Pacific- Center for Social Responsibility (UA&P- CSR) identified the following sustainability indicators to assess its data:

- **A** INDICATORS OF INTEREST TO STAKEHOLDERS
- **B** ADDRESSING GOVERNMENT REGULATIONS
- **C** WITH FINANCIAL IMPACTS CRITICAL TO INVESTORS
- **D** INDICATORS THAT ARE ESSENTIAL TO IMPROVE OUR SERVICES TO OUR VARIOUS STAKEHOLDERS.

To determine the sustainability parameters for a diverse audience, First Gen analyzed appropriate indicators from 10 organizations, consisting of:

- **3** STANDARDS/FRAMEWORKS
- **4** CREDIT RATING AGENCIES
- **3** GOVERNMENT BENCHMARKS

The list of indicators was validated with the Company's shareholders and other stakeholders through the Sustainability Technical Working Group (TWG).

As a result, the relevant standards and references that were used in this report are from the:

- GLOBAL REPORTING INITIATIVE (GRI)
- SUSTAINABILITY ACCOUNTING AND STANDARDS BOARD (SASB)
- TASK FORCE FOR CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)
- UN GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS (UNGP-BHR)

While these standards address the requirements of different stakeholders, they also complement each other. By referencing the report to GRI standards, the impacts of the business to the planet were covered and with SASB indicators, the impacts of external factors to the business were reflected. In this way, the report focuses on value to shareholders but at the same time attention is given to the contribution of the business to the well-being of the planet and people.

The list of disclosures or matters that were identified has been translated into an online survey for First Gen's providers of capitals and Sustainability technical working group (TWG) to assess the following:

**How significant is the impact of the disclosure or matter on First Gen's ability to achieve its business goals and thereby create value**

**How significant is the influence or the degree of control that First Gen has on the disclosure or matter**

GRI 102-21 102-40 102-42 102-43 102-46

The table below shows the scoring criteria for materiality.

| TOPIC SCORE | DESCRIPTION |
|---|---|
| 1.00 | The topic has no importance in terms of its known or potential effect on value creation. |
| 1.01 – 2.00 | The topic has a low importance in terms of its known or potential effect on value creation. |
| 2.01 – 2.50 | The topic has a moderate importance in terms of its known or potential effect on value creation. |
| 2.51 – 3.00 | The topic has a high importance in terms of its known or potential effect on value creation. |

### OUT OF THE 28 TOPICS, 25 WERE CONSIDERED MATERIAL TOPICS.

Each topic that was considered material has an overall score between 2.51 – 3.00. Overall score is the average of the scores from providers of capitals and TWG for impact and influence. In addition, several topics relevant to the business operations were also considered material. The following topics were identified as material for First Gen:

| GOVERNANCE, FINANCIAL AND ECONOMIC | ENVIRONMENT | SOCIAL |
|---|---|---|
| Executive level responsibility on economic and ESG topics | Climate Strategy | Human Capital Development and Employee Well-being |
| Non-financial indicators in company KPI | Water & Wastewater-related Risks & Management and Efficiency | Labor Practices |
| Risk and Crisis Management | Energy Consumption | Stakeholder Engagement/ Community Relations |
| Innovation Management | Waste & Hazardous Materials Management and Efficiency | Human Rights |
| Supply Chain Management | Environmental Compliance | Quality, Occupational Health and Safety |
| Financial Implications due to Climate Change | Land Use and Biodiversity | Diversity and Equal Opportunity |
| Indirect Economic Impacts | Environmental Policy and Management Systems | Socio-economic Compliance |
| Resource Allocation | Electricity Generation/ Energy Supply Mix/ Opportunities in Renewable Energy | |
| | Materials and Resource Use | |
| | Fossil Fuel Involvement | |

**GRI 102-44 102-47**

# About First Gen

## Our Mission

We commit to forging collaborative pathways for a decarbonized and regenerative future.

## Our Purpose

We recognize that our planet's life support systems and social institutions are now at a breaking point. Unbridled consumption and primacy of bottom-line growth are at the root of the climate crisis, our alienation from nature, and the profound social and economic divisions, that have become existential threats to humanity today.

Overcoming all of these challenges will require paradigm shifts in the ways that we think, live, and do business. It is now clear that pursuing sustainability that seeks only to do less harm is no longer good enough.

Instead, we need to create symbiotic, mutually beneficial relationships with nature and society that benefit more than just shareholders. Businesses today must urgently become a regenerative force that elevates everything that they touch – customers, employees, suppliers, contractors, the environment, communities, and investors.

The transformation cannot be done by entities working alone. We are mindful that we exist within highly diverse and nested systems, and that we must all play unique, reciprocal, and synchronized roles in a world that needs to be healed.

Our collective success will be measured by how quickly we can decouple economic and social prosperity from the destruction of our planet's life support systems.

We choose this path because it is the only way to a destination where everyone has the opportunity to thrive and prosper on a healthy planet. We choose this path because we believe it is the only way to create lasting value for all stakeholders and not just shareholders. We choose this path because it is inseparable from the Lopez Values that have, and always will, define us.

## Our Chosen Path

We choose to harness only those energy sources that allow us to meet the needs of the present without harming the ability of future generations to meet theirs.

With a deep understanding of the evolving needs of our customers, we will deliver resilient and compelling energy solutions that will promote energy productivity, empowering our customers to make the right choices and to do more with less energy, simultaneously reducing their carbon footprints.

We will lead the transition to a decarbonized energy system in line with the UN IPCC target of limiting global warming to 1.5 degrees Celsius, by focusing on the following:

- We will build on our platform of renewable and low carbon energy assets and complement them where appropriate with flexible generation and storage technologies.
- We will expand the use of clean and renewable geothermal resources that provide uninterrupted power 24/7 globally, deploying our extensive experience in geothermal development, gained over four decades in the Philippines.
- We will operate our geothermal and hydrological resources with a regenerative mindset that will strengthen and enrich the communities and biodiverse ecosystems in which we are all embedded.
- We reaffirm our 2016 commitment that we will not build, develop or invest in coal-fired generation plants because to do so would be inconsistent with the UN IPCC target and lead to a planet that is uninhabitable for future generations.
- We believe that natural gas, as the least carbon-intensive fossil fuel, will continue to play a vital role in the transition to a decarbonized world for some time. Natural gas-fired plants will enhance grid security and resilience and support the development of more variable renewable sources such as wind, solar, and hydro, in combination with storage. Gas-fired plants can respond quickly and reliably when variable renewable sources are not available, allowing the lights to stay on.

**GRI 102-16**

- We will pioneer the development of a liquefied natural gas (LNG) terminal that will introduce reliable, flexible, and cost-competitive LNG to the Philippines. LNG will enable our own and other existing gas-fired plants to continue to operate by initially supplementing, and eventually even replacing, declining indigenous natural gas reserves. The LNG terminal can serve as a hub that will underpin new large and small-scale LNG opportunities as a means to introduce natural gas throughout the many islands of the Philippines.
- We will actively pursue new, innovative, economically viable technologies that can further reduce the carbon intensity of natural gas, recognizing that it may otherwise become necessary to phase natural gas use down in line with decarbonization targets.
- We will lead the development of decentralized and resilient microgrids that enable universal access to electricity in ways consistent with social justice and the transition to a decarbonized future.

As we progress along our chosen path, we will always seek to enable shared prosperity and well-being in ways that will regenerate our planet for future generations.

# Lopez Credo and Values

We, as employees of the Lopez group of companies, believe that our primary reason for being is to serve God and the Filipino people.

Thus, we shall always conduct ourselves in a manner that is mindful of the long-term mutual benefit of the Lopez Group, and the various publics we serve.

We will be responsible stewards of all our resources, and conscious of our obligation to present and future generations.

Since 1928, and in the years and generations to follow, our commitment to the distinctive Lopez values will not change as we remain committed to serve our stakeholders.

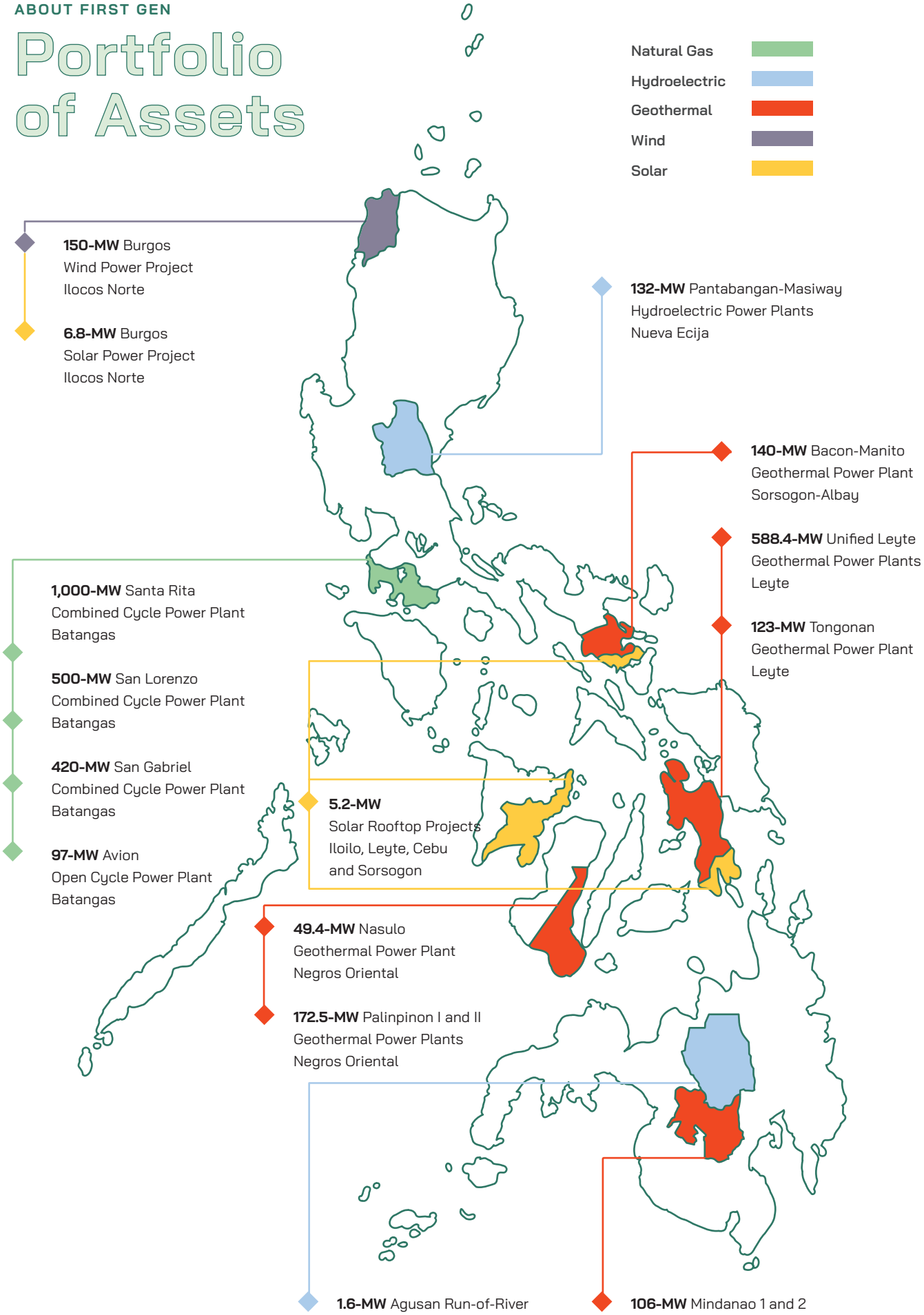
In our service to the Filipino people, we will be guided by the following distinct Lopez Values:

- A Pioneering Entrepreneurial Spirit
- Business Excellence
- Unity
- Nationalism
- Social Justice
- Integrity
- Concern for Employee Welfare and Wellness

We know from generations of experience that it is by living according to these values that a company can be built to last.

GRI 102-16

# Portfolio of Assets

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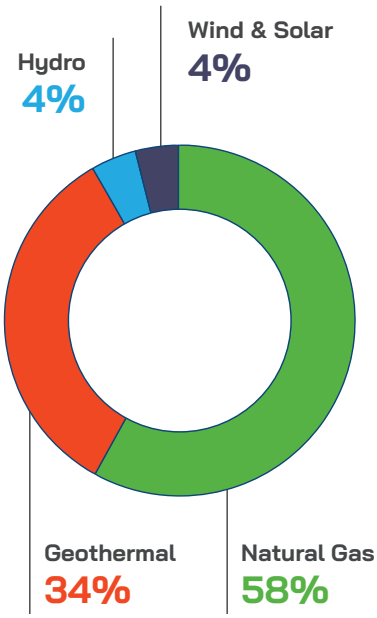
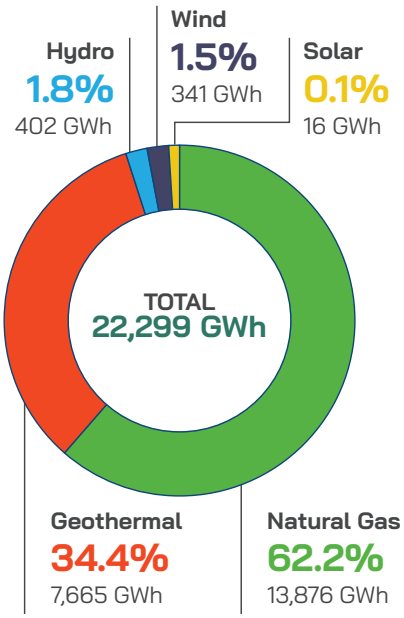
## Installed Capacity by source

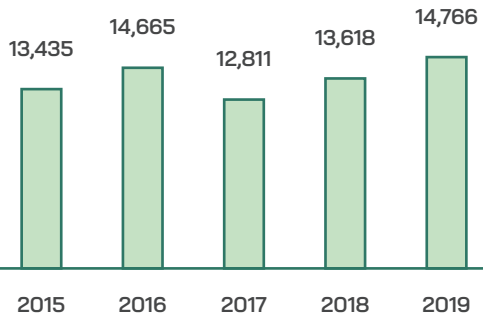



## Total GWh generated by source

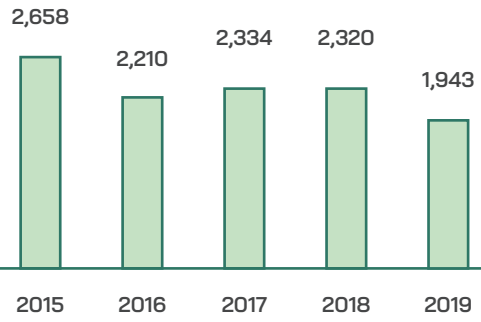



## Tax Contribution

(In PHP Millions)




## Total Employees




## Financial Performance

(In USD Thousands)

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Revenues from Sale of Electricity | 2,151,386 | 1,978,689 | 1,708,122 |
| Consolidated Net Income | 414,228 | 319,485 | 208,154 |
| Net Income Attributable to Equity Holders of the Parent | 296,208 | 221,200 | 134,424 |
| Recurring Net Income Attributable to Equity Holders of the Parent | 284,410 | 242,378 | 161,183 |
| Total Assets | 5,209,697 | 5,059,901 | 5,500,860 |
| Total Liabilities | 2,618,198 | 2,788,974 | 3,036,672 |
| Equity Attributable to Equity Holders of the Parent | 2,124,979 | 1,855,146 | 1,882,270 |
| Non-Controlling Interests | 466,520 | 415,781 | 581,918 |

GRI 102-7 201-1 EU1

# Why First Gen?

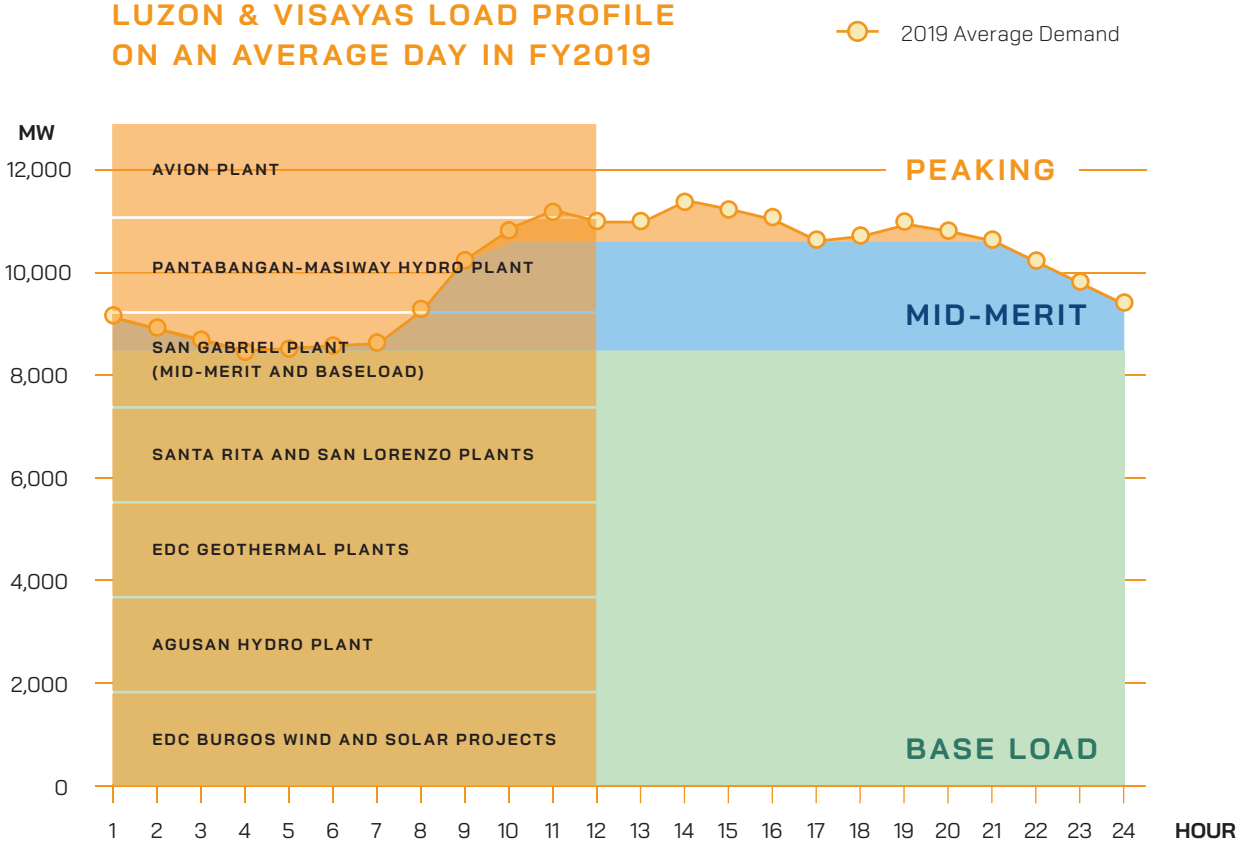
## A LEADING CLEAN, RENEWABLE AND LOW-CARBON POWER PRODUCER

First Gen owns and operates 30 power plants across Luzon, Visayas, and Mindanao with 3,492 megawatts (MW) of installed capacity, powering 21.0 percent of the Philippines' gross generation in 2019. The Company has a strong track record in developing, financing, building, bidding for, and operating power generation projects that have made First Gen into a leading Independent Power Producer (IPP) in the Philippines.

First Gen has the largest portfolio of power plants that use clean, renewable, and indigenous fuels such as steam, water, wind, solar, and natural gas. The Company's 65 percent-controlled Energy Development Corporation (EDC) is the largest vertically-integrated geothermal company in the world. The Company's diversified and flexible portfolio of assets makes it well-positioned to address the growing demands of intermittent sources of energy.

In line with its parent company's mission of forging pathways towards a decarbonized and regenerative future, First Gen will continue to strive to deliver resilient and compelling energy solutions that will promote energy productivity, allowing customers to do more with less energy while simultaneously lowering their carbon footprint.

### LUZON & VISAYAS LOAD PROFILE ON AN AVERAGE DAY IN FY2019




**NOTE:** Wind and Solar are must run plants under the Renewable Energy (RE) Law. Solar plants share in delivering the daytime baseload requirement of the grid.

GRI 102-2

| PLATFORM | NO. OF PLANTS | CAPACITY (MW) |
|---|---|---|
| Geothermal | 12 | 1,179 |
| Solar | 10 | 12 |
| Wind | 1 | 150 |
| Hydro | 3 | 134 |
| Gas | 4 | 2,017 |
| Total | 30 | 3,492 |

## ROBUST CASH FLOW AND EARNINGS

The Company has an established track record of developing and operating projects that deliver robust and stable cash flow. From its earnings before interest, taxes, depreciation, and amortization (EBITDA) of USD 324.9 million in 2006 – the year the Company made its debut in the Philippine Stock Exchange, the Company has since grown its EBITDA to USD 767.8 million in 2019, while the Company's attributable net income has grown steadily from USD 91.8 million in 2006 to USD 296.2 million in 2019.

"The Company continues to forge pathways towards a decarbonized and regenerative future.


## NATURAL GAS PIONEER

First Gen owns and operates four out of the country's five natural gas-fired power plants with a combined installed capacity of 2,017 MW, making it the largest offtaker for natural gas and producer of natural gas-fired power in the country. In the late 1990's, First Gen initially developed the 1,000-MW Santa Rita and 500-MW San Lorenzo combined cycle power plants. These two power plants made the Malampaya Project, the country's largest foreign investment at that time, possible. More than a decade later, First Gen built two more natural gas-fired power plants—(i) the 97-MW Avion peaking power plant, which is currently the only one in the country that utilizes aero-derivative technology; and (ii) the 420-MW San Gabriel flex power plant, which is the most efficient natural gas-fired power plant in Southeast Asia at that time. All four plants are located in the First Gen Clean Energy Complex (FGCEC) in Batangas City.

First Gen believes that natural gas plays an important role in the transition to decarbonization because its flexibility and reliability make it the perfect complement to intermittent renewable energy (RE) sources.

GRI 102-2 102-7 EU1

## GLOBAL EXPERT IN GEOTHERMAL POWER

In 2007, First Gen, through its subsidiary Red Vulcan Holdings Corporation, won the bid to acquire a 40.0 percent economic stake (60.0 percent voting stake) in the Philippine National Oil Company-Energy Development Corporation (PNOC-EDC), which was later renamed Energy Development Corporation (EDC). EDC is a pioneer in the geothermal energy industry with over four decades of proven business viability, where it has developed some of the world's pioneering and most complex steam fields. EDC is primarily engaged in the business of exploring, developing, operating, and utilizing geothermal energy and other indigenous RE sources for electricity generation.

Today, EDC is a globally-renowned geothermal company operating 12 geothermal power plants in Bicol, Negros Oriental, West Leyte, and North Cotabato. The various geothermal plants have a combined installed capacity of 1,179.3 MW, making EDC the largest vertically-integrated geothermal power producer in the world. It has also branched out into developing and operating other renewable sources of energy.

The various geothermal plants have a combined installed capacity of 1,179.3 MW, making EDC the largest vertically-integrated geothermal power producer in the world.

First Gen and its affiliates continue to work together to realize synergies and create even more value for the Lopez Group and its shareholders.

## A STRONG MAJORITY SHAREHOLDER

First Gen's majority shareholder, First Philippine Holdings Corporation (FPH), is a 59-year old Philippine corporation that is among the oldest and largest conglomerates in the Philippines. FPH has investments in vital industries that support the country's economic development such as power generation (through First Gen) and distribution, through its 3.9 percent effective ownership interest in Meralco. It also has substantial investments in Rockwell Land Corporation, a leading residential and commercial property developer in the country, and First Philippine Industrial Park, one of the country's major industrial park developers that houses world-class companies. The conglomerate likewise owns and operates subsidiaries that are involved in manufacturing, as well as construction and engineering services. Moreover, FPH is affiliated with ABS-CBN, the country's leading information and entertainment multimedia conglomerate.

First Gen and its affiliates continue to work together to realize synergies and create even more value for the Lopez Group and its shareholders.

## ESTABLISHED RELATIONSHIPS WITH WORLD-CLASS PARTNERS

First Gen has a strategic partnership with two of the world's largest infrastructure investors: Macquarie Infrastructure and Real Assets (MIRA), and Arran Investment Pte Ltd (Arran) an affiliate of GIC Pte Ltd (GIC). The consortium has a USD 1.3 billion investment in EDC. The partnership is an affirmation of confidence in EDC's RE platform and in the Philippine power industry.

Through the development, construction, and operation of its portfolio of power plants, the Company has benefited from strong relationships with its world class project partners, such as Siemens AG, Shell, Vestas, and Andritz, among others.

We look forward to forging more partnerships to fulfill our social, ethical, environmental, and economic responsibilities.

# Message from the Chairman

## To Our Dear Stakeholders,

As I write this message for our very first Integrated Report, the whole world is in varying stages of lockdown from the COVID-19 pandemic. With the prospect of a vaccine not yet in sight, we're all still in a dangerous "dance" with the virus—simultaneously avoiding it, yet trying to regain some of the normalcy of our past lives that now feel like a world away. Prescient voices warned of this possibility. We all assumed that dystopian events like this only happen in movies and sci-fi novels and most of us dismissed the probability of it even occurring in our lifetimes. We convinced ourselves that modern technology and medicine will always come to the rescue. So we went on with our lives.

What is overwhelming us today in this pandemic is but a sneak preview of the geologic-scale changes that will result from an unabated climate crisis. These changes are already evident in record-breaking temperatures and natural catastrophes hitting the planet every year now. Early this year, a record-high temperature of 20.75 degrees Celsius was set in the Antarctic. At the time of this writing, the Arctic also broke historic records with a high temperature of 38 degrees Celsius. The incessant rise in the world's carbon emissions has put us on a trajectory of a global temperature rise of between 3.7 to 4.8 degrees Celsius by 2100. That's an unlivable planet!

**GRI 102-14**

Today, we have a narrowing window left to keep warming within the desired 1.5 degrees Celsius agreed to in Paris under COP 21, or watch it run away from us irreversibly. The upcoming decade of the 2020s will critically determine whether we succeed or not. To succeed, humanity needs to reduce carbon dioxide emissions by 6 percent every year until we achieve net zero emissions in 2050. For perspective, the lockdowns and passenger transport restrictions resulting from the pandemic are expected to bring emissions down this year by about 8 percent; which means we need a COVID-scale catastrophe every year until 2050 just to achieve the 1.5 degree Celsius target! How did we get into this existential crisis?

Central to all this is the all-too-common mindset that man is apart from, and not a part of, nature—that nature exists to serve our wants and needs, regardless of the toll we inflict upon it. Today, our global population of 7.8 billion humans consumes an estimated 1.75 Earths per year. That's 75 percent more resources than our planet's ability to replenish. According to the Global Footprint Network, US lifestyles consume an average of 5 Earths, which many others on the planet aspire to attain. Yet the pattern of growth is broken: instead of lifting all boats, it has left too many behind. The top 10 percent of the world now owns 82 percent of the wealth, a trend that's set to worsen over time. The populism that's sweeping the world is a symptom of this growing disenchantment with business, politics, and life as usual. Clearly, our planet's natural environment and its social fabric are already ripping at the seams.

The natural, social, and political forces being unleashed in the coming decade will likely make it the most challenging and most disruptive business has ever seen. The COVID-19 pandemic is but a mere "*fire-drill*" for what's coming and demonstrates the scale at which things need to change. We are living in a time of great paradigm shifts, and businesses that seek to thrive in this era must be able to reimagine and redesign themselves for this new world.

In this kind of a world, corporate sustainability that seeks to simply "*tick the box*" or do less harm is no longer good enough. Sustaining our trajectory today will result in disasters that are not only greater in scale, but also are more unjust towards those who do not have the capacity to cope with the devastating changes that are already here and continue to escalate.

Businesses need to align themselves, their resources, and their capabilities towards a mission that seeks to elevate everything they touch—their customers, employees, suppliers, contractors, the environment, communities, and, of course, their investors. There is an urgency for all of us to go beyond incremental sustainability and transform into regenerative forces that align our profit engines with the need for a better world and a safer planet. I am certain that humanity, collectively, has the creativity and innovative energy needed to solve the world's greatest problems. Unlocking these will be the foundation to some of the greatest business opportunities in the coming century.

This year we crystallized our Mission at FPH and our group of companies and that is: ***"To forge collaborative pathways for a decarbonized and regenerative future."*** It's a deliberately high bar and we're nothing short of humbled by it. But we expect this short phrase to be the beacon that guides us through this turbulent decade and beyond. We've also put into words our Purpose and Chosen Path, etching out the role we see for ourselves in the coming years with greater clarity. The ideas and principles behind our words are not new. We've been living and breathing most of those principles the last decade. At times we felt we may have been getting ahead of ourselves and where our investors wanted us to be. But even back then, just like today, we've always been playing for the long term, reading the tea leaves, and conscientiously transforming ourselves into what the world needs us to be.

I hope you enjoy reading our recrafted Mission and Purpose as much as we did rewriting them. More importantly, I hope you're encouraged to come along with us on what will be a rewarding and purposeful journey.


Federico R. Lopez
**CHAIRMAN AND CHIEF EXECUTIVE OFFICER**

# President's Message

## Dear Stakeholders,

A warm heartfelt greeting to all of you! The COVID-19 pandemic drastically changed how we all live and required many of us to work from home and restrict our movements for a prolonged period. We first needed to ensure the safety of our employees and their families. Given the circumstances and with the help of technology, I believe our organization adjusted quickly, almost seamlessly. As for me, working from home has actually been quite productive. It gave me indispensable quiet time. It gave me the opportunity to reflect on disruptive events like the COVID-19 pandemic and what many believe is the larger, more consequential concern that is climate change. This period also allowed our leadership at First Gen to further examine our impact on people and society as well as fine tune and, if necessary, recast our Mission, our Purpose, and our Chosen Path and their impact on our business platforms and plans for the future.

My report should have been an easy one. I would have simply reported how 2019 was a stellar year with First Gen posting "all-time high" profits and how we continue to gain momentum on our growth plans. I would have also reported that 2019 marked a year where the volume and depth of the discussion on the necessity to shift energy use towards less polluting, low carbon electricity sources like renewable energy, and even natural gas, became much more acceptable, understandable, and mainstream. We were no longer an outlier in the conversation and that certainly felt good. This increased awareness and positive change in the tide favored First Gen's clean and renewable portfolio and affirmed our decision to not invest in coal.

I am sure that not one of us ever thought we would go through our lives experiencing a scary life-threatening global health pandemic. Our very own well-being is

> This period also allowed our leadership at First Gen to further examine our impact on people and society.

affected by feeling of anxiety and uncertainty about our future. More so, I realized that this feeling of uneasiness is similar to the feeling I have on how slowly the world seemed to be moving in addressing the existential threat of human-made climate change. For some time now, we at First Gen have been passionate and vocal about the necessity for the Philippine energy sector to shift towards a decarbonized energy system and that it is important for our leaders and stakeholders to work together and create an environment that will promote and incentivize proper behavior to take a more drastic pivot towards clean and renewable energy or suffer the consequences of climate-related disasters.

Renowned climate scientist turned political activist James Hansen, who I follow and admire, phrases the connection between the pandemic and climate change quite clearly in that they are "both characterized by a ***delayed response*** which makes the problem and its solution more difficult." Hmm, a delayed response by whom?

Hansen further adds, "with the virus the lags for an individual are between infection, appearance of symptoms, and ultimate response, which can potentially include death... with climate change the lags are between emissions, appearance of warming, and ultimate effects such as large sea level rise and species extinctions, which can potentially lead to social disorder and a more desolate world."

Hansen then concludes, "We are in a race to find remedies in both cases, but the near-term focus on the virus provides a moment to assess the actions needed for climate. It is a ***solvable problem***. It is inappropriate to pile stress on young people, by implying that it is too late for realistic actions to be effective." There are keywords we can take away from Hansen's statements: first, is that of the "delayed response" by whom? Clearly, it refers to our leaders and stakeholders, including politicians, businessmen, regulators, lenders, and even consumers. We need to move more decisively today! The second key takeaway is equally important and that this is a "solvable problem". It is not going to be easy but it is solvable and we have to accept the fact that we are going to have to live and cope with this environment today and tomorrow. Again, we need to move more decisively today!

## OUR 2019 MILESTONES

First Gen made significant progress in its key projects for 2019. Despite the calamities and natural disasters, the plants continued to function reliably to ensure power supply to all our customers.

### Progress of the LNG project and terminal

We continued to focus on pioneering LNG to the country. Last May 2019, together with our partner Tokyo Gas, a traditional *Kagami Biraki* ground-breaking was held, marking the next phase of the development. In August 2019, the Energy Investment Coordinating Council declared the project an "Energy Project of National Significance" signifying the project's importance to grid security and how it is aligned with the Department of Energy's (DOE) policy and energy plan.

We see how the LNG project can serve the natural gas requirements of existing and future gas-fired power plants for both First Gen and third parties. This addresses the long-term fuel supply risk of our country's gas plants. This also allows us to continue providing clean and competitively priced energy to the grid, supplementing the growth of renewable energy projects, and encouraging new large and small-scale gas plants throughout the many islands of our country.

### Accomplished detail study on the modified jetty

First Gen has also completed a detailed study on modifying its existing jetty at the First Gen Clean Energy Complex (FGCEC) in Batangas City. We can proceed with construction once the DOE approves our Permit to Construct, Expand, Rehabilitate, and Modify (PCERM) application. The LNG project's modified jetty will have the ability to receive large- and small-scale LNG vessels including Floating Storage Regasification Units (FSRUs). FSRUs can store LNG molecules and will be capable of returning LNG back to its gaseous state.

### Reliability of power plants

Our plants continued to operate reliably when other power plants were experiencing outages. Three of our baseload natural gas plants—Santa Rita, San Lorenzo, and San Gabriel—continuously operated throughout the Luzon grid outages in 2019. The peaking plant Avion and the Pantabangan-Masiway Hydroelectric power plants were also able to quickly ramp up and down to meet the requirements of the grid. These plants augmented the supply shortage in the first half of 2019, which was driven by the combination of high summer demand and depressed electric supply.

### EDC's improved drilling efficiency

EDC is among the first in the Philippine geothermal sector to employ real-time Pressure-while-Drilling technology, enabling us to analyze real-time information underground. This information will allow us to optimize operations and reduce drilling costs while completing projects faster.

### Full recovery of EDC's Leyte plants

EDC's Unified Leyte and Tongonan plants contributed significantly higher revenues in 2019 following their recovery from damages caused by Typhoon Urduja in 2017. We continue to invest in resilience programs to mitigate possible key risks due to calamities.

Resilience programs we implemented in 2019 include a) the construction of geohazard and landslide mitigating measures fleet-wide, b) the setup of earthquake monitoring systems, which include installing accelerographs and seismic stations in the plants, and c) the replacement of Malitbog Cooling Tower Unit 3 to a more resilient one. These projects are expected to mitigate key risks related to one-off events such as typhoons, landslides, and earthquakes.

### Full-year benefits of de-leveraging activities

First Gen reaped the full-year benefits of last year's deleveraging activities while EDC continued to pay down debt. In 2019, EDC further pre-paid approximately PHP 5.2 billion of its outstanding debt. As of end-2019, First Gen's outstanding consolidated debt balance (gross of debt issue costs) was at USD 1,947.3 million (PHP 98.6 billion), coming from USD 3,012.6 million (PHP 141.8 billion) in 2015.

# OUR 2019 BY THE NUMBERS

2019 is the year First Gen's attributable and recurring net income (RNI) reached an all-time high. Our attributable net income reached **USD 296.2 million**, a 34 percent or USD 75.0 million increase from our USD 221.2 million in 2018. Our RNI reached **USD 284.4 million**, a 17 percent increase, or USD 42.0 million from our USD 242.4 million in 2018. The increase can be attributed to the following:

EDC's geothermal, solar, and wind platforms' RNI
**increased by USD 23.8 million**
due to higher contribution from Unified Leyte and Tongonan plants

San Gabriel's RNI
**increased by USD 1.9 million**
due to its full-year PSA with Meralco

FG Hydro's RNI
**increased by USD 7.6 million**
due to higher generation, strong Wholesale Electricity Spot Market (WESM) sales, and lower interest expenses on its full loan repayment in 2018

Avion's RNI
**increased by USD 6.5 million**
due to better dispatch and higher average WESM selling price

## OUR COMMITMENT TO A DECARBONIZED AND REGENERATIVE FUTURE

For the energy industry, a decarbonized energy system is the path toward a regenerative future. With the Paris Agreement as its groundwork, the Climate Action Summit gathered leaders to craft realistic plans to achieve carbon neutrality, targeting to reduce greenhouse gas emissions by 45 percent over the next decade, and to net zero emissions by 2050. In 2019, a more aware global market clamors for cleaner renewable energy sources. Investors have become much more choosey with the companies they invest in, favoring clean and renewable energy companies. Banks are now being pressured to stop lending to coal projects. Even owners and developers are either selling their stakes or shutting down their coal plants due to regulatory or economic reasons. Customers have also begun to realize that they have a responsibility and a choice in determining where their electricity comes from.

The Philippines, however, is sadly lagging in this movement. The country still has a large coal energy portfolio, which is expected to increase in the coming decade. This is despite the fact that most of our coal supply is imported from other nations. This does not make sense to me. Additionally, the regulatory environment is still not ideal for renewable energy. Yet, we remain hopeful. We believe that it is only a matter of time before this improves. Several government policies and legislations have already been enacted, and it is every stakeholder's role to respond firmly and be consistent in shifting to low carbon energy. Church representatives are speaking up against dirty coal and encouraging cleaner alternatives. Provinces, too, are now more aware of coal's environmental and health hazards and have begun banning coal plants. We still have a long journey ahead.

A full switch to 100 percent renewable energy cannot be done immediately. Consistent with our chosen path, we will deploy our extensive experience in geothermal, gained over four decades in the Philippines, to expand the use of geothermal resources globally as it provides uninterrupted power 24/7.

Most other renewable sources suffer from variability and intermittency. While we are optimistic that these will eventually be addressed given the speed of innovation of battery storage technology, we cannot wait until then. Part of the Hydro platform's expansion involves the development of the 100-MW Aya Pumped-Storage facility capable of providing energy during peak periods and storing energy during off-peak periods. We need to start the transition now.

First Gen's clean and flexible gas portfolio is a pioneer in the country and is well-positioned to help with the transition. Our natural gas platform is the ideal transition fuel as it is flexible, reliable, efficient, and emits far less emissions compared to coal plants. Introducing LNG to the country, allows us to support and boost the growth of variable renewable energy sources like wind, solar, and hydro.

For the energy industry, a decarbonized energy system is the path toward a regenerative future.

## VISION WITHIN REACH

First Gen's efforts show that a decarbonized and regenerative future is possible. As with any great feat, it is challenging, but it is achievable. With around 65 percent of emissions coming from electricity generation and industry-use, the energy industry needs to develop a systemic and radical plan toward decarbonization. We need to change our mindset to create change in the market.

Pulitzer Prize-Winning author and New York Times columnist Thomas Friedman was asked about the pandemic and the environment in a Harvard Business Publishing interview during the quarantine. His response was also quite clear and compelling. He mentioned that "this (pandemic) is of course the warm up act for the big one. And the big one is climate change. And there are two differences between a pandemic and climate change. The first is climate change doesn't peak. If the Greenland and Antarctic ice shelf melts, they're gone. They will no longer reflect the sun's rays. The oceans will rise. They will be permanently boiled by the sun. And the second difference between pandemics and climate change is there is no herd immunity to climate change. ***There is just a relentless pounding on the herd.*** So if this isn't a wake-up call to what is now a decade where we have to do everything we can to stay under 1.5-degree rise in average temperature by 2100. If we have any hope of managing what is now unavoidable and avoiding what will be unmanageable, if this is not a wake up for that, I really don't know what is." I don't know about you, but the concept of a continuous and relentless pounding of the herd is not something we should look forward to. We have to try our best to avoid it and prepare for a difficult journey ahead.

As the leading clean and renewable energy provider in the country, we encourage everyone to respond to this important call for action. We need to shift to sustainable regenerative practices and utilize renewable energy. This shift is how we can ensure that the next generation has the resources not only to cope, but more so to thrive and prosper. This is First Gen's mission, and we hope everyone can take part in forging pathways towards a decarbonized and regenerative future.

> As with any great feat, it is challenging, but it is achievable.

Francis Giles B. Puno
**PRESIDENT AND CHIEF OPERATING OFFICER**


FEATURE STORY

# Employee Efforts for Marine Protection

The Company recognizes that its operations affect the environment, particularly the marine biodiversity near its power plants. First Gen and its employees, embracing the role of custodians of the environment, are committed to upholding the Lopez's values on caring for the environment through several marine biodiversity programs.

## COASTAL CLEANUP

On September 21, 2019, 44 First Gen personnel, from a total of 249 volunteers from various companies, helped collect a total of 167 sacks of mixed garbage from the Batangas City shoreline.

First Gen employees and their families participated in the coastal clean-up at the FGCEC Shoreline Area in Batangas City. After the clean-up, the Company held a short program discussing climate change, marine pollution, and ways to keep plastics off the ocean.

The activity helped enhance awareness about the potential harm plastics have on the marine ecosystem and highlighted the importance of efficient solid waste management and proper waste disposal as the best strategies to combat marine pollution.

## TWO-DAY MARINE FACILITATOR'S WORKSHOP

Twenty-one employee-volunteers attended the two-day marine facilitator's workshop on March 9 - 10, 2019, to gain further understanding of marine protection and conservation. Held in Lobo, Batangas, the workshop explored an experiential learning method using the five senses.

The workshop discussed the following:

I. Introduction to Philippine Marine Environment
II. The Verde Island Passage
III. Marine Ecosystems
IV. First Gen's marine conservation efforts
V. Leave No Trace
VI. Commitment to Marine Conservation

The workshop accomplished the following:

- Raised awareness among First Gen employees regarding the significance of marine biodiversity conservation and protection
- Trained First Gen employees as marine environment ambassadors to promote environmental advocacy.

To promote their environmental advocacy, the employees who completed the training shared their knowledge of marine conservation to their co-employees and the community. They facilitated the "Marine Conservation: An Earth Day Celebration and Conservation" Workshop participated by head office employees on April 22, 2019 and Month of the Ocean Celebration: Marine Protection Conservation participated by site employees on May 15, 2019. They also facilitated the Center of Center Marine Eco Camp for Malabrigo Elementary School on May 18 and 19, 2019, and for Malabrigo National High School on October 19 and 20, 2019. Both schools are in Lobo, Batangas.

To fulfill its vision of a decarbonized country, First Gen aims to implement further waste reduction programs and policies, as well as stringent waste management and disposal protocols. The Company and its employees realize that promoting eco-friendly habits, such as waste segregation and proper disposal, is vital to protecting marine life.

# Our Market Environment

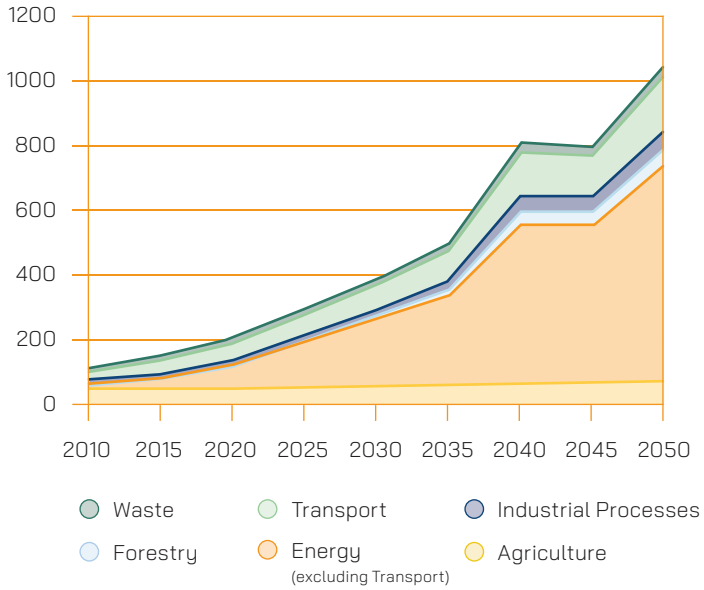
The climate crisis has driven companies to effect drastic and systemic change. For energy companies, there is greater pressure to decarbonize energy sources. However, this has yet to impact coal plant operations and development in the country, as well as the energy consumption behavior of local consumers.

## THE URGENCY OF THE CLIMATE CRISIS

Climate change continues to worsen year on year. The Paris Agreement, fully enacted in 2016, aligned nations to maintain the global temperature rise well below 2 degrees Celsius over pre-industrial levels, or ideally, at 1.5 degrees Celsius. In December 2019, COP25 discussed the widening gap between the goal set by the Paris Agreement and the progress of nations. Aggressive measures to reducing carbon footprint need to be taken. With the energy industry being one of the biggest sources of greenhouse gas (GHG) emissions, there is increasing public pressure on energy companies to be part of the solution.

Without mitigation, the energy sector is projected to have a 64 percent share in the total GHG emissions of the Philippines by 2050.

**PHILIPPINE GHG EMISSION PROJECTIONS BY INDUSTRY**




**SOURCE:** Building Low Emission Alternatives to Develop Economic Resilience and Sustainability Project (B-Leaders) Philippines Mitigation Cost-Benefit Analysis 2018 Integrated Update Report

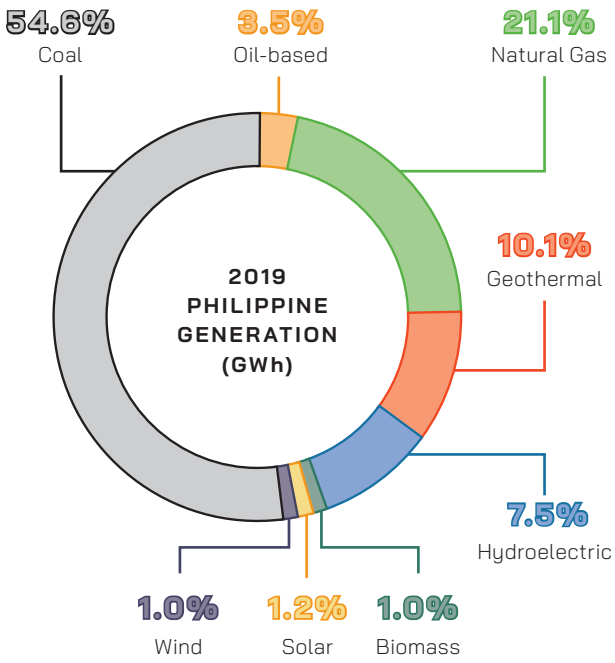
## THE TRANSITION TO RENEWABLE ENERGY

With environmental activists like Greta Thunberg sparking discussions around the world to forego fossil fuel use, consumers are now demanding the development of more RE sources. The share of renewables in the global power mix is projected to rise to over 40 percent by 2040 (World Energy Outlook 2018). This is driven by the rapid technological advancements that make RE more affordable and government policies that support the development of RE sources.

The situation is quite opposite in the Philippines. Based on 2019 data, coal still makes up more than 50 percent of the country's gross energy generation and new coal plants are still being built. If these coal projects continue to push through, the Philippines will be farther from achieving the global targets.

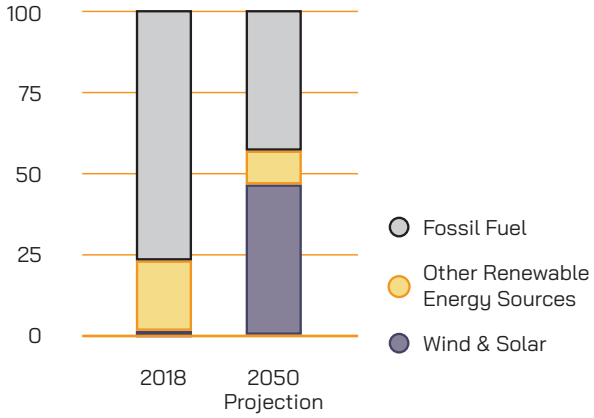
Despite this situation, policies are in place, and there are several companies seeking to develop RE sources in the country. The government, through the National Renewable Energy Program (NREP), initially set the target of tripling the 5,438 MW renewable energy capacity to roughly 15,000 MW. In 2019, they announced that the program's targets are under review. However, they have subsequently disclosed that there is a target increase of renewable capacity to 20,000 MW from 2019 to 2040. Implementation plans are to be determined.

Despite the impending increase in coal production, the National Renewable Energy Board (NREB) remains hopeful for the growth of RE sources in the Philippines. The NREB expects to expedite the development of the country's RE sources once the Renewable Portfolio Standards (RPS) are fully implemented. If this continues, Bloomberg New Energy Finance (BNEF) projects that the Philippines power mix would be composed of 57 percent RE by 2050.



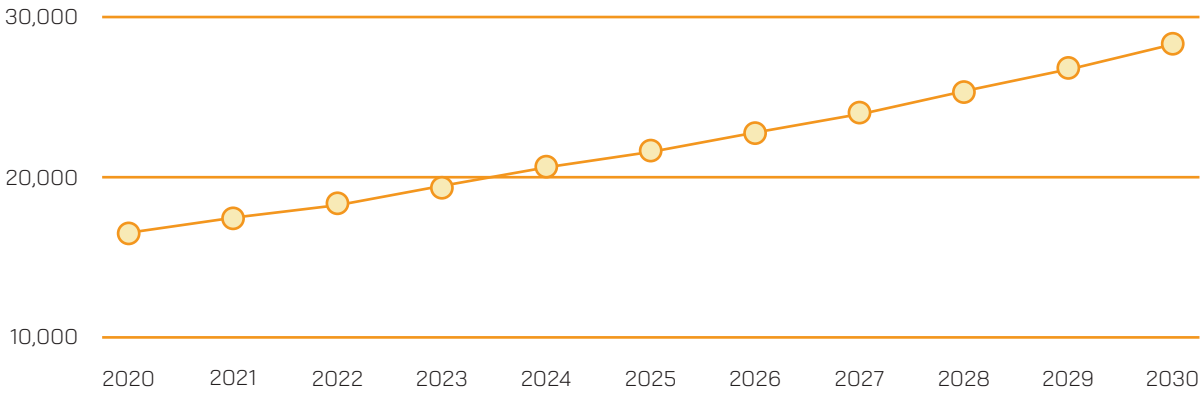

**SOURCE:** www.doe.gov.ph, 2019 Power Statistics as of December 31, 2019

**PHILIPPINE ENERGY MIX**




> With the energy industry being one of the biggest sources of greenhouse gas (GHG) emissions, there is increasing public pressure on energy companies to be part of the solution.

**DEPARTMENT OF ENERGY'S PEAK DEMAND FORECAST 2020-2030**




**SOURCE:** Department of Energy's Peak Demand Forecast 2020-2030

## CONTINUOUS TECHNOLOGICAL ADVANCEMENTS

To decarbonize the country's energy production, there is a need to invest in the advancement of clean and RE sources. Technological advancements continue to drive down the costs of wind and solar, increasing the viability of these RE sources. Innovations have presented new ways of consuming power, as well. For example, battery developments alone have enabled the increased use of e-vehicles, while the installation of microgrids can provide an additional 2.7 million Filipinos with consistent and reliable power.

On the other hand, natural gas plants have also become more efficient and flexible, making it the best complement to RE as the world undergoes decarbonization. The first step to wean off from coal dependency is to invest in liquefied natural gas (LNG). LNG, due to its liquid form, can easily be stored and transported without the use of pipelines. In addition, the industry has recently developed a variety of new LNG projects, technologies, and business models, all of which contribute to a more competitive and flexible market.

Enabling LNG in the Philippines will grant the country access to the expanding global gas market, particularly the development of new gas fields such as shale gas. Shale formations are fine-grained sedimentary rocks that can be rich sources of petroleum and natural gas, derived through hydraulic fracturing. Shale has drastically increased the availability of natural gas in the market, leading to a more robust and abundant gas supply.

## INCREASING PHILIPPINE ENERGY DEMAND

As the Philippine economy grows, its energy demand is expected to grow exponentially with it. The Department of Energy (DOE) projects the Philippine demand to increase by 82.6 percent in 10 years.

This forecast, however, has yet to take into consideration the potential effects of the novel coronavirus (COVID-19) outbreak, which originated from China in December 2019 and became a global pandemic in March 2020. As of publication date, disruptions in the global supply chain were already being felt, even as markets adjusted to oil price cuts and the likelihood of a slowdown in production. Localized lockdowns in several countries, including the Philippines, had also constricted movements, with a subsequent toll on energy, particularly in the transport sector. There is still uncertainty as to the full impact of the situation. Forecasts on energy demand and supply, including for renewables and natural gas, will need to be adjusted accordingly.

Government regulations and policies continue to have a significant influence on the energy industry as it continues its transition toward increased retail access and decarbonization.

## EMERGENCE OF NEW MARKET SEGMENTS

The implementation of the retail competition and open access (RCOA) in December 2012 started to change the entire energy landscape of the Philippines. It has opened power generators to a wide and diversified market. At present, those consuming over 750kW per month are now allowed to directly contract their power supply from their chosen generator. However, in 2017, the Supreme Court issued a temporary restraining order (TRO) for RCOA that has stalled the implementation of its latter phases. The Energy Regulatory Commission (ERC) is currently studying how to move forward with the policy in light of the TRO.

Government regulations and policies continue to have a significant influence on the energy industry as it continues its transition toward increased retail access and decarbonization. The Energy Reform Agenda supports the development of RE sources to attain energy self-sufficiency, energy security, and environmental sustainability. On April 2019, the Congress signed into law the Republic Act No. 11285 or the Energy Efficiency and Conservation Act which aims to regulate the use of energy-efficient technologies in buildings. DOE's Renewable Energy Management Bureau continuously explores issuances that can reignite the development of the RE sector.


FEATURE STORY

# A Kagami Biraki groundbreaking for First Gen's LNG Terminal project

On the 28th of May 2019, First Gen together with LNG partner Tokyo Gas, held a ***kagami biraki*** groundbreaking ceremony at the FGCEC. The groundbreaking ceremony signified that the project has passed its pre-development work and marked the beginning of its next phase: the construction of the terminal.

## THE CEREMONY

*Kagami biraki*, meaning "opening the mirror", is a traditional Japanese ceremony meant to mark significant events, said Kunio Nohata, Chief Executive of the Global Business Division of Tokyo Gas. The ceremony involved using a wooden mallet to break open the lid of a sake barrel, and then sharing the contents with the participants. The act of opening (*biraki*) the rounded barrel lid (*kagami*, signifying harmony) represents an openness to harmony, and is expected to bring good fortune to the ongoing project. Others present during the ceremony were Jonathan Russell, First Gen Executive Vice President and Chief Commercial Officer; Beverley Rose Dimacuha, Batangas City Mayor; Sen. Sherwin Gatchalian, Chairman of the Senate Energy Committee; Francis Giles B. Puno, First Gen President and Chief Operating Officer; Rep. Lord Allan Velasco, Chairman of the House Committee on Energy; Rep. Mario Vittorio Marino, Fifth District of Batangas; Hermilando Mandanas, Batangas Governor; Makoto Iyori, Minister for Economic Affairs of the Embassy of Japan; and Department of Energy Secretary Alfonso G. Cusi.

Both Tokyo Gas and First Gen look forward to the LNG Terminal's construction as it is a significant investment in providing low-carbon energy to the country. Based on a Joint Development Agreement that both parties have entered into, First Gen will take an 80 percent participating interest in the LNG project while Tokyo Gas will take a 20 percent participating interest.

## LNG PROJECT'S NEXT STEPS

As a next step, First Gen intends to modify the existing jetty into a multi-purpose jetty. The modified multi-purpose jetty will have the capacity to receive liquid fuel carriers but will have the additional capability of accommodating a FSRU on an interim basis, as well as LNG carriers, that will accelerate First Gen's ability to introduce LNG to the Philippines to as early as 3rd quarter of 2022.

**Both Tokyo Gas and First Gen look forward to the LNG Terminal's construction as it is a significant investment in providing low-carbon energy to the country.**

# Value Creation Capitals

First Gen reports its strategy on how the Company utilizes its resources to continually create value over time. This value is affected by the organization's inputs, activities, and outputs, and the critical interdependencies, and trade-offs between them, which are classified under capitals. Based on the International <IR> Framework, the capitals are categorized and described as follows:

## FINANCIAL CAPITAL

Sources of funds that are:

- available to an organization for use in the production of goods or the provision of services
- obtained through financing, such as debt, equity or grants, or generated through operations or investments

## MANUFACTURED CAPITAL

Manufactured physical resources material (as distinct from natural physical resources material) are resources available to an organization for use in the production of goods or the provision of services. This can include:

- buildings
- equipment
- infrastructure (such as roads, ports, bridges, and waste and water treatment plants)

Manufactured capital is often created by other organizations but can also include assets manufactured by the reporting organization for sale or when they are retained for its own use.

## INTELLECTUAL CAPITAL

Organizational, knowledge-based intangibles, including:

- intellectual property such as patents, copyrights, software, rights, and licenses
- "organizational capital" such as tacit knowledge, systems, procedures, and protocols

## HUMAN CAPITAL

People's competencies, capabilities and experience, and their motivations to innovate, including their:

- alignment with and support for an organization's governance framework, risk management approach, and ethical values
- ability to understand, develop, and implement an organization's strategy
- loyalties and motivations for improving processes, goods and services, including their ability to lead, manage, and collaborate

## SOCIAL AND RELATIONSHIP CAPITAL

The institutions and the relationships within and between communities, stakeholder groups and other networks. This also includes the ability to share information to enhance individual and collective well-being. Social and relationship capital includes:

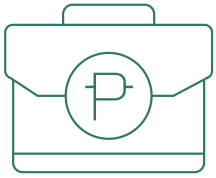
- shared norms, common values, and behaviors
- key stakeholder relationships, as well as the trust and willingness to engage that the organization has developed and strives to build and protect with external stakeholders
- intangibles associated with the brand and the reputation the organization has developed
- an organization's social license to operate

## NATURAL CAPITAL

All renewable and non-renewable environmental resources and processes that provide goods or services that support the organization's past, current, or future prosperity. This includes:

- air, water, land, minerals, and forests
- biodiversity and eco-system health

# Management Approach to Capitals



## FINANCIAL CAPITAL

Financial capital is composed of the Company's sources of funds for the provision of services. It is managed based on maximizing stakeholder value to contribute optimum economic and social performance. The Company adopts strategies that increase financial returns and that avoid, mitigate, or rectify risks. The process involves: a) identifying growth targets and initiatives that are value-adding, b) developing and refining the strategies to achieve targets, c) regularly identifying and quantifying the related risks and their mitigants, d) executing the action plans, and e) continuously monitoring results to verify actions and validate effectiveness of actions taken. Risk assessments on the economic, environmental and social aspects of the business are developed and conducted with guidance from the Management and the Board. Results are reported on a quarterly and annual basis through consolidated financial statements, which are prepared in accordance with Philippine Financial Reporting Standards that are effective in a given year. The annual consolidated financial statements prepared by management are audited in accordance with Philippine Standards on Auditing by the independent external auditors duly appointed by the stockholders. The same annual consolidated financial statements are reviewed and approved by the Board of Directors prior to issuance to the stockholders.

## MANUFACTURED CAPITAL

First Gen's manufactured capital consists of physical resources materials, and technological assets (power plants, buildings, equipment, tools, and other infrastructure assets) used by the Company to generate power for customers. The power plants are either acquired or constructed through turnkey Engineering, Procurement and Construction (EPC) Contracts.

All assets are managed and maintained through value preservation, high economic performance, safety, reliability, cost-effectiveness, and sustainability of operations. The Company conducts planning, maintenance, and monitoring programs to provide reliable and dispatchable power. Periodic assessments and reviews on business risks and environmental risks are done for each asset. Stewarded by the Senior Management Risk Review Committee (SMRRC) and Board Risk Oversight Committee (BROC), appropriate measures are developed and implemented to address or mitigate risks and ensure the resilience of assets and continuity of business in situations brought about by climate change. A Business Continuity Management (BCM) System consists of: 1) Emergency Preparedness and Response that is made up of immediate plans, and responsibilities to be taken on a strike of emergency condition, 2) Crisis management that deals with strategic communications and directions with regard to the position of the organization with the key stakeholders such as Philippine Electricity Market Corporation (PEMC), ERC, DOE, and the media, and 3) Business recovery to ensure that mission critical business processes are recovered within required timeframes. Stringent security measures along with a good relationship with fence-line communities are also maintained to protect the assets.

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## INTELLECTUAL CAPITAL

First Gen's intellectual capital encompasses the organization's investments in selected software and manpower training, utilized by its various business units and critical support groups. The software, data, and information are managed by the business units together with the Information Technology Group. These intangibles are utilized in new business development and project development, effective and efficient asset management, and successful and streamlined operations in a highly competitive electricity market. Additionally, the Company's First Gen Energy Solutions (FGES) Group uses internally-developed Demand Forecasting techniques and Wholesale Electricity Spot Market (WESM) trading strategies. New knowledge and skills are also derived from specialized training with Original Equipment Manufacturers (OEMs), immersion with Operations & Maintenance (O&M) contractors, training at conventions, and membership in technical societies. Preferred technical consultants are engaged to address capability gaps on specific technical issues, thereby expanding extent and sources of Intellectual Capital. First Gen and its subsidiaries' Quality Management Systems are certified with the International Organization for Standardization (ISO) 9001:2015, which assures stakeholders that the Company operates on an internationally-recognized framework to achieve company objectives. Process leading indicators were also developed and monitored to anticipate parameters that potentially contribute adverse impact to the business operations and non-compliance with contractual obligations, and environmental and social-related regulatory requirements.

## HUMAN CAPITAL

First Gen's human capital lies in the knowledge, skillset, and capability of its management and employees to perform duties and responsibilities regardless of gender, ethnic background, age, and religion. Its manpower is driven by the Lopez values, and guided by company policies and procedures. They are accorded with training and other forms of learning to build their competence and perform effectively. An annual Performance Engagement Process (PEP) evaluates employee performance and employee development to aid professional and personal development.

The management fully supports the employees' well-being by providing physical and emotional wellness programs, annual physical examination, information, and education campaigns on relevant environment, safety, and health issues. First Gen highly regards its employees' health and safety, developing and implementing the Occupational Health and Safety Management System (OHSMS) to ensure safe and healthy workplace for the employees and all workers through the identification and assessment of all OHS hazards and risks; and the timely implementation of mitigating measures to address the significant OHS risks. Plants are also working on the migration of OSH Management Systems' OHSAS 18001:2007 certification into ISO 45001:2018 certification. To protect the security of personnel and assets, stringent security measures are enforced. Security personnel are likewise trained to effectively conduct their duty with utmost regard for human rights.

First Gen complies with the national labor laws and standards in the Philippines, including hiring employees of legal age; fair and just compensation and benefits to its workforce; training; upholding the Anti-Sexual harassment Policy; gender equality and respect and other mandated health and safety related policies. It likewise provides the workforce the appropriate infrastructure, equipment and materials as part of the essential tools of the trade.

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## SOCIAL AND RELATIONSHIP CAPITAL

First Gen considers its stakeholders as valued partners. Various departments communicate and engage the stakeholders they directly interface with for effective conveyance of information and response to the stakeholders. The Investor Relations Group handles timely information dissemination through public disclosures and responds to investors' queries at any given point in time. FGES and the Operations Groups manage customer communications such as responding to their concerns and obtaining customer feedback.

Engagements and plenary sessions are held with accredited contractors and outsourced service providers to ensure their awareness and adherence to the Company's business requirements and policies and Contractor ESH Management (CESHM). Screening of contractors based on environmental and social criteria is done in alignment with First Gen's environmental and occupational health and safety standards, national labor laws and other legal requirements.

Meetings and consultations with host communities and local government units discuss the corporate social responsibility (CSR) and community relations projects of the Company intended to improve the communities' quality of life and promote their level of self-reliance. First Gen also recognizes the Indigenous Peoples (IP) as partners by upholding their territory rights and respecting their cultural integrity, as stipulated in the Company's Cultural Heritage and Indigenous Peoples policy.

## NATURAL CAPITAL

First Gen depends on natural capitals that serve as raw materials for its businesses and as the source of environmental services that benefit the Company's employees, host communities, and facilities. To preserve the natural capital, the Company complies with all applicable national environmental laws and regulations, as well as all relevant international conventions on natural resources management, land use, biodiversity, waste management, and sustainable development.

First Gen's power plants operate lawfully, focusing on the protection and conservation of the environment. Its operating companies: FGPC, FGP, FNPC, FG Hydro, FG Bukidnon have their Integrated Management Systems on Quality, Environmental and Occupational Health and Safety certified to ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007, respectively. EDC operating plants on the other hand, maintain their Environment Management System's certification with ISO 14001:2015 and their testing and calibration laboratories' certification with ISO/IEC 17025. An established policy on Environment, Safety, and Health guides the Company's stewardship/ management of its environmental impacts, environmental protection through its low carbon emissions, responsible management of effluents and wastes, and efficient use of natural resources.

Considering the results of environmental assessment, including the effects of climate change and its financial impact to the business, the Company adopted the "Mitigation Hierarchy Principle," and practices a) avoidance of activity to prevent potential adverse impacts, b) minimization of the intensity and duration of adverse impacts, c) restoration to re-establish the

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natural system's composition, structure, and function, and d) offsetting the adverse impacts on the operation. Meanwhile, First Gen's adoption of the "Precautionary Principle" protects the ecosystems and prevents environmental degradation by ensuring that decisions with environmental implications are well studied and based on science.

While First Gen produces power, it also implements programs and projects on energy reduction through consumption monitoring, conservation programs, information campaigns, and use of solar panels.

First Gen manages its environmental impact through mitigation measures and monitoring processes preventing GHG emissions relative to its natural gas-fired power plants. First Gen uses low NOx Burner Technology and natural gas with lower emissions. In times of natural gas unavailability, the O&M contractor utilizes liquid fuel with low sulfur content and water injection technology to reduce NOx emissions.

Together with its O&M contractors, the Company established an integrated waste management program to ensure that hazardous and non-hazardous wastes are stored, transported, treated, and disposed of according to regulatory requirements and standards. Due diligence of third-party service providers is carried out in compliance with regulatory requirements.

First Gen's impact on water resources occur during the withdrawal and consumption of water for processing, cooling and domestic use of the Sta. Rita, San Lorenzo, San Gabriel, Avion, and FG Bukidnon power plants. Regular monitoring of water withdrawal is conducted to ensure compliance with the extraction rate limits set by the National Water Resources Board for groundwater and seawater. The seawater used by thermal plants for condenser cooling employs a once-through system and is returned back to the sea. Wastewater treatment facilities are provided to comply with effluent quality before discharge to receiving bodies of water. Effluent quality is regularly monitored before discharge in compliance with the Philippine Clean Water Act of 2004.

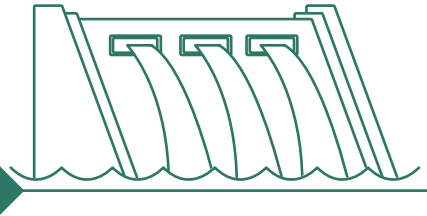
In EDC's geothermal plant sites, water management is addressed at a larger scale, i.e., at the watershed level, with geographic information system-assisted Watershed Management Plan. In addition, climate modeling is conducted for EDC's Burgos Wind Project for early detection of oscillation which will potentially affect wind resource.

The Company's environment conservation program like the Center of the Center of Marine Shorefish Biodiversity Project has contributed to the conservation of the Verde Island Passage. The forest cover near geothermal plants is protected and propagated to ensure the delivery of optimum forest goods and services that help recharge geothermal and hydropower reservoirs and serve various publics and industries dependent on the watershed.

EDC's in-house experts and specialists implement a comprehensive Biodiversity Conservation and Management Program (BCMP) which entails monitoring of flora, fauna, and freshwater macro invertebrates; mapping and protecting High Conservation Value Areas (HCVA) within our geothermal reservations; and adopting wildlife species. EDC also implements a holistic upland community management program that helps transform upland communities living within the vicinity of its project sites into effective stewards of watershed resources.

**GRI 102-11 103-1 103-2 103-3 303-2 306-1**

START



## Renewable Power

**GEOTHERMAL**
Geothermal generates energy using the earth's natural heat. Water seeps three kilometers down into the ground where it is hotter. Once this water becomes heated, it becomes less dense and rises back up as steam. This steam is used to power a turbine and generate electricity.

**HYDROELECTRIC**
Hydroelectric power generation follows the Hydrological Cycle. Reservoirs store potential energy gathered during the rainy season. Hydro plants harness this stored energy through its intake towers, transforming the force of the falling or moving water into kinetic energy and becoming mechanical energy as it hits the turbines, thereby generating electricity.

**WIND**
Wind electricity generation is opposite an electric fan. An electric fan uses electricity to produce wind while wind turbines use the kinetic energy of the wind to produce electricity. The wind turns the blades on the turbines, spinning the shaft connected to the generator to generate electricity.

# First Gen's Energy Value Chain

First Gen secures low-carbon, clean and renewable energies – natural gas, geothermal, solar, wind, and hydro – for its customers. The Company maintains a complementary portfolio, advocating for the adoption of more RE in the country, while investing in natural gas as a reliable supplement and transitional fuel.

First Gen adopts efficiency measures and conducts environment-friendly activities in its plant locations to protect and improve the natural ecosystems surrounding its operations. First Gen also invests in and works with its partner communities to help them attain self-sufficiency and holistic human development.

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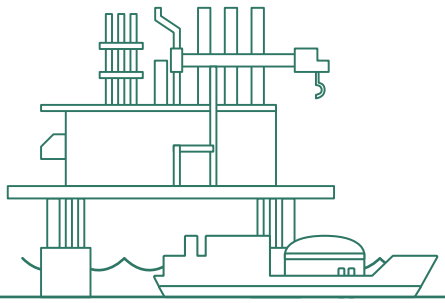
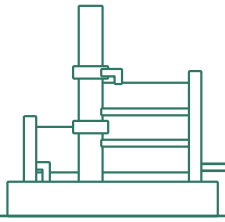




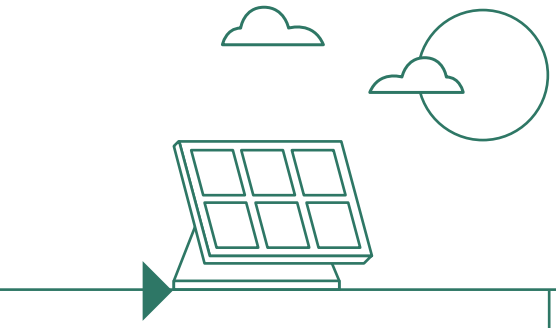
## Natural Gas Power

**OFFSHORE SUPPLY**
The natural gas used in First Gen's power plants is indigenous and sourced from the Malampaya gas field located 80 kilometers west of northern Palawan.

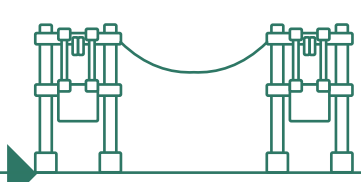
**ONSHORE GAS PLANT (OGP)**
From Malampaya, the extracted natural gas is delivered via an undersea pipeline to an onshore gas platform in Tabangao, Batangas City for filtering. Here, the natural gas delivered is purified to suitable quality for the power plants.

**DELIVERY TO POWER PLANTS**
The natural gas then makes its way through an approximately nine-kilometer underground pipeline to reach the First Gen Clean Energy Complex where First Gen's four natural gas plants are located.

GRI 102-9

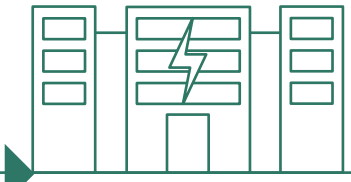


**SOLAR**
Silicon in the solar photovoltaic panel absorbs tiny energy particles in sunlight called photons. Photons excite the electrons in the silicon, which then pass through copper wiring in the solar panels. The DC power generated by the solar panels pass through an inverter to convert electricity into usable AC power.



## Transmission

The National Grid Corporation of the Philippines (NGCP) manages the physical flow of energy from Generation Companies to Distribution Utilities through utilizing the state-owned power grid. NGCP also ensures that the energy supply of the power grid always meets the energy demand and system frequency by managing the reserves. First Gen supplies energy to NGCP by entering into Ancillary Service Procurement Agreements (ASPAs) which provide energy to the reserves that NGCP uses. These reserves are used to adjust the energy supply in the power grid to match the energy demand, as well as maintain the health of the grid by managing the system's frequency.



## Distribution

Distribution Utilities (DUs) manage the physical flow of energy from Transmission (NGCP) to Contestable Customers (customers whose electricity consumption have an average monthly peak demand of at least 750kW) and the Captive Market (customers whose electricity consumption have an average monthly peak demand below 750kW). First Gen enters into Power Supply Agreements (PSAs) to supply the energy requirements DUs deliver to their coverage area. First Gen also partners with DUs by entering into Distribution and Wheeling Services Agreements (DWSA) to serve First Gen's contestable customers located in the DU's coverage area.

**NATURAL GAS**
Natural Gas serves as the power plants' primary fuel, combusted to spin turbines that enable the plants to generate electricity.

## Powering the Philippines

Natural gas, geothermal, hydro, wind, and solar power are all part of First Gen's clean and renewable energy portfolio. The Company provides 21.0 percent of the Philippines gross generation as of December 31, 2019 with electricity sold to DUs, electric cooperatives, industrial consumers, and the Wholesale Electricity Spot Market (WESM).

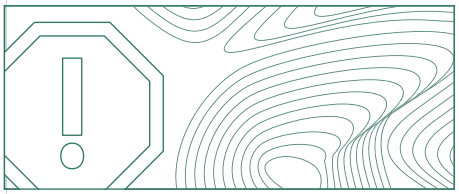
GRI 102-9

# Creating Value at First Gen

## EXTERNAL ENVIRONMENT

- Urgency of the Climate Crisis
- Decarbonized Future
- Continuous Technological Advancements
- Increasing Philippine Energy Demand
- Emergence of New Market Segments

## RISKS



- Depletion of Indigenous Resources
- Climate Change & Natural Catastrophes
- Plant and Equipment Reliability
- Regulatory Risks
- Intense Competition & Increased Market Volatility
- Financial Risks
- Cybersecurity Risk

## OPPORTUNITIES

- Development of LNG Terminal
- Increase in Energy Demand in the Medium to Long Term
- Development of Variable Renewable Energy Projects
- Implementation of Clean Development Mechanism
- Incentives under the Renewable Energy Law of 2008
- Inadequate Access to Electricity

## INPUTS

### FINANCIAL CAPITAL

- USD 1.2B Retained Earnings
- USD 683M Equity invested by Common Shareholders
- USD 374M Equity invested by Preferred Shareholders
- USD 2.2B Debt provided by Lenders

### MANUFACTURED CAPITAL

- 4 Natural Gas Power Plants (2,017 MW)
- 12 Geothermal Power Plants (1,179 MW)
- 1 Wind Power Plant (150 MW)
- 3 Hydro Power Plants (134 MW)
- 10 Solar Power Plants (12 MW)

### INTELLECTUAL CAPITAL

- In-house WESM Trading Strategies and Forecasting Techniques
- Robust customer database, and market model and analysis data warehouse
- Resource and steamfield management through Artificial Intelligence (AI) and analytics-enhanced numerical models
- Climate modeling for Burgos Wind Project

### HUMAN CAPITAL

- 1,943 employees, 1:2.4 Female-Male Ratio
- 107,172 hours of Employee Skills Training; Average of 55 hours per employee
- 113 hires for 2019
- HR Policies

### SOCIAL AND RELATIONSHIP CAPITAL

- 20 years of partnership with Siemens for technical knowledge and skills required to operate Natural Gas Plants
- Partnership with MIRA and GIC of Singapore for the Renewable Energy Portfolio
- Community Investments amounting to USD 3.2 million
- Partnership with 36 Local Government Units/ 217 Host Communities/ 4 Indigenous People Group located in areas of business operations

### NATURAL CAPITAL

- 2,039,234.9 tons of non-renewable materials
- 67,474,054.9 tons of renewable materials
- 4,463,929,3 ML of water withdrawn
- 136,084,107.0 GJ of energy consumed

**GRI 102-7 102-8 102-15 201-1 201-4 301-1 302-1 303-3 303-4**

# OUTCOMES FROM OPERATIONS

First Gen

Forging collaborative pathways
for a decarbonized and
regenerative future.

## OUTPUT

22,299.1 GWh of Clean
and Renewable Energy

5,705,715.5 $tCO_2e$ of Scope 1 Emissions

6,283.6 $tCO_2e$ of Scope 2 Emissions

5,208.6 $tCO_2e$ of Scope 3 Emissions

4,461,291.1 ML of Water Discharged

1,393.0 tons of Non-Hazardous Wastes disposed

543.4 tons of Hazardous Wastes
treated and disposed

## PERFORMANCE

USD 2.196B Direct Value Generated

90% (3,136.5 MW) Contracted
from the Total Installed Capacity

0.003 Intensity ($tCO_2e$/unit revenue)

0.25 Intensity ($tCO_2e$/MWh)

## OUTLOOK

Increase Plant Capacity MW
(Pumped Storage, Run-of-river,
Natural Gas, Geothermal and Wind Energy)

Secure long term fuel supply
for Natural Gas Plants
(LNG Terminal, FSRU)

### FINANCIAL CAPITAL

- Attributable Net Income of USD 296.2 million, thereby increasing the Company's financial capital
- Cash Dividends Paid to Shareholders of First Gen amounting to USD 54.7 million (for common and preferred shares)
- Interest Paid and Principal Repaid to Lenders amounting to USD 112.4 million and USD 341.4 million, respectively

### MANUFACTURED CAPITAL

- Provided 13.7% of the Philippines' total installed capacity*
- Provided 21.0% of the Philippines' gross energy generation*
- Provided baseload, mid-merit, peaking energy that promote grid stability
- Climate resilient infrastructure

**Based on DOE 2019 Power Statistics as of December 31, 2019*

### INTELLECTUAL CAPITAL

- Integrated systems and processes
- Advanced resource and steamfield management
- Efficient asset management
- Competitively priced power
- Versatile and flexible fuel mix
- Energy security for the grid

### HUMAN CAPITAL

- 19,641,609 Safe Man-hours
- 0 fatality as a result of work-related injury and illness
- Provided skills, competencies, and exposure
- Preferred Employer

### SOCIAL AND RELATIONSHIP CAPITAL

- 69 companies provided with clean and renewable energy, including 42 contestable customers, 19 DUs/electric cooperatives, and 6 directly connected customers
- 94.5% of purchases and services sourced from Local Suppliers
- 100% compliance to applicable legal and regulatory requirements

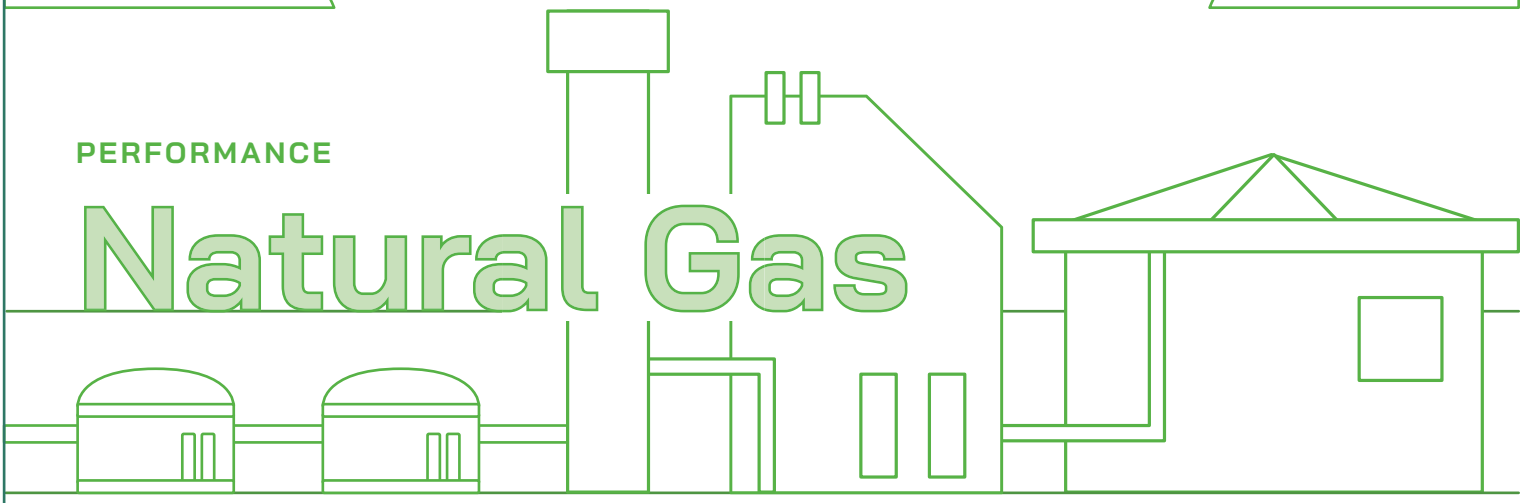
### NATURAL CAPITAL

- Adaptation to Climate Change
- Resilience to Future Carbon Regulation
- 19,468,054 tonnes of Carbon Stored in Geothermal Reservations
- GHG avoided ($tCO_2e$) vs. Coal: 15,924,383.5 $tCO_2e$
- Forest Protected : 112,177 hectares (ha.)
- Forest Carbon Captured : 71,447,760 tonnes $CO_2$
- 572 species of fauna and 14 species of mangrove monitored

GRI 304-2 305-1 305-2 305-3 306-2 307-1 404-1 EU2 EU3 EU10 EU13

PERFORMANCE

# Natural Gas



**SUBSIDIARIES**

- First Gas Power Corporation (FGPC)
- FGP Corp. (FGP)
- First NatGas Power Corp. (FNPC)
- Prime Meridian PowerGen Corporation (PMPC)

**2,017 MW**
**Total capacity**

## FINANCIAL HIGHLIGHTS

(In USD Millions)

| PERFORMANCE INDICATORS | SANTA RITA | | SAN LORENZO | | SAN GABRIEL | | AVION | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Revenues from Sale of Electricity | 704.5 | 681.9 | 352.3 | 341.7 | 248.1 | 199.4 | 34.7 | 17.0 | 1,339.6 | 1,240.0 |
| Operating Income (loss) | 151.0 | 152.1 | 71.3 | 72.8 | 50.1 | 49.6 | 5.6 | (2.5) | 278.0 | 272.0 |
| Net Income (loss) | 105.7 | 101.7 | 45.9 | 42.7 | 45.7 | 35.2 | 3.9 | (1.9) | 201.2 | 177.7 |

First Gen's natural gas platform performed well in 2019. The Company's established natural gas power plants greatly contributed to its overall record earnings for the year. This increase can be attributed to several factors, namely:

△

The natural gas platform reported a net income of **USD 201.2 million** for 2019, a 13.2 percent increase from USD 177.7 million in 2018. This increase also contributed 67.9 percent to the Company's overall earnings for 2019.

△

In 2019, **SAN GABRIEL** had a higher net income of **USD 45.7 million** a 29.8 percent increase from USD 35.2 million in 2018, due to the full-year PSA with Meralco.

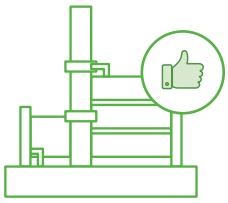
△

**AVION**'s net income increased by **USD 5.8 million** due to higher dispatch and higher average WESM selling prices during the year.

# OPERATIONAL HIGHLIGHTS

First Gen's natural gas plants operated reliably, each contributing to the success of the natural gas platform and helping curtail power outages in the Luzon grid in 2019.

| PERFORMANCE INDICATORS | SANTA RITA | | SAN LORENZO | | SAN GABRIEL | | AVION | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Actual Energy Generation (GWh) | 7,188.0 | 7,259.4 | 3,732.5 | 3,606.7 | 2,758.3 | 2,198.4 | 196.8 | 123.3 |
| Net Capacity Factor (%) | 75.6 | 75.8 | 76.3 | 73.5 | 75.4 | 61.0 | 23.2 | 14.5 |
| Availability (%) | 95.5 | 96.4 | 95.4 | 94.2 | 92.6 | 90.5 | 65.8 | 89.0 |
| Reliability (%) | 98.5 | 98.8 | 98.2 | 97.5 | 93.2 | 94.1 | 70.3 | 93.9 |
| Planned Outage (hrs) | 839.3 | 802.4 | 464.9 | 428.2 | 0.0 | 335.4 | 516.7 | 672.0 |
| Forced Outage (hrs) | 367.0 | 416.3 | 310.4 | 428.6 | 573.8 | 492.1 | 4,923.1 | 971.2 |
| Generation Efficiency (%) | 54.4 | 54.0 | 55.2 | 54.6 | 57.9 | 56.8 | 38.0 | 37.0 |



## COMPETITIVENESS OF GAS PLANTS

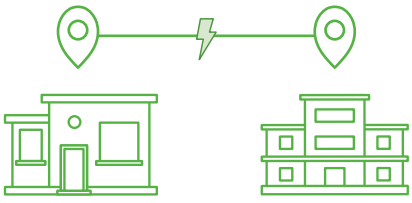
Natural gas is a competitive player in the energy industry.

- Based on Meralco's Average Generation Costs, First Gen's natural gas plants have provided cheaper all-in tariffs in comparison to coal plants for 7 out of the last 11 years, specifically 2009- 2011 and 2016-2019. This allowed customers to enjoy affordable electricity prices.
- The San Gabriel plant helped lower Meralco's average generation rate, producing electricity at PHP 0.46/kWh less than the 2019 Weighted Average Meralco Captive Rate.

## CONTINUED EXCELLENCE OF OPERATIONS

Santa Rita and San Lorenzo plants continue to operate in excellent condition.

- San Lorenzo and Santa Rita operated at a 95 percent and 96 percent availability factor, respectively, or seven and eight percent higher than the 88 percent benchmark rate set by the US Generating Availability Data System (US GADS*).
- The high capacity factors of Santa Rita and San Lorenzo (approximately 76 percent) showcase how the two plants continue to be relied on to provide reliable baseload power to the grid.



## EXPANSION OPPORTUNITIES

With the right infrastructure, natural gas can be explored and developed for expanded geographical and utility use.

- Additional geographical use involves bringing gas-fired electricity to areas in Visayas and Mindanao
- Expanded utility use involves utilizing gas for transportation, residential, and commercial purposes.

*US GADS is a mandatory industry program that tracks information from various conventional generating technologies that are 20 MW and larger.*

GRI 202-2 203-2 EU2 EU10 EU11 EU30

PERFORMANCE: NATURAL GAS

# 2019 Key Achievements

First Gen's natural gas platform made significant strides in 2019, all of which resulted in better performance, improved plant resilience, and significant progress in on-going projects.

## 1 PLANT PERFORMANCE

- Our three baseload natural gas plants, namely, Santa Rita, San Lorenzo, and San Gabriel, continued to operate reliably during critical red and yellow alert periods. The flexibility of the Santa Rita and San Lorenzo power plants to run on liquid fuel helped the grid overcome the restrictions of the Malampaya gas supply.
- San Gabriel's full-year delivery for its PSA with Meralco allowed the Company to provide Meralco customers with one of the lowest generation costs in 2019 which, in turn, enabled the Company to provide affordable electricity to Meralco customers.
- The Avion plant displayed its capability to quickly ramp up and down to augment supply shortages, allowing it to provide electricity to the grid during periods of peak demand. In 2019, Avion achieved an all-time high for the plant's dispatch.

## 2 RESILIENCY MEASURES

The FGCEC improved its plant reliability by employing resiliency measures such as:

- Constructing storm surge and flood barriers;
- Improving the retention for storm water discharge; and
- Improving site protocols during typhoons.

## 3 PROGRESS OF THE LNG PROJECT

First Gen's Batangas LNG Terminal Project achieved key milestones in 2019. The project was also declared an "Energy Project of National Significance," in recognition of its importance to national grid security.
*(For a full discussion of these milestones, see First Gen's LNG Project: An Update on page 37.)*

GRI 202-2 203-2 413-1

# Creating Value for Stakeholders

First Gen continues to develop its natural gas platform to provide its stakeholders with cleaner energy at competitive prices.

### CUSTOMERS
Lower generation costs for its customers, like Meralco.

### STOCKHOLDERS
First Gen's natural gas platform contributed 67.9 percent to the Company's attributable net income in 2019. Its competitive pricing and reliability make it a worthy investment.

### COMMUNITY
FGCEC continues to operate with minimal impact to its surrounding communities as it emits minimal amounts of particulate matter and does not leave behind harmful pollutants such as ash and sludge. Various environment and community initiatives have also been set up, such as coastal cleanup, educational programs, and health programs.

### ENVIRONMENT
In 2019, First Gen's Natural Gas Plants produced a total of 13,873 GWh of power avoiding the release of 8.6 million tons of greenhouse gas emissions* ($tCO_2e$), equivalent to taking out the emissions of 1.9 million cars annually.

**vs. coal*
**NOTE:** Reference for equivalent emissions for coal-fired power plant and passenger vehicles are based on U.S. Environmental Protection Agency (USEPA) Greenhouse Gas Equivalencies Calculator (https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)

# First Gen's LNG Project: An Update

The LNG terminal remains on-track to initiating commercial operations by 2022. The project was able to accomplish the following so far:

## MARCH 2019

DOE awarded First Gen LNG Corporation a Notice to Proceed (NTP) permit for the LNG terminal.

## MAY 2019

First Gen held a traditional *Kagami Biraki* groundbreaking ceremony with Tokyo Gas.

## AUGUST 2019

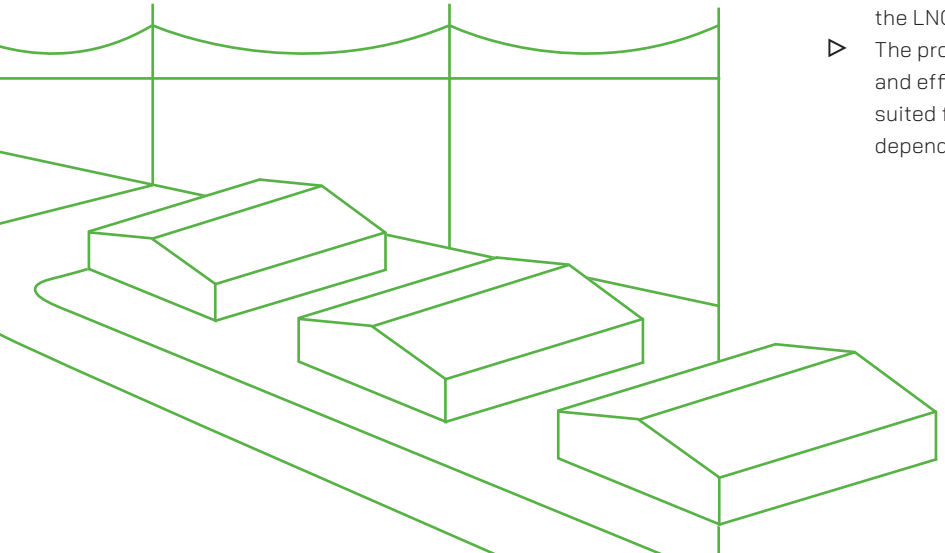
The project was declared as an "Energy Project of National Significance" (EPNS) in accordance with Executive Order No. 30.

## OCTOBER 2019

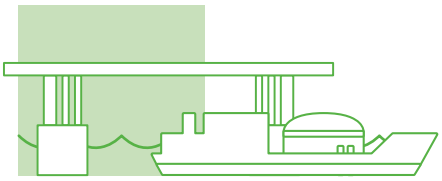
The DOE approved the extension of the project's NTP, allowing the continuation of the work and activities required to complete the NTP conditions.

## MARCH 2020

First Gen submitted its application for a Permit to Construct, Expand, Rehabilitate, and Modify (PCERM) to the DOE



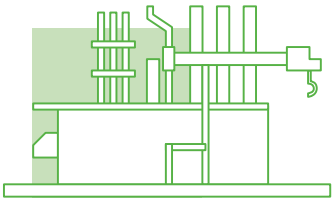
There is also development on the infrastructure needed to advance the LNG terminal.



### ENHANCED PROJECT CONCEPT: THE MULTI-PURPOSE JETTY

Once the modification of the existing jetty is completed, the modified multi-purpose jetty will have the capacity to receive liquid fuel carriers but will have the additional capability of accommodating a FSRU on an interim basis, as well as LNG carriers, that will accelerate FGEN LNG's ability to introduce LNG to the Philippines to as early as 3rd quarter of 2022.

This innovation can readily serve the natural gas requirements of existing and future gas-fired power plants of third parties and FGEN LNG affiliates, and bring the country closer to its goals of energy security, expanded energy access, and low-carbon future. The LNG terminal can serve as a hub that will underpin large and small-scale LNG opportunities throughout the Philippine archipelago.



### ADDITIONAL CAPACITY THROUGH THE SANTA MARIA POWER PLANT

- First Gen continues to work on the development of the approximately 1,200-MW Santa Maria Combined Cycle Gas Turbine (CCGT) Power Plant Project in conjunction with the ongoing efforts to develop the LNG Terminal.
- The project is expected to provide more flexible and efficient capacity for the country, especially suited for the needs of a grid that will be increasingly dependent on intermittent renewable energy sources.

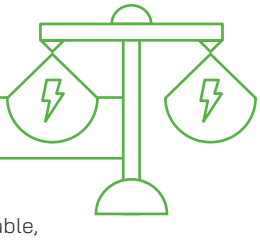
EU10

# Strategy for Natural Gas

To supplement renewable energy's variability and intermittency, First Gen sees natural gas as a clean, affordable, and reliable energy source that can address the Energy Trilemma, namely:

**ENERGY SECURITY**

Meet current and future energy demand reliably and be able to quickly provide power in response to volatility in the grid.



**ENERGY EQUITY**

Provide universal access to reliable, affordable, and abundant electricity.

**ENERGY SUSTAINABILITY**

Mitigate and avoid potential environmental harm and climate change impacts.

The Philippines still heavily relies on coal energy. As an advocate of clean and renewable energy, the Company is responsible for communicating why natural gas is a better investment than coal.

## Natural Gas is...

**CLEAN**

Natural Gas is the cleanest burning fossil fuel. Compared to coal, it emits 60 percent less $CO_2$, 100 percent less SOx, 80 percent less NOx, and does not produce ash, sludge, and particulate matter that are harmful to human health and the environment.

**AFFORDABLE**

Natural gas has provided Meralco with lower generation costs than coal for 7 out of the past 11 years (from 2009-2011 and 2016-2019), and its plants are cheaper to build and operate than coal plants.*

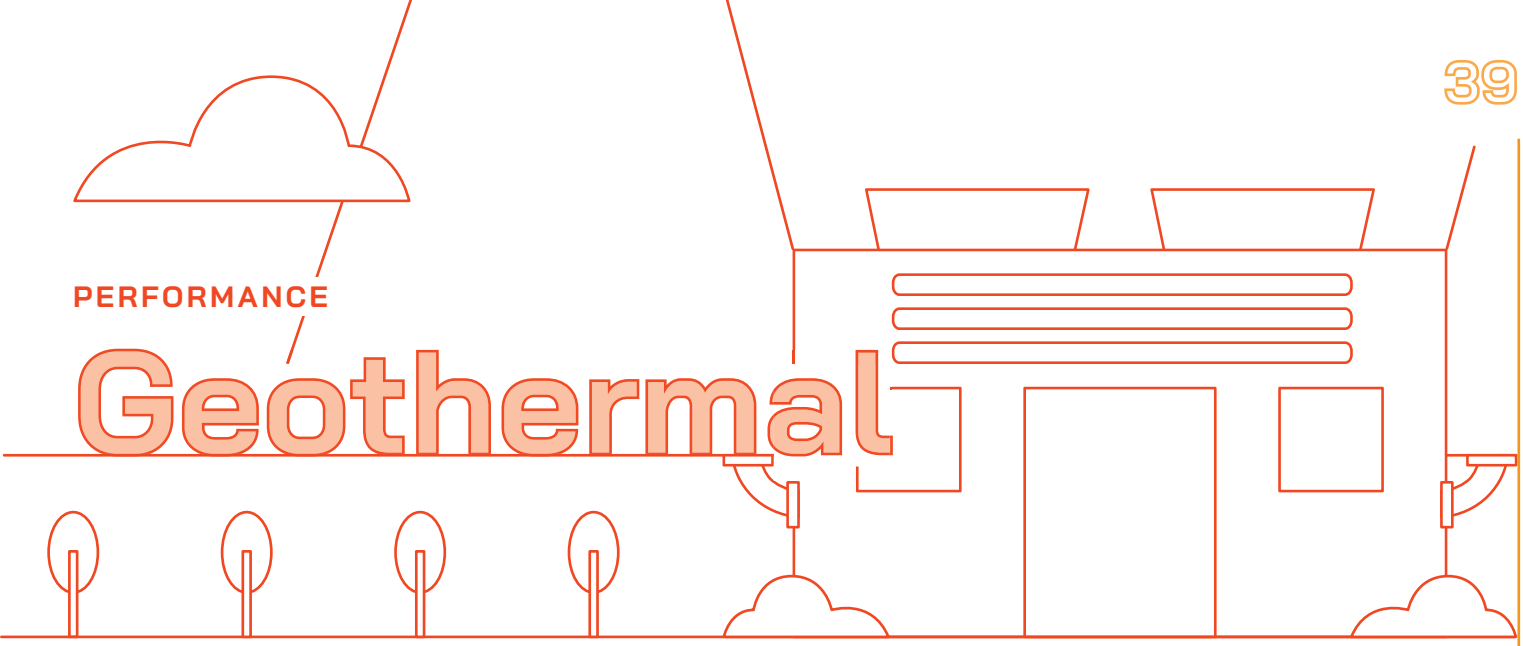
**RELIABLE**

Natural gas plants have higher availability than coal plants in the Philippines, based on data from 2016 to 2019. Natural gas plants can also start and stop up to 50 times faster than coal plants, making them highly flexible without compromising efficiency and reliability.

**A BRIDGE FUEL TOWARD MORE RENEWABLES**

Natural gas plants can support intermittent RE sources because they are highly flexible. Natural gas plants can turn on and off quickly, allowing them to adapt to the changing demands of the grid or respond to sudden loss in capacity due to intermittence.

**US Energy Information Agency (EIA) Capital Cost and Performance Characteristic Estimates for Utility Scale Electric Power Generating Technologies, 2020 or 2016*



PERFORMANCE

# Geothermal

**SUBSIDIARIES**

- Bacon-Manito (BacMan) Geothermal Power Plants
- Unified Leyte Geothermal Power Plants
- Tongonan Geothermal Power Plants
- Palinpinon Geothermal Power Plants
- Nasulo Geothermal Power Plant
- Mindanao Geothermal Power Plants

**1,179.3 MW**
**Total capacity**

## FINANCIAL HIGHLIGHTS

(In PHP Millions)

| PERFORMANCE INDICATORS | TOTAL EDC GEOTHERMAL | |
|---|---|---|
| | 2019 | 2018 |
| Revenues from Sale of Electricity | 36,442.8 | 32,835.3 |
| Operating Income | 11,841.7 | 10,140.5 |
| Net Income | 11,075.6 | 8,212.1 |

**EDC'S GEOTHERMAL PLATFORM** performed well in 2019. Overall, the platform earned **PHP 36.4 billion** in 2019, an increase of PHP 3.6 billion or 11 percent from PHP 32.8 billion in 2018. This increase can be attributed to the following:

- Recovery of Leyte power plants from the damages caused by Typhoon Urduja in 2017. The power plants resumed normalized operations for the whole year in 2019.
- Higher sales from contracts and the spot market led to higher revenues for the Negros and BacMan geothermal plants.

**EDC** likewise experienced a reduction in operating expenses, resulting in a net income of **PHP 11.1 billion**. This was PHP 2.9 billion or 34.9 percent higher than PHP 8.2 billion in 2018. The operational expense reduction was due to optimized operational execution. The various cost-saving activities were:

- In-housing work.
- In-house sourcing of materials.
- Streamlining the scope of work.

## PERFORMANCE: GEOTHERMAL

# OPERATIONAL HIGHLIGHTS

| PERFORMANCE INDICATORS | BACMAN | | UNIFIED LEYTE | | TONGONAN | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Actual Energy Generation (GWh) | 1,066.8 | 1,061.6 | 3,470.2 | 3,277.7 | 901.6 | 635.3 |
| Net Capacity Factor (%) | 91.5 | 93.6 | 72.7 | 70.1 | 106.5 | 80.7 |
| Availability (%) | 93.4 | 96.0 | 85.3 | 86.8 | 98.8 | 92.3 |
| Reliability (%) | 99.1 | 98.4 | 87.3 | 87.6 | 99.4 | 98.7 |
| Planned Outage (hrs) | 368.1 | 662.1 | 2,350.6 | 953.6 | 308.0 | 1,699.6 |
| Forced Outage (hrs) | 561.8 | 634.4 | 46,318.1 | 39,060.4 | 78.6 | 4,759.6 |

| PERFORMANCE INDICATORS | PALINPINON | | NASULO | | MINDANAO | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Actual Energy Generation (GWh) | 1,201.1 | 1,193.5 | 308.9 | 304.9 | 716.0 | 791.8 |
| Net Capacity Factor (%) | 84.4 | 82.9 | 78.2 | 78.0 | 79.1 | 86.1 |
| Availability (%) | 97.0 | 98.0 | 95.8 | 99.9 | 98.6 | 96.4 |
| Reliability (%) | 99.1 | 99.4 | 99.2 | 99.9 | 99.7 | 95.9 |
| Planned Outage (hrs) | 496.1 | 537.6 | 183.2 | 0.0 | 194.5 | 552.3 |
| Forced Outage (hrs) | 2,011.7 | 474.3 | 161.3 | 42.0 | 349.9 | 101.4 |

Geothermal facilities collectively produced 7,877.4 GWh in 2019, 537.0 GWh or 7.3 percent higher than 7,340.7 GWh in 2018 despite the challenges in steam availability in the Leyte plants. The challenges the geothermal plants experienced were as follows:


**CHALLENGES CAUSED BY NATURAL DISASTERS**

- Typhoon Tisoy struck the BacMan plant, slightly damaging the Palayan (BacMan 1) switchyard. The cooling tower walling, cable trays, and access platforms only sustained minimal damage given recent modifications that were made to increase their resiliency against typhoons.
- The Leyte plant sustained damage caused by Typhoon Ursula last December 2019. There were damages on the piping of the Leyte FCRS, which was repaired immediately. Its cooling tower only sustained minor damages since its modification.


**CHALLENGES ON STEAM AVAILABILITY**

- Mahanagdong well issues that resulted in a steam shortfall.
- Extended plant outages of Upper Mahiao Unit 2 and Mahanagdong Unit 1.


**CHALLENGES CAUSED BY NATURAL DISASTERS**

- Mt. Apo facility was affected by the 6.5 magnitude earthquake last October 31, damaging M1's main stop valve, some buildings and access roads.

Minor repairs were immediately carried out to address minor damages. EDC benefitted from its resiliency investments as the facilities were able to return to service immediately. The company continues to invest in its resiliency program to mitigate key risks related to natural disasters like typhoons, landslides, and earthquakes.

EU2 EU30

# 2019 Key Achievements

EDC focused on optimizing the operations of its power plants through upgrades and improvements in plant reliability, plant efficiency, and implementation of efficient workstream projects.

## 1 PLANT RELIABILITY IMPROVEMENTS

- Palinpinon 2 Upgrades.
  The Palinpinon 2 plants had a Control Systems (CS) Upgrade to ensure that the controls are fully responsive and comply with the ancillary service requirements under the 2016 Philippine Grid Code (PGC). Power plant and FCRS (Fluid Collection and Recycling System) controls have also been integrated into a centralized facility control room and were upgraded to improve reliability and overcome obsolescence.
- Palinpinon 2 Sogongon Unit 1 and 2 Automatic Voltage Regulator (AVR) Replacement.
  These AVRs were replaced as part of an initiative to replace all existing AVRs with ABB (Asea Brown Boveri) Unitrol 6080. This is to ensure that the fleet has a common brand, making it easier to upgrade obsolete AVRs and drive a more strategic spares strategy.
- Upper Mahiao Battery Bank Upgrade.
  480V Battery banks were replaced with an upgraded design to increase reliability.
- Mt. Apo Unit 2 Main Transformer Replacement.
  The main transformer was replaced since the installed main transformer was already reaching the end of its useful life.
- Improvement in Planned Outage Execution.
  Eight (8) out of 10 scheduled Planned Maintenance Shutdowns (PMS) were completed in advance with a total of 26.5 outage days saved. The improvement is primarily attributed to a Scheduled Outage Optimization initiative which pushed for planned outage optimization and flawless outage execution.
- Project Neptune.
  Modifications were made to the Leyte and BacMan plants for better resilience against one-off disasters such as typhoons, landslides, and earthquakes.

## 2 APOLLO GENERATION WORKSTREAM PROJECTS IMPLEMENTATION

Its implementation optimized generation uplift through:

- Variable Frequency Drive (VFD) Installation.
  The project aims to reduce house load consumption at reduced load capacity. These VFDs were installed in Malitbog Unit 3, Malitbog Bottoming, Mahanagdong, Palinpinon 1, and Palinpinon 2 Okoy 5.
- Gas Removal System (GRS) Retrofit.
  Liquid Ring Vacuum Pumps (LRVPs) were installed in the units to allow for hybridized gas removal process to improve steam conversion efficiency.
- FCRS Optimization.
  This is a fleet-wide initiative to maximize and optimize the geothermal resource in the steam field.
- Scheduled Outage Optimization.
  The project aims to reduce the duration of planned outages from the historical average in order to minimize generation loss by optimizing and squeezing the planned outage schedule.

GRI 302-4

## PERFORMANCE: GEOTHERMAL
2019 KEY ACHIEVEMENTS

### 3 RESILIENCY PROJECTS

- Palinpinon 2 Okoy 5 Cooling Tower Upgrade from Wood to Fibre Reinforced Plastic (FRP) Structure.
  Cooling Towers were upgraded from wood to FRP for better resilience against earthquakes.
- Malitbog Unit 3 Cooling Tower Upgrade from Wood to FRP Structure.
  Cooling Towers were upgraded from wood to FRP for better resilience against earthquakes.

### 4 STEAM CONVERSION EFFICIENCY

- Mahanagdong Unit 1 and 2 Scrubber Replacement.
  Reduce entry of solids into the turbine system which may cause foreign object damage to the turbine and/or affect the turbine steam path.
- Tongonan Steam Wash System.
  Reduce entry of solids into the turbine system which may cause foreign object damage on the turbine and/or affect the turbine steam path.
- Tongonan conversion to hybrid Gas Removal System (GRS) using Liquid Ring Vacuum Pumps (LRVP).
  LRVPs were installed in the units to allow for a hybridized gas removal process to improve steam conversion efficiency.

**GRI 304-3 EU13**

# Creating Value for Stakeholders

EDC remains consistent in how it engages its stakeholders in its various projects. Internally, the company gives its employees greater involvement and accountability for their growth as employees and as individuals. The company also supports its host communities through various initiatives, guided by the Lopez Group's CSR principles.

### KEITECH EDUCATIONAL FOUNDATION, INC.

Since its establishment, KEITECH has produced more than a thousand graduates in the construction, metal and engineering, and tourism services sectors, with a 100 percent passing rate in all National Certification II competencies and a 96 percent employment rate. The foundation produced 153 graduates on its 10th year in 2019.

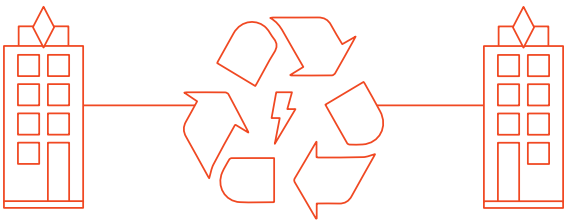
### BINHI GREEN LEGACY PROGRAM (BINHI)

BINHI is EDC's nationwide greening program with the goal of restoring denuded forests, preserve and propagate threatened native tree species, and protect biodiversity. In 2019, EDC reforested a total of 100 hectares in three (3) of its sites, bringing the overall reforested area to 9,449 hectares.

| SITE | AREA (ha) |
|---|---|
| Bacon-Manito Geothermal Reservation | 24 |
| Mt. Apo Geothermal Reservation | 6 |
| Pantabangan-Masiway Hydro Project | 70 |
| **TOTAL** | **100** |

# Strategy for Geothermal

As the country continues its track of becoming sustainably powered by renewable energy supply, EDC will continue to provide clean energy to support and secure uninterrupted power in major regions of the country. With its good track record of power plant availability and reliability, geothermal power remains capable of providing the needed capacity to the grid.



# Recognition for Geothermal

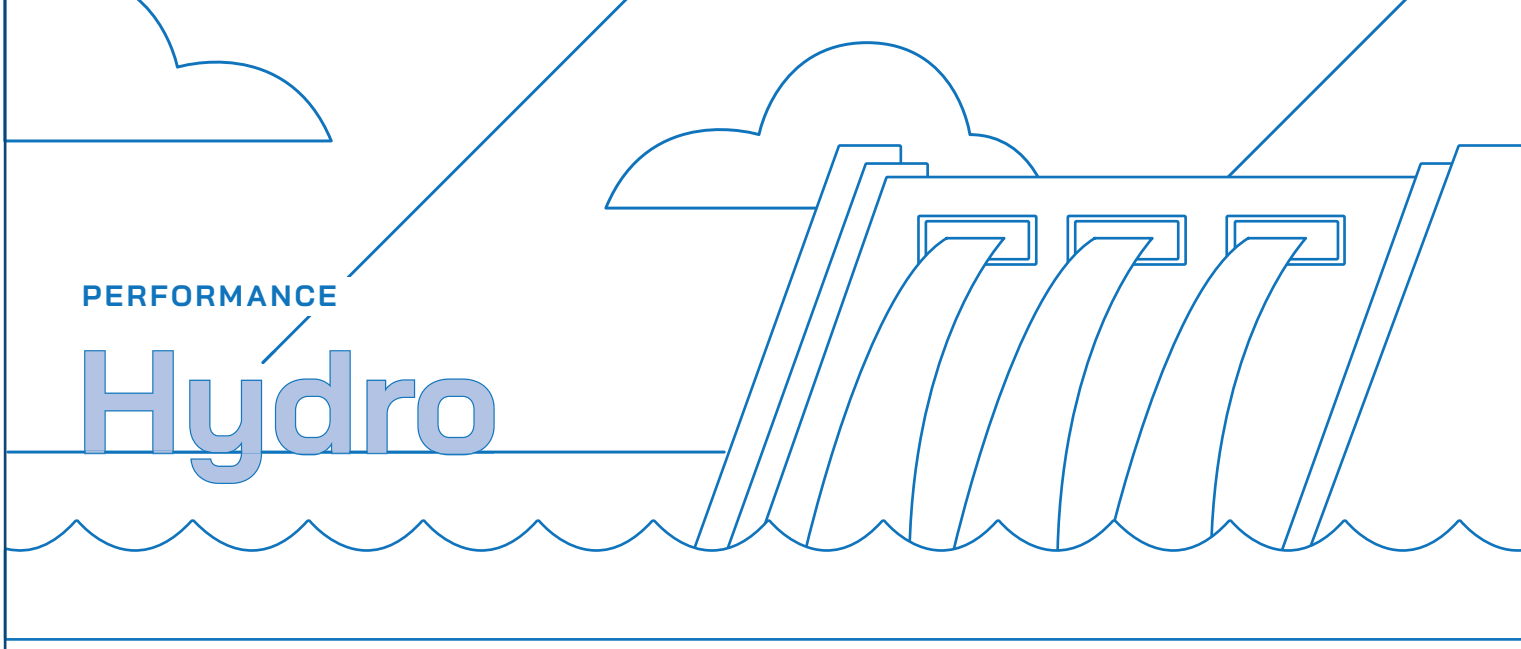
EDC's plants and people were recognized in 2019 at the DOLE 11th Gawad Kaligtasan at Kalusugan (GKK).

## INDUSTRY CATEGORY

EDC's Mt. Apo facility emerged as one of the regional winners for the industry category, which includes recognition for compliance with general labor and occupational safety and health standards.

## INDIVIDUAL CATEGORY

Eduardo "Jong" Morales, Jr. and Joel Handugan were heralded as the winners for the individual category, as their efforts were recognized as an outstanding contribution in the area of occupational health and safety.



PERFORMANCE

# Hydro

**SUBSIDIARIES**

- First Gen Hydro Power Corporation (FG Hydro)
- FG Bukidnon Power Corporation (FG Bukidnon)

**133.6 MW**
**Total capacity**

## FINANCIAL HIGHLIGHTS

(In PHP Millions)

| PERFORMANCE INDICATORS | PANTABANGAN-MASIWAY | | AGUSAN | | TOTAL | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Revenues from Sale of Electricity | 2,391.3 | 1,865.0 | 35.6 | 46.3 | 2,426.9 | 1,911.3 |
| Operating Income (loss) | 1,146.1 | 605.9 | (11.6) | 5.4 | 1,134.5 | 611.3 |
| Net Income (loss) | 1,058.3 | 509.7 | (10.2) | 5.0 | 1,048.1 | 514.7 |

**FG HYDRO** revenues increased by PHP 526.3 million, or 28.2 percent, to **PHP 2.4 billion** in 2019 from PHP 1.9 billion in 2018.

This increase can be attributed to several factors, namely:

- Significantly higher dam elevation coupled with higher water releases resulting in higher generation.
- High spot market prices and higher generation during the first half of 2019. High spot market prices were driven by several plant outages in the Luzon grid during the period.
- The accreditation of Pantabangan's units by NGCP to provide Ancillary Services to the Luzon Grid under Automatic Generation Control Mode.

**FG BUKIDNON** revenues decreased by PHP 10.7 million, or 23.1 percent, to **PHP 35.6 million** in 2019 from PHP 46.3 million in 2018.

This decrease was caused by the following:

- Lower generation due to El Niño
- Increase in Real Property Tax (RPT) from PHP 0.3 million to PHP 1.1 million

# OPERATIONAL HIGHLIGHTS

| PERFORMANCE INDICATORS | PANTABANGAN | | MASIWAY | | AGUSAN | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Actual Energy Generation (GWh) | 346.1 | 275.0 | 46.9 | 45.0 | 8.6 | 11.2 |
| Net Capacity Factor (%) | 32.9 | 26.2 | 44.6 | 42.8 | 61.2 | 80.0 |
| Availability (%) | 91.0 | 84.8 | 87.0 | 90.2 | 94.5 | 95.5 |
| Reliability (%) | 99.8 | 100.0 | 99.9 | 100.0 | 95.0 | 99.7 |
| Planned Outage (hrs) | 1,549.7 | 404.7 | 809.3 | 952.7 | 42.7 | 36.2 |
| Forced Outage (hrs) | 44.8 | 86.5 | 92.1 | 37.6 | 1,752.0 | 13.4 |

FG Hydro's strong revenue for the year was due to the plants' higher dam elevation that equated to higher generation. At the beginning of 2019, FG Hydro recorded a dam elevation of 217.3 meters above sea level (masl), 6.2 percent or 12.7 masl higher compared to 204.6 masl in 2018. Other factors that contributed to the higher generation were the following:

### IMPLEMENTATION OF "MAAGANG TANIM, MASAGANANG ANI" PROGRAM

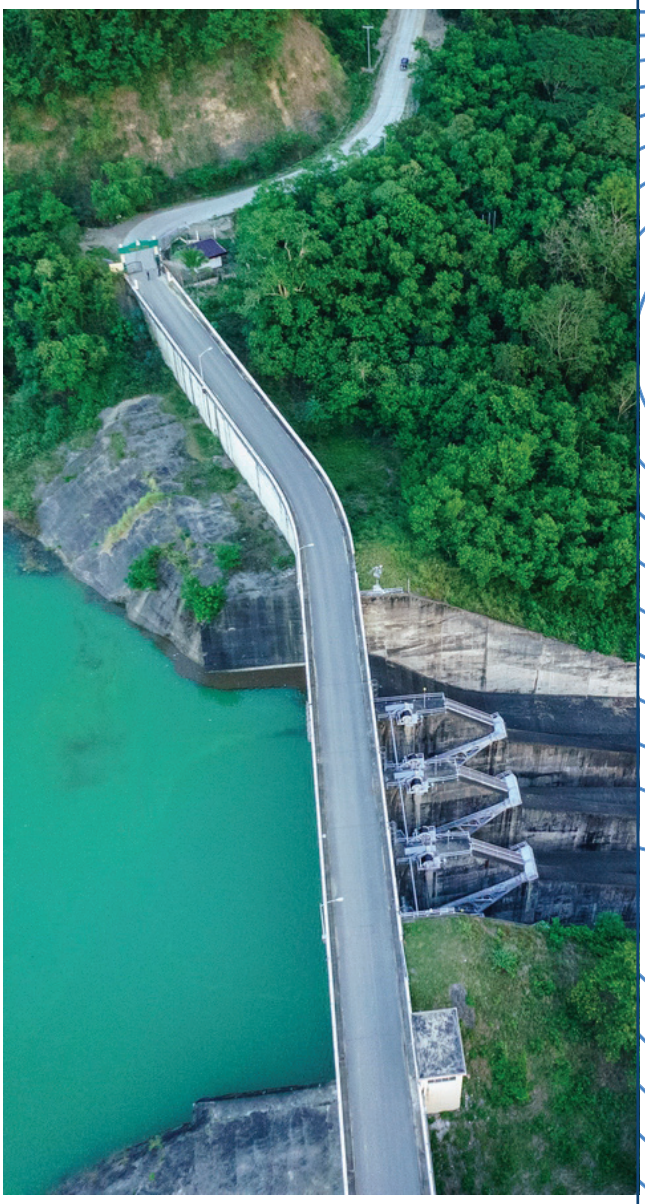
- Implemented by the National Irrigation Administration (NIA), the program was executed to increase palay harvest during the farmlands' rest period and irrigation canal maintenance.
- Through this program, water was released from the Pantabangan dam, irrigating lands and creating an opportunity for the Pantabangan and Masiway plants to generate more power.

### PROVISION OF ANCILLARY SERVICES TO THE LUZON GRID

- Pantabangan's units were accredited by the NGCP.
- The ancillary service to the Luzon Grid (free Governor and Automatic Generation Control modes), including FG Hydro's Automatic Generation Control (AGC)-capability, opened revenue opportunities for FG Hydro.

On the other hand, FG Bukidnon delivered lower generation for 2019. The plant delivered a net energy of 8.6 GWh, equivalent to a net capacity factor of 61.2 percent. This was 23.9 percent lower than in 2018, wherein the plant delivered 11.2 GWh, equivalent to a net capacity factor of 80.0 percent.
The generation reduction was due to the following factors:

- Low water inflow caused by the El Niño that lasted for approximately eight months.
- Run-of-river plant's lower reliability factor due to a plant outage that lasted 433 hours (from February 1-20, 2019). This was caused by the plant's Main Power Transformer (MPT) breakdown due to defects in its tap changer which was immediately replaced.



EU2 EU30

## PERFORMANCE: HYDRO

# 2019 Key Achievements

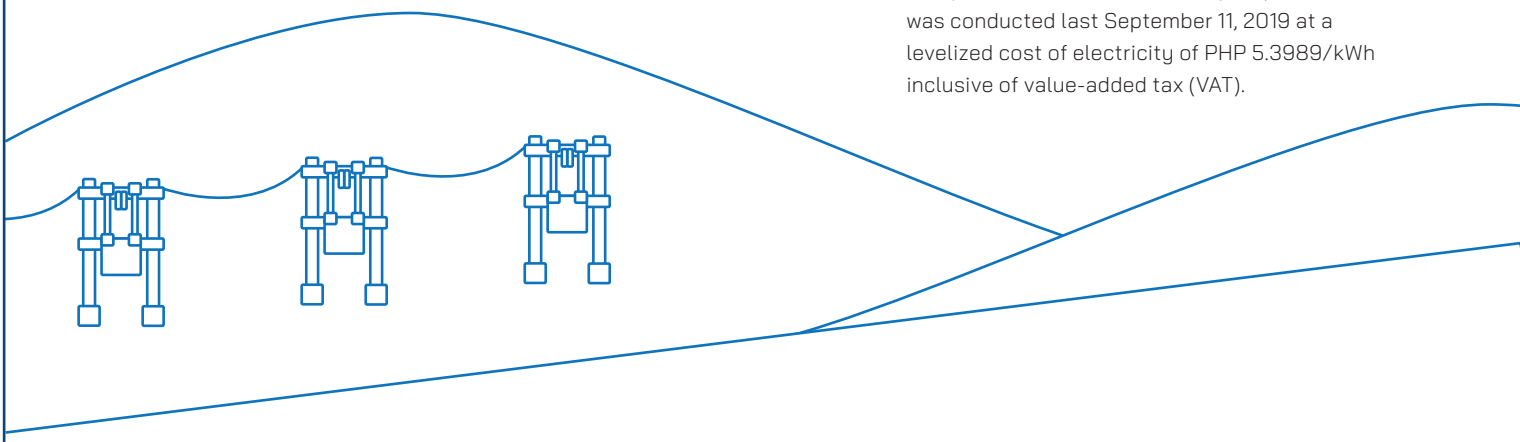
FG Hydro and FG Bukidnon made improvements to its operations and programs in 2019, while achieving significant progress on on-going projects.

### 1 OPTIMIZING OPERATING FACILITIES

- FG Hydro and FG Bukidnon timed its plant maintenance during seasonally low water flows, thereby maximizing energy generation.
- Asset Management initiatives complementing regular maintenance programs to prolong plant life and preservation of reliability.
  - Masiway's re-wedging project to prolong the life of its generator.
  - Replacement of Pantabangan's power intake trash rack panel to ensure debris are properly filtered and will not enter the turbine.
  - Replaced the blow-off valve at FG Bukidnon's Forebay to ensure stable water flow from its power intake to the turbines.
- Operating facilities adopted the latest management standards and preserved their Integrated Management System certifications.
  - ISO 9001:2015 for Quality Management System
  - ISO 14001:2015 for Environmental Management System
  - OHSAS 18001:2007 for Occupational Health and Safety Management System
  - Ongoing migration from ISO 18001:2007 to ISO 45001:2018
  - ISO 55001:2014 for Asset Management System for FG Hydro

### 2 NEW PLANT DEVELOPMENTS AND SYSTEM UPGRADES

- Development of the 100-MW Aya Pumped-Storage Project, utilizing the Pantabangan and Masiway Reservoirs (as its upper and lower reservoirs).
  - Envisioned to be the country's pioneering variable-speed pumped-storage facility.
  - In December 2019, FG Hydro was granted by the DOE a Hydropower Service Contract (HSC) for the exclusive development of the project.
  - The facility will provide energy during peak periods and Ancillary Services to the electricity grid for grid security and stability.
- First Gen continued developing its various run-of-river projects (i.e., Bubunawan, Tagoloan, Puyo and Cagayan 1N) while waiting for a more favorable regulatory regime for renewable projects.
- FG Hydro seamlessly upgraded its SCADA system and commissioned an ancillary monitoring system.
  - These ensured that the Pantabangan plant could deliver all the ancillary reserves under the more stringent NGCP protocols for Ancillary Services, giving the facility flexibility to deliver energy by a) power generated for WESM or contracts, or b) reserves via the different Ancillary Services.
  - FG Hydro is also certified to deliver reactive power and black start power to the grid.
- FG Hydro won Meralco's 100-MW mid-merit Competitive Selection Process (CSP) bid that was conducted last September 11, 2019 at a levelized cost of electricity of PHP 5.3989/kWh inclusive of value-added tax (VAT).



GRI 102-12 EU10

# Creating Value for Stakeholders

The regular maintenance and monitoring of First Gen's hydro platform, along with its ongoing developments, have had a significant contribution to the business and to its stakeholders.

- Higher generation equates to higher tax contributions (i.e., business tax, income tax, government share tax, ER 1-94).
- Optimized assets resulting to higher plant availability and reliability.
- Displacement of over 380,000 tons of $CO_2$ as part of the Company's zero-carbon generation goal.
- A comprehensive biodiversity and assessment and monitoring of flora, fauna, and aquatic life in the Pantabangan watershed.
- Forest cover restoration efforts in Pantabangan watershed that has sequestered 15.0 million pounds of $CO_2$ since 2009. This was done under the Company's BINHI program and in partnership with four farmers' associations (FAs) in the municipality.
- Establishment of a Bamboo Stirrer and Tea Processing Enterprise under the company's BINHI 2.0 Program and in cooperation with the Villanueve Farmers' Association and D' Sustainable Planet/Bambuhay. Phase 2 of BINHI aims to sustainably utilize mature forest products established and maintained during Phase 1.

## 3 RESILIENCY MEASURES

- Structural reinforcing of buildings and towers via cable supports and window shutters to withstand strong typhoons.
- Structural calculations for new buildings are designed to withstand wind speed of 320 kph and above.
- Regular drills and simulation of our Business Continuity Management (BCM) Plan for familiarity and identifying improvement areas.
- Capacity building of local government units (LGUs), like the rural health unit of Pantabangan and Brgy. Fatima, to respond to calamities and emergencies with the help of EDC's Emergency Preparedness and Disaster Response Unit (EPDRU).
- Sequestered 86,814.0 tons of $CO_2$ emissions (2008 to 2019) through the BINHI program.
- Requested contractors to plant trees after every completion of a site project, with a current total of 100 trees planted due to this initiative.

GRI 413-1

# Regulations Affecting Our Operations

New regulations and circulars by the DOE have been considered by First Gen with regard to its hydro platform's operations.

### RENEWABLE PORTFOLIO STANDARDS

A market-based policy of the DOE, it promotes the use of RE by requiring DUs, electric cooperatives, and retail electricity suppliers (RES) to source an agreed portion of their energy supply from eligible RE facilities.

### NEW ANCILLARY SERVICES PROTOCOL

All accredited Ancillary Services providers are mandated to provide security and stability to the Grid as per the Philippine Grid Code of 2016. Ancillary Services are now monitored on a per second basis and FG Hydro has equipped itself with proper hardware and software to monitor its compliance and has trained its personnel on how to adjust turbine controller parameter settings to meet the requirement.

### 5-MINUTE ENERGY BIDDING

This circular from DOE has called for several changes, including shorter trading and dispatch interval (five minutes), automated pricing corrections, ex-ante pricing (forecast-based pricing) for every five-minute trading and dispatch interval, and a one-hour interval for settlement purposes based on a weighted average of the five-minute ex-ante prices. It has also removed the plant's minimum output level (Pmin) constraint to comply with WESM's market dispatch optimization model.

# Strategy for Hydro

First Gen intends to maintain its operating facilities' high reliability and resilience to climate change. Given the seasonal nature of hydro's fuel resource, First Gen intends to adopt a more dynamic maintenance strategy to maximize the hydro resource. First Gen will also ensure that its facilities continue adopting new versions of international standards for quality, environment, and safety and health management systems. The Company has several resiliency initiatives aligned for future implementation.

## DEVELOPING PLANT PROJECTS

### Construction of Aya Pumped-Storage Project

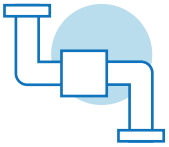
The project seeks to address future needs of the grid. It can deliver all of the grid's required types of Ancillary Services, and at the same time can store up to eight hours of equivalent energy.

### Run-of-river projects

The Hydro business unit will continue working on its permitting requirements in 2020. For Cagayan 1N project, the Hydro Business Unit is seeking to complete all its technical studies.

### Pipeline of 200 MW to 250 MW growth projects

First Gen currently has 133.6 MW of hydropower. The Company intends to pursue these projects, in line with the development of market conditions, and secure their social acceptability.



## UPCOMING RESILIENCY INITIATIVES

### Enhance the plants' Energy Conservation Program to further reduce station power consumption

### Capacity building of NIA on Emergency Response Preparedness (ERP)

The ERP procedures and FG Hydro drills will be shared and integrated to NIA's Dam and Reservoir Division's (NRD's) process.

EU10

PERFORMANCE

# Wind & Solar

**SUBSIDIARIES**

- Energy Development Corporation (EDC)
- EDC Burgos Wind Power Corporation (EBWPC)
- EDC Siklab Power Corporation (EDC Siklab)

**162.0 MW**
**Total capacity**

## FINANCIAL HIGHLIGHTS

(In PHP Millions)

| PERFORMANCE INDICATORS | BURGOS WIND | | BURGOS SOLAR | | SOLAR ROOFTOP | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Revenues from Sale of Electricity | 2,908.2 | 3,208.8 | 86.8 | 90.9 | 39.4 | 33.1 |
| Operating Income | 1,366.0 | 1,696.6 | 39.2 | 42.5 | 16.3 | 20.7 |
| Net Income | 692.0 | 990.5 | 24.1 | 27.5 | 12.5 | 15.2 |

Both Burgos Wind Project and Burgos Solar Project registered lower revenues in 2019 compared to 2018. Factors that affected the performance of both are comprised of natural causes and scheduled and unscheduled maintenance works.

Burgos Wind in particular, experienced its lowest generation ever and continued with the downward trend until April of the same year. However, this trend reversed in the second half of the year where its generation from August to November was at its highest since it started operations.

## PERFORMANCE: WIND & SOLAR

▼

### BURGOS WIND PROJECT ILOCOS NORTE

earned a total of
**PHP 2.9 billion**
in revenues for 2019,
a 9.4 percent decrease from
the PHP 3.2 billion in 2018

This was driven by lower generation in the first half of 2019 due to the effects of El Niño. Fortunately, the Burgos Wind Project saw a partial recovery in its generation in the second half of 2019 as a result of several Low Pressure Areas (LPAs) and a strong Amihan.

▼

### BURGOS SOLAR PROJECT ILOCOS NORTE

earned a total of
**PHP 86.8 million**
in revenues for 2019,
a 4.5 percent decrease from
the PHP 90.9 million 2018

This was a result of planned and unplanned outages due to the Burgos Solar Farm's transmission line upgrades, as well as Ilocos Norte Electric Cooperative Inc.'s (INEC's) scheduled power interruption due to the transfer of poles and conductors affected by DPWH's road expansion project.

▲

### EDC SIKLAB

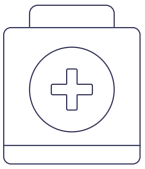
earned a total of
**PHP 39.4 million**
in revenues for 2019,
a 19.0 percent increase from
the PHP 33.1 million in 2018

This was due to higher generation experienced with three fully operational solar rooftop projects in 2019.

## OPERATIONAL HIGHLIGHTS

| PERFORMANCE INDICATORS | BURGOS WIND | | BURGOS SOLAR | | SOLAR ROOFTOP | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Actual Energy Generation (GWh) | 341.0 | 376.0 | 9.5 | 9.8 | 6.7 | 5.6 |
| Net Capacity Factor (%) | 25.9 | 28.6 | 16.0 | 17.7 | 14.8 | 13.9 |
| Availability (%) | 98.7 | 99.6 | N/A | N/A | N/A | N/A |
| Reliability (%) | N/A | N/A | 71.8 | 70.5 | 71.8 | 78.3 |
| Planned Outage (hrs) | 35.2 | 33.4 | 22.8 | 0.0 | 3.0 | 0.0 |
| Forced Outage (hrs) | 0.0 | 11.7 | 939.5 | 662.3 | 0.0 | 0.0 |

First Gen prioritized the growth of its capitals by investing in various initiatives and developments that promote workplace health and safety, power plant resiliency, and wind farm efficiency. The Company conducted proper typhoon preparations to safeguard employees and other stakeholders, as well as Company assets.



### WORKPLACE HEALTH & SAFETY

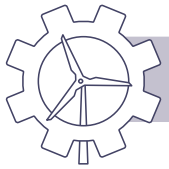
Ensuring a safer workplace through:

- Careful placement of signages and safety devices.
- One Permit-to-Work System implementation.
- Healthy and safety trainings.

### PLANT RESILIENCY

Preparation for low pressure areas and typhoons through:

- Coordination with contractors for their skeletal force.
- Conducting call tree simulations.
- Yaw Back Up Protection System and emergency generator sets.
- Emergency supplies storage.
- Review of Extreme Wind Management plan.
- Better LGU coordination.



### WIND FARM OPTIMIZATION

Optimizing operations through:

- Discussions with different suppliers on available options for increasing wind energy generation.

**EU2 EU30**

# 2019 Key Achievements

In 2019, the wind and solar business units optimized operations through initiatives that allowed its facilities to produce energy efficiently and save on costs.

### 1 COMPLETION OF THE YEAR 5 MAINTENANCE OF BURGOS WIND PROJECT

Wind farm maintenance activities were done during low wind in order to minimize or avoid generation loss. Aside from maintaining the turbines, the following were also scheduled within the year: preventive maintenance activities of substation high-voltage equipment and peripherals, civil works, and transmission line maintenance.

### 2 COMPLETION OF MAINTENANCE OF THE SOLAR ROOFTOP SITES IN PANAY ISLAND

Previously handled by an external contractor, the maintenance was transferred in-house to the wind and solar team's engineers. The first in-house site maintenance activities of the solar rooftop plants were in Kalibo, Oton, and Passi, which were done in March 2019.

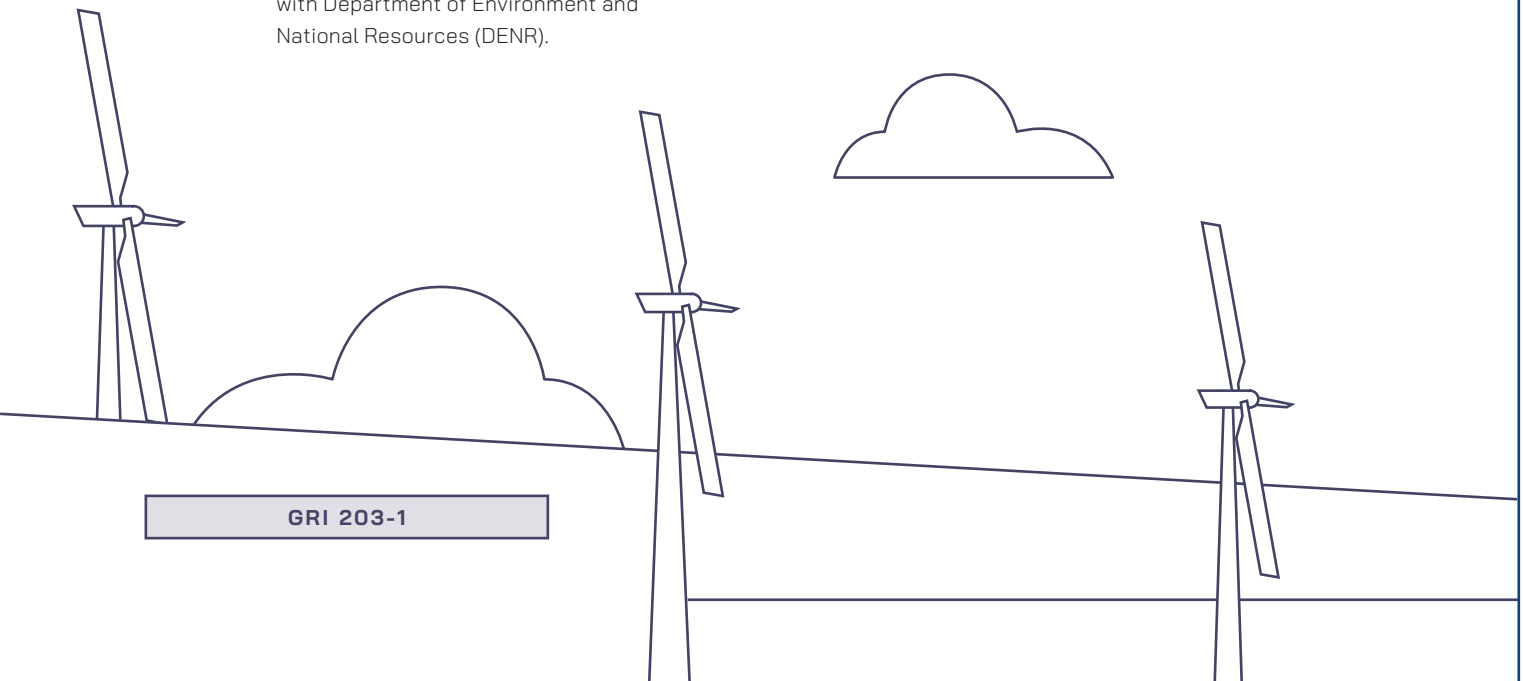
### 3 SUCCESSFUL THREE-YEAR PARTICIPATION IN THE NATIONAL GREENING PROGRAM

EBWPC was recognized on September 12, 2019 for its contribution by planting 1.0 million trees with an 80.0 percent survival rate within three years. This was in compliance with the Memorandum of Agreement (MOA) signed with Department of Environment and National Resources (DENR).

# Creating Value for Stakeholders

The wind and solar facilities executed programs designed to create value and/or improve business operations, in order to address the identified needs of stakeholders. These programs are aligned with the Lopez Group's CSR principles that focus on the areas of education, livelihood, and environment.

- "*Usapang Werpa*" radio program with discussions about protecting the environment.
- Construction of rainwater harvesting tanks in seven elementary schools.
- Ecobrick initiative to reduce waste generated by municipalities.
- Tree planting and other environmental initiatives implemented by BINHI.
- Coastal clean-up at Kapurpurawan Rock Formation.
- Donation of rescue equipment and medical devices to the Local Bureau of Fire Protection.
- Municipal Fire Olympics to enhance the fire brigades' capabilities in fire suppression and rescue.
- Donation of relief goods to Typhoon Ineng victims.



GRI 203-1

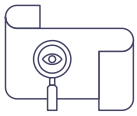
# Strategy for Wind and Solar

Apart from CSR programs, First Gen also invested in technology and partnerships that optimize operations and can benefit stakeholders in the long-term.

### VESTAS POWERPLUS INSTALLATION IN DECEMBER 2019

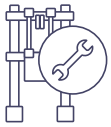
This installation is expected to improve the annual energy yield of Burgos Wind Farm's wind turbines by 1.5 GWh through cut-out wind speeds extension and power curve during operation optimization.

### WIND SERVICE CONTRACTS REVISITED



As government develops new green incentives (i.e., Green Energy Pricing) and as the cost to build new wind power plants goes down, several wind service contracts are being revisited and reviewed to reevaluate their viability.

### ADDRESSING TRANSMISSION LINE CONSTRAINTS



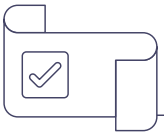
Once the service contracts' constraints in Ilocos are addressed, the viability of installing more wind turbines improves further.

# Training, Certifications, and Awards

For 2019, each subsidiary ensured it acquired the necessary certifications and executed training programs for its employees. Each plant's immediate compliance also gained them recognition during the year.

### TRAINING

- 8-hour Occupational Health and Safety Seminar
- First Aid Training
- WESM Generators' Compliance Training
- Solar Operations and Maintenance Training



### CERTIFICATIONS

- Certification of Compliance Renewal of Burgos Wind Project
- Board of Investments Registration of Gaisano La Paz

### AWARDS

- Best Production Values Award for Radio Program *"Usapang Werpa"*
- Top Real Property Taxpayer Awards for EDC Siklab awarded by the municipality of Balasan

**GRI 404-2**

# Governance

First Gen Corporation is a responsible corporate citizen which gives utmost importance to good corporate governance. First Gen is well aware that good corporate governance is an effective and powerful tool which can propel the Company towards achieving long-term success and assuring its sustained competitiveness in the energy industry. With this knowledge, First Gen puts a premium on strict compliance with corporate governance regulations and ensures that the Company and its people move relentlessly towards improving its corporate governance structures to comply with and even go beyond global best practices. The Company's governance structure is detailed in its Manual on Corporate Governance which is posted on the Company's website at https://www.firstgen.com.ph/wp-content/uploads/2018/05/Revised-Manual-on-CG_May-2017.pdf.

# The Board of Directors

## PRINCIPAL ACTIVITIES OF THE BOARD

As a publicly listed company in the Philippines, First Gen ensures that its Board of Directors (BOD) is composed of individuals who are responsible for managing and driving the corporate governance structures of First Gen. The BOD is responsible for guiding the Company toward fulfilling its economic targets and governance aspirations. The BOD of First Gen consists of nine (9) members, including three (3) Independent Directors.

These members were elected by the Company's qualified stockholders during the annual general meeting held every second Wednesday of May of each year. Independent Directors Jaime I. Ayala, Cielito F. Habito and Alicia Rita L. Morales have neither interest nor relationship with First Gen that may hinder their independence from the Company or its management, or interfere with their exercise of independent judgment in carrying out their responsibilities.

## BOARD ATTENDANCE

| | FEB 13 | MAR 12 | APR 10 | MAY 8 | JUN 17 | JUL 10 | SEP 11 | NOV 8 | NOV 29 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Federico R. Lopez | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | 9 |
| Oscar M. Lopez | | ◆ | | | ◆ | ◆ | | ◆ | ◆ | 5 |
| Francis Giles B. Puno | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | 9 |
| Richard Raymond B. Tantoco | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | 9 |
| Peter D. Garrucho, Jr. | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | 9 |
| Eugenio L. Lopez III | | ◆ | ◆ | ◆ | ◆ | | ◆ | ◆ | ◆ | 7 |
| Jaime I. Ayala | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | 9 |
| Cielito F. Habito | ◆ | | ◆ | ◆ | ◆ | ◆ | ◆ | | ◆ | 7 |
| Alicia Rita L. Morales | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | 9 |

*All were Regular Board Meetings, except for May 8, which was an Organizational Board Meeting*

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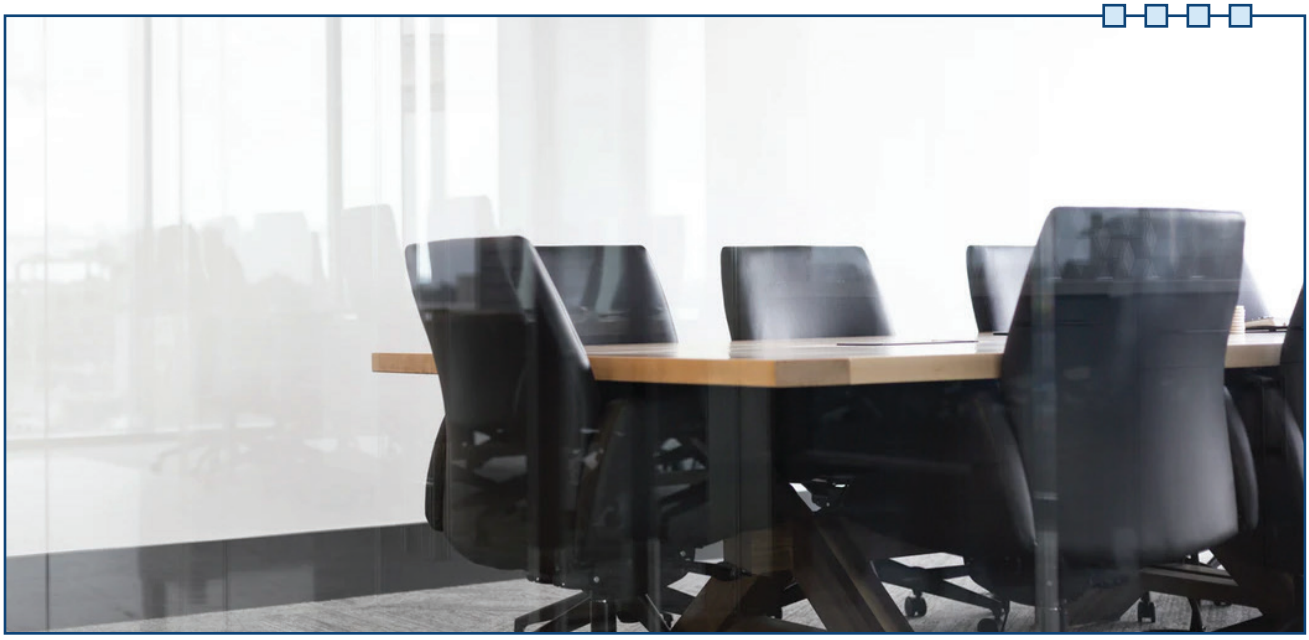
## GOVERNANCE: BOARD OF DIRECTORS



### BOARD COMMITTEES

In compliance with the Company's Manual on Corporate Governance, the members of the board have also been selected as members of the following standing committees: the Nomination and Governance Committee, the Compensation and Remuneration Committee, the Audit Committee, and the Board Risk Oversight Committee.

The **NOMINATION AND GOVERNANCE COMMITTEE** exercises the principal function of selecting and evaluating directors. Qualifications for selection are consistent with the By-laws and Manual on Corporate Governance. The committee makes sure that the board election will result in a mix of proficient directors, each of whom will be able to add value and bring prudent judgment to the BOD. The committee is also tasked to review the structure, size, and composition of the Board and make appropriate recommendations thereto.

The **COMPENSATION AND REMUNERATION COMMITTEE** has the principal function of studying and recommending the appropriate compensation and/or reward system for the corporate officers other than the Chairman. The Chairman's compensation and remuneration shall be determined by the President and two (2) directors, one of whom shall be an Independent Director. The committee shall establish a policy on remuneration of directors and officers to ensure that their compensation is consistent with the Corporation's culture, strategy, and the business environment in which it operates. Furthermore, it is tasked to review the Corporation's human resources development or personnel handbook, in order to strengthen provisions on conflict of interest, policies on salaries and benefits, and directives on promotion and career advancement.

The **AUDIT COMMITTEE**'s primary function is to assist the BOD in fulfilling its oversight responsibilities for financial reporting, internal control systems, internal audit activities, compliance with key regulatory requirements, and enforcement of the Corporate Code of Conduct.

The **BOARD RISK OVERSIGHT COMMITTEE** (previously the Risk Management Committee) assists the BOD in its oversight responsibility over management's activities. This includes risk management of the Corporation's various aspects such as physical, financial, operational, labor, legal, security, environmental, and other facets of the Corporation. The committee plays a vital oversight role and serves as an important liaison to the Board. Under its charter, the committee has the duty and responsibility of providing guidance to management through the establishment of the Company's risk management philosophy and risk appetite. The committee likewise approves the Company's risk management policy and processes and any revision thereto. It is also responsible for communicating to key stakeholders the status of strategic and critical risks, and for providing the necessary support and resources to management in managing these risks to the Corporation. To confirm that the risk management system of the Company is operating correctly and consistently with its objectives, periodic reports are required from management.

**GRI 102-18 102-19 102-22 102-24 102-26 102-27 102-29 102-30 102-31 102-33 102-34 102-35 103-1 103-2 103-3**

## Federico R. Lopez

CHAIRMAN OF THE BOARD &
CHIEF EXECUTIVE OFFICER

Federico R. Lopez, born August 5, 1961, Filipino, has been a member of the board since December 1998. He is Chairman and CEO of publicly-listed companies First Gen and FPH. He is also Chairman and CEO of Energy Development Corporation ("EDC") which was officially delisted from the PSE effective November 29, 2018. He is a director of ABS-CBN Corporation, Vice Chairman of Rockwell Land Corporation ("Rockwell"), and Treasurer of Lopez Holdings Corporation, which are also listed companies. Mr. Lopez is Chairman of the Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation (OML Center) and the Sikat Solar Challenge Foundation, and President of Ang Misyon, Inc. He is a member of the board of trustees of the Forest Foundation Philippines, Philippine Disaster Resilience Foundation, and Teach for the Philippines. Mr. Lopez is a member of the New York Philharmonic International Advisory Board, Asia Business Council, World Presidents' Organization, Chief Executives Organization, ASEAN Business Club, Management Association of the Philippines, Philippine Chamber of Commerce and Industry, European Chamber of Commerce of the Philippines, and Makati Business Club. Mr. Lopez is a graduate of the University of Pennsylvania with a Bachelor of Arts degree double major in Economics and International Relations (cum laude, 1983).

## Oscar M. Lopez

CHAIRMAN EMERITUS

Oscar M. Lopez, born April 19, 1930, Filipino, held the position of Chairman of First Gen from the company's incorporation in December 1998 until January 2010, when the board of directors bestowed upon him the title Chairman Emeritus. He is also Chairman Emeritus and Chief Strategic Officer of FPH, and Chairman Emeritus of Rockwell and Lopez Holdings Corporation (formerly Benpres Holdings Corporation), all of which are listed companies. He is Chairman Emeritus of EDC and a member of the board of directors of listed company ABS-CBN Corporation. Mr. Lopez was conferred the degrees of Doctor of Humanities honoris causa by the De La Salle University and Ateneo de Manila University in 2010, and Doctor of Laws honoris causa by the Philippine Women's University (2009) and the University of the Philippines (2012). Mr. Lopez has a master's degree in Public Administration from the Littauer School of Public Administration (now the John F. Kennedy School of Government) at Harvard University (1955). Mr. Lopez also earned his Bachelor of Arts degree (cum laude) from Harvard University (1951).

## Francis Giles B. Puno

PRESIDENT &
CHIEF OPERATING OFFICER

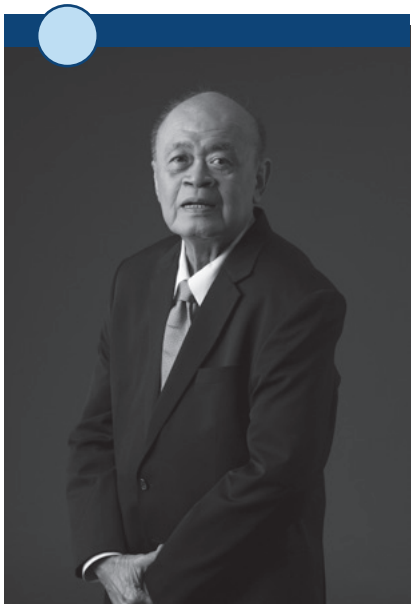
Francis Giles B. Puno, born September 1, 1964, Filipino, was first elected to the board in August 2005. He is President and COO of First Gen. In October 2015 he assumed the position of President and COO of FPH, where he previously held the posts of Executive Vice President, CFO and Treasurer. He sits in the boards of publicly-listed companies FPH and Rockwell. He is also a member of the board of directors of EDC. Mr. Puno previously worked as Vice President with the Global Power and Environmental Group of The Chase Manhattan Bank based in Singapore. He has a master's degree in Management from the Kellogg Graduate School of Management of Northwestern University (1990) and a degree in Bachelor of Science in Business Management from Ateneo de Manila University (1985).

## GOVERNANCE: BOARD OF DIRECTORS

### Richard Raymond B. Tantoco

DIRECTOR &
EXECUTIVE VICE PRESIDENT

Richard Raymond B. Tantoco, born October 2, 1966, Filipino, has been a director of the Corporation since August 2005. He is a Director and Executive Vice President of the Corporation, Executive Vice President of FPH, and President and Chief Operating Officer of EDC. First Gen and FPH are publicly-listed companies. Mr. Tantoco previously worked with the management consulting firm Booz, Allen and Hamilton, Inc. in New York and London. He has an MBA in Finance from the Wharton School of Business of the University of Pennsylvania (1993) and a Bachelor of Science degree in Business Management from Ateneo de Manila University where he graduated with honors (1988).



### Peter D. Garrucho, Jr.

DIRECTOR

Peter D. Garrucho Jr., born May 4, 1944, Filipino, has been a member of the board since the company's incorporation in December 1998. He is a member of the board of directors of listed company FPH. Mr. Garrucho is also a director and Vice Chairman of the Franklin Baker Company of the Philippines, a manufacturer and exporter of dessicated coconuts. Until his retirement in January 2008 as Managing Director for Energy of FPH, Mr. Garrucho held the positions of Vice Chairman and CEO of First Gen. Mr. Garrucho served in Government as Secretary of Tourism and Secretary for Trade & Industry during the administration of President Corazon C. Aquino. He was also Executive Secretary and the Presidential Advisor for Energy Affairs under President Fidel V. Ramos. In 2017, he was elected Chairman of the board of trustees of the Asian Institute of Management. Mr. Garrucho has an AB-BSBA degree from De La Salle University (1966) and a master's degree in Business Administration from Stanford University (1971).

### Eugenio L. Lopez III

DIRECTOR

Eugenio L. Lopez III, born August 13, 1952, Filipino, was first elected to the board of directors in September 2009. He is Chairman Emeritus of ABS-CBN Corporation, a director of FPH and Rockwell, and Vice Chairman of Lopez Holdings, all of which are listed companies. Aside from leading ABS-CBN, he also serves as Chairman of Sky Cable Corporation and Play Innovations, Inc. Mr. Lopez earned a Bachelor of Arts degree in Political Science from Bowdoin College (1974), and a master's degree in Business Administration from the Harvard Business School (1980).

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## Jaime I. Ayala
INDEPENDENT DIRECTOR

Jaime I. Ayala, born March 24, 1962, Filipino, was elected Independent Director of the company in May 2013. He is the Founder and CEO of Hybrid Social Solutions, a social enterprise focused on empowering rural villages through solar energy. He was recognized as the Schwab Foundation Social Entrepreneur of the Year in 2013 and as the Ernst & Young Entrepreneur of the Year Philippines in 2012. Mr. Ayala was President and CEO of publicly-listed Ayala Land, Inc. and Senior Managing Director of Ayala Corporation. Prior to that, he was a director (global senior partner) at McKinsey & Company, where he played a number of global and regional leadership roles, including head of the firm's Asian Energy Practice, and President of McKinsey's Manila office. Mr. Ayala is a member of the National Advisory Council of the World Wildlife Fund, trustee of Stiftung Solarenergie – Solar Energy Foundation and Philippine Tropical Forest Conservation Foundation, and Chairman of Healthway Medical Inc. He earned his MBA from Harvard Business School (honors, 1988) and completed his undergraduate work in Economics at Princeton University (magna cum laude, 1984).

## Cielito F. Habito
INDEPENDENT DIRECTOR

Cielito F. Habito, born April 20, 1953, Filipino, was elected Independent Director of the company in May 2016. An accomplished economist, Dr. Habito is a Professor of Economics at the Ateneo de Manila University and is also Chairman of Brain Trust Inc. and Operation Compassion Philippines. In 2013-2017, he headed the USAID Trade-Related Assistance for Development (TRADE) Project as Chief of Party (Project Leader). He also writes the twice-weekly column "No Free Lunch" in the Philippine Daily Inquirer. He is an Independent Trustee of Manila Water Foundation, Chairman of the Board of Advisers of the Asian Institute of Management's TeaM Energy Center for Bridging Leadership, and Member of the Advisory Committee of the Japan International Cooperation Agency (JICA)-Philippines, Board of Trustees of the Ramon Magsaysay Foundation, National Advisory Council of WWF Philippines, and Council of Advisers of the Philippine Rural Reconstruction Movement, among others. Dr. Habito is the recipient of numerous awards including the Philippine Legion of Honor (1998), The Outstanding Young Men (TOYM) Award (for Economics) in 1991, Most Outstanding Alumnus of the University of the Philippines-Los Baños (UPLB) in 1993, and the Gawad Lagablab (Outstanding Alumnus Award) of the Philippine Science High School in 1991. He served in the Cabinet of former President Fidel V. Ramos throughout his 6-year presidency in 1992-1998 as Secretary of Socioeconomic Planning and Director-General of the National Economic and Development Authority (NEDA). Dr. Habito holds Ph.D. in Economics (1984) and Master of Arts (1981) degrees, both from Harvard University; a Master of Economics degree from the University of New England in Australia (1978); and a Bachelor of Science in Agriculture (Agricultural Economics) degree from the University of the Philippines (1975), where he graduated summa cum laude.

## Alicia Rita L. Morales
INDEPENDENT DIRECTOR

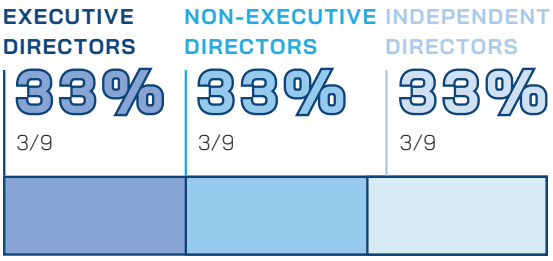
Alicia Rita L. Morales, born June 25, 1962, Filipino, was elected Independent Director of the company in May 2018. She is the Managing Director of John Clements Consultants, Inc., principally for its talent development and leadership institute division. She was instrumental in obtaining the partnership with Harvard Business Publishing, a wholly-owned subsidiary of Harvard Business School, from 2007 to 2019. Ms. Morales has created leadership development programs for over 7,500 high potentials and senior leaders from leading multinationals and regional conglomerates in Southeast Asia. She was elected Independent Director of BPI Securities Corporation in 2020. She was previously President of RCBC Securities, Inc., Director of the Securities Clearing Corporation of the Philippines and PCIB Securities, Inc. and President of the Harvard Business School Club of the Philippines. Ms. Morales was the youngest Chairman of the PSE, a position she held for two (2) terms. She garnered The Outstanding Women in Nation's Service (TOWNS) award for the category 'Business-Stock Exchange' in 2004, and the Triple A Award from Maryknoll/Miriam College in 2014. She is a member of the International Coach Federation, a certified coach of Zenger Folkman, and a certified discussion leader of the Harvard Business School. Ms. Morales is a certified public accountant with a Bachelor of Science degree in Business Administration and Accountancy from the University of the Philippines (1984) and an MBA from the J.L. Kellogg Graduate School of Management, Northwestern University, with a triple major in Finance, Marketing and Economics (1990). She is also a graduate of the Advanced Management Program from the Harvard Business School (2014).

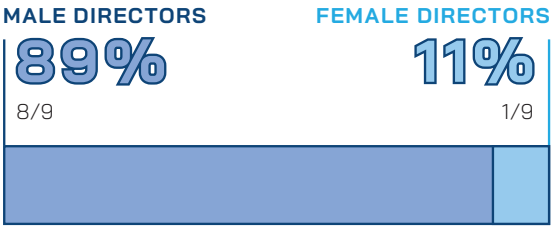
GRI 102-22

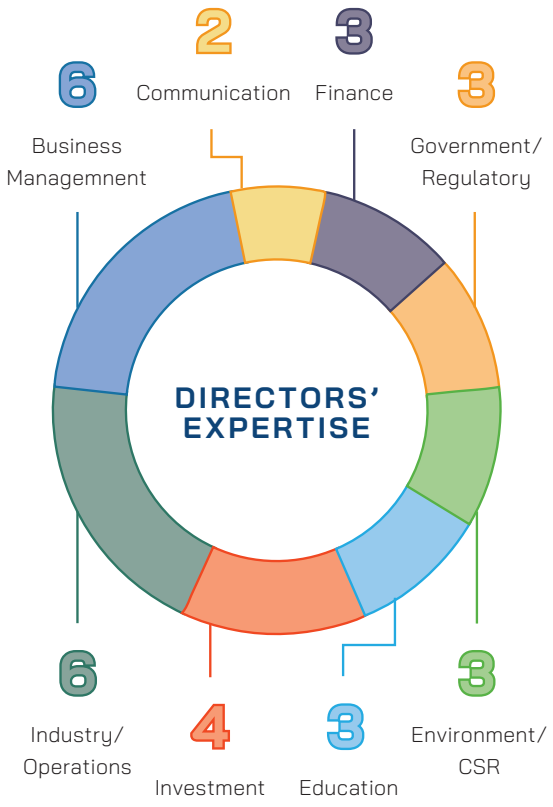
# Composition

## BOARD OF DIRECTORS

As of May 8, 2019, the Board of Directors of First Gen Corporation is composed of 9 members.




## SENIOR MANAGEMENT



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GOVERNANCE

# Senior Management

Assisting the BOD in steering the Company toward its governance aspirations are the members of its management. The BOD and Senior Management continuously search for means to further improve its corporate governance structures.

**Federico R. Lopez**
DIRECTOR, CHAIRMAN &
CHIEF EXECUTIVE OFFICER

**Francis Giles B. Puno**
DIRECTOR, PRESIDENT &
CHIEF OPERATING OFFICER

**Richard Raymond B. Tantoco**
DIRECTOR &
EXECUTIVE VICE PRESIDENT

**Jonathan C. Russell**
EXECUTIVE VICE PRESIDENT &
CHIEF COMMERCIAL OFFICER

**Renato A. Castillo**
SENIOR VICE PRESIDENT &
CHIEF RISK OFFICER

**Victor B. Santos, Jr.**
SENIOR VICE PRESIDENT

## GOVERNANCE: SENIOR MANAGEMENT

**Emmanuel P. Singson**
SENIOR VICE PRESIDENT, CHIEF FINANCE OFFICER & TREASURER

**Julicer A. Alvis**
VICE PRESIDENT

**Ramon J. Araneta**
VICE PRESIDENT

**Erwin O. Avante**
VICE PRESIDENT

**Khairuddin Hyatt V. Basman**
VICE PRESIDENT

**Ma. Cecilia R. Batalla**
VICE PRESIDENT

**Jerome H. Cainglet**
VICE PRESIDENT

**Gerald T. Cajucom**
VICE PRESIDENT

**Ramon A. Carandang**
VICE PRESIDENT FOR CORPORATE COMMUNICATIONS

**Ma. Aurora E. Ceniza**
VICE PRESIDENT

**Reman A. Chua**
VICE PRESIDENT

**Shirley H. Cruz**
VICE PRESIDENT

**Nurjehan Maria D. Dayrit**
VICE PRESIDENT

**Teodorico R. Delfin**
VICE PRESIDENT

**Valerie Y. Dy Sun**
VICE PRESIDENT,
HEAD OF INVESTOR RELATIONS &
COMPLIANCE OFFICER

**Anna Karina P. Gerochi**
VICE PRESIDENT &
HEAD OF HUMAN RESOURCES

**Dennis P. Gonzales**
VICE PRESIDENT

**Ariel Arman V. Lapus**
VICE PRESIDENT

## GOVERNANCE: SENIOR MANAGEMENT

**Rassen M. Lopez**
VICE PRESIDENT

**Jorge H. Lucas**
VICE PRESIDENT

**Denise Natalie F. Mercado**
VICE PRESIDENT

**Ferdinand B. Poblete**
VICE PRESIDENT &
CHIEF INFORMATION OFFICER

**Bernadette Ann V. Policarpio**
VICE PRESIDENT

**Peter Jason D. Samonte**
VICE PRESIDENT

**Aloysius L. Santos**
VICE PRESIDENT

**Ronaldo B. Tablante**
VICE PRESIDENT

**Maria Carmina Z. Ubaña**
VICE PRESIDENT & COMPTROLLER

**Daniel H. Valeriano, Jr.**
VICE PRESIDENT

**Carlos Lorenzo L. Vega**
VICE PRESIDENT

**Conrado Ernesto C. Viejo**
VICE PRESIDENT

**Ma. Theresa M. Villanueva**
VICE PRESIDENT

**Vincent C. Villegas**
VICE PRESIDENT

**Rachel R. Hernandez**
VICE PRESIDENT &
CORPORATE SECRETARY

**Angelo D. Macabuhay**
HEAD OF INTERNAL AUDIT

**Cara Martha R. De Guzman**
ASSISTANT CORPORATE SECRETARY

# Ethics and Compliance

Each Board Committee is guided by a Charter in the performance of its duties and responsibilities. The following Committee Charters may be viewed in the Company website.

- BOARD RISK OVERSIGHT COMMITTEE CHARTER
- AUDIT COMMITTEE CHARTER
- NOMINATION AND GOVERNANCE COMMITTEE CHARTER
- COMPENSATION AND REMUNERATION COMMITTEE CHARTER

The Company upholds the principles of honesty, integrity, and transparency in conducting its business. Through the following policies, the Company hopes to further promote a culture of good corporate governance:

- ANTI-BRIBERY AND CORRUPTION POLICY
- POLICY ON INSIDER TRADING
- POLICY ON CONFLICT OF INTEREST
- WHISTLEBLOWER POLICY
- MATERIAL RELATED PARTY TRANSACTIONS POLICY

The Company is likewise guided by the following policies which address business processes, corporate social responsibility, as well as people management:

- CORPORATE SOCIAL RESPONSIBILITY POLICY
- ENVIRONMENTAL, SAFETY AND HEALTH POLICY
- CODE OF BUSINESS ETHICS AND RESPONSIBILITY
- CULTURAL HERITAGE AND INDIGENOUS PEOPLES POLICY
- QUALITY POLICY
- HUMAN RIGHTS POLICY
- ANTI-SEXUAL HARASSMENT POLICY
- GENDER EQUALITY AND DIVERSITY POLICY
- RESPONSIBLE ASSET PROTECTION POLICY

**The Board Committee Charters and Company Policies may be viewed in the Company's website, www.firstgen.com.ph.**

**GRI 102-16 102-17 102-25 103-1 103-2 103-3**

GOVERNANCE

# Human Resources

The disruption of the old world—the emergence of new business models, evolving preferences of a diverse workforce, and adaptation to climate change—makes the transition to new ways of working and engaging with employees an imperative for all businesses.

In 2019, First Gen focused on implementing technology as an enabler to realize its people priorities. The system is envisioned as a credible official source of information that will facilitate factual and insightful people-related decisions. It allows enhanced and secure access to people data to improve process efficiency and quality, empowers employees and managers by giving them visibility and control over their own data, and facilitates easy connection between colleagues across the power group and the First Philippine Holdings Group which include First Gen. Over time it is expected to enhance talent mobility and career growth for our workforce, strengthening the organization's skills and leadership bench.

The company adopted Workday as its system of choice, and went live in October for recruitment, talent and performance, employee expense, and human capital management processes.

We continued to strengthen our organization capability through talent acquisition, learning and development. The year saw heavy investment in the buildup of talents for new clean energy projects, retail marketing and sales, and robust backbone support services, resulting in a 12 percent* hire rate.

Learning was also a key component of capability-building, with a training reach of 91 percent* of employees, and an average of 47* training hours per employee. Emphasis was placed on strategy and capabilities, updated leadership practices, and agile ways of working, creating a new common language and shared understanding of the way we will do business moving forward. In addition to training, learning and development also includes career mobility. 17 percent* of employees were either promoted into higher or expanded roles, or cross-posted for on-the-job exposure and enrichment. These initiatives not only equip the organization, but ensure the engagement of employees by building mastery in their areas of expertise and strengthening alignment of their work with the company's priorities and purpose.

Employee well-being remains top-of-mind for the company, as reflected in the Lopez Group value of Employee Welfare and Wellness. In 2019, the emotional well-being and mental health program begun in the previous year went in full swing, with the provision of 24/7 hotline and chat support, packages for employee and family counseling, and the setup of occupational health protocols related to mental health assessment, support and return to work. Skills-building and awareness programs for employees and leaders alike, including self-management and mindfulness, life skills, and peer counseling, were offered throughout the year.

**Includes First Gen Head Office, FGCEC, FG Hydro, FG Bukidnon, and FGES only.*

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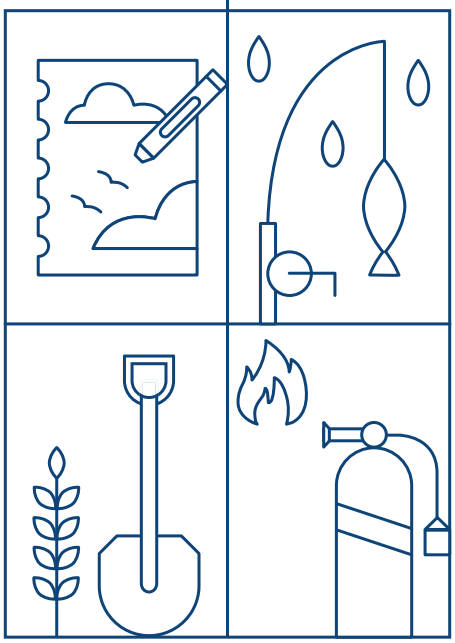
GOVERNANCE

# Corporate Social Responsibility



First Gen's CSR policy upholds the Lopez Group's CSR principles and commitments, made evident in the relevant, responsive, and sustainable CSR programs focused on education, livelihood, the environment, community health and safety, disaster response, and local culture. The Company ensures efficient and effective delivery by communicating and engaging with stakeholders.

## CSR Organization

The CSR Policy is integrated into the business, with direction coming straight from the top, and delivery participated in by the CSR and community relations personnel on the ground.

**OVERALL CSR DIRECTION**

**Senior Management**
Provides overall direction of the Company's CSR

**Management Committee**
Cascades policies and ensures implementation of overall direction for CSR

**ALIGNMENT AND INSTITUTIONALIZATION OF CSR SYSTEMS**

**Business Units**
Ensures alignment between business units strategies/ operations and CSR programs

**CSR Head Office Team**
Institutionalizes internal CSR systems

**LOCAL STAKEHOLDER ENGAGEMENT EXECUTION OF CSR PROGRAMS**

**Site CSR/ Community Relations (ComRel) Group**
Manages local stakeholders through the efficient and effective delivery of CSR programs

**Stakeholders**
- Government & regulatory agencies
- Local communities
- Church
- Academe
- Other stakeholders

## CODIFIED COMMITMENTS

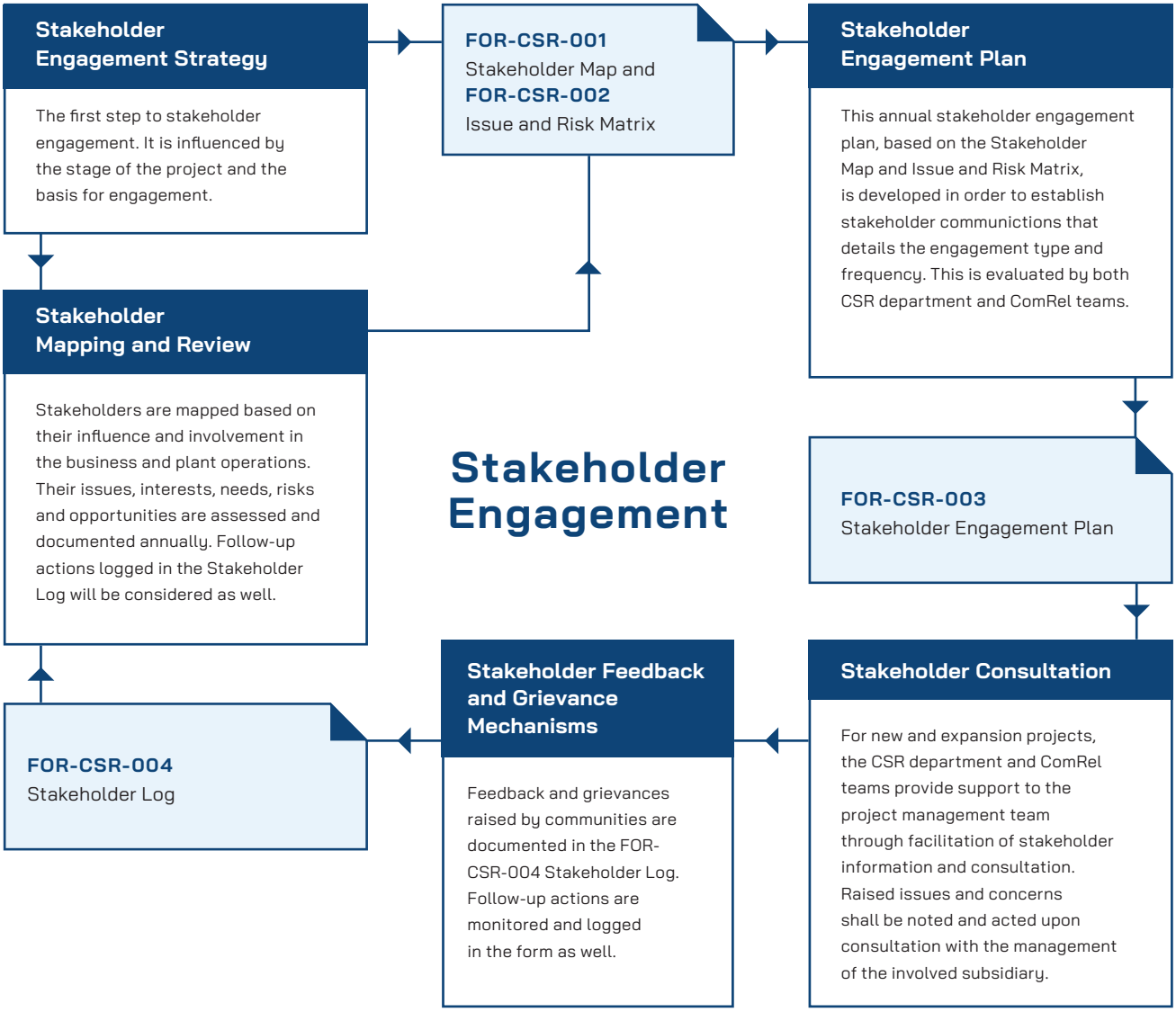
Under the overarching CSR policy, First Gen has articulated several other policies that serve as guidelines in ensuring seamless development, execution, and monitoring of the Company's CSR programs.

1

### STAKEHOLDER MANAGEMENT POLICY

Stakeholder Mapping and Engagement Planning is a crucial step in the Company's CSR process. This process manages the relationship between the Company and stakeholders, where their participation is sustained throughout the life of the project. This strategic approach to stakeholder engagement allows the CSR department to continuously develop programs that address the stakeholders' issues and needs. Communities and organizations are involved in decisions that may affect them and so they remain supportive of the Company.

GRI 102-21 103-1 103-2 103-3




2

### CSR PROGRAM DEVELOPMENT AND MANAGEMENT POLICY

First Gen tasks the CSR department and ComRel teams to come up with CSR programs aligned with the Company's priority areas. The programs should address community needs and positively impact partner communities and institutions. Community profiling and social acceptability surveys are conducted every three years. Once a program is developed and executed, its impact is monitored, evaluated, and reported. Such policy ensures relevance and impact of CSR programs, resulting in the shared development and established partnership between the Company and the community.

3

### DONATIONS AND SPONSORSHIP POLICY

The policy covers requests for donations and sponsorships across First Gen and First Gen's subsidiaries. Only requests that pass the Program Criteria identified in the CSR and ComRel program will be approved and processed for release. If applicable, approved donations and sponsorships must be covered by a Memorandum of Agreement (MOA).

4

### EMPLOYEE VOLUNTEERISM POLICY

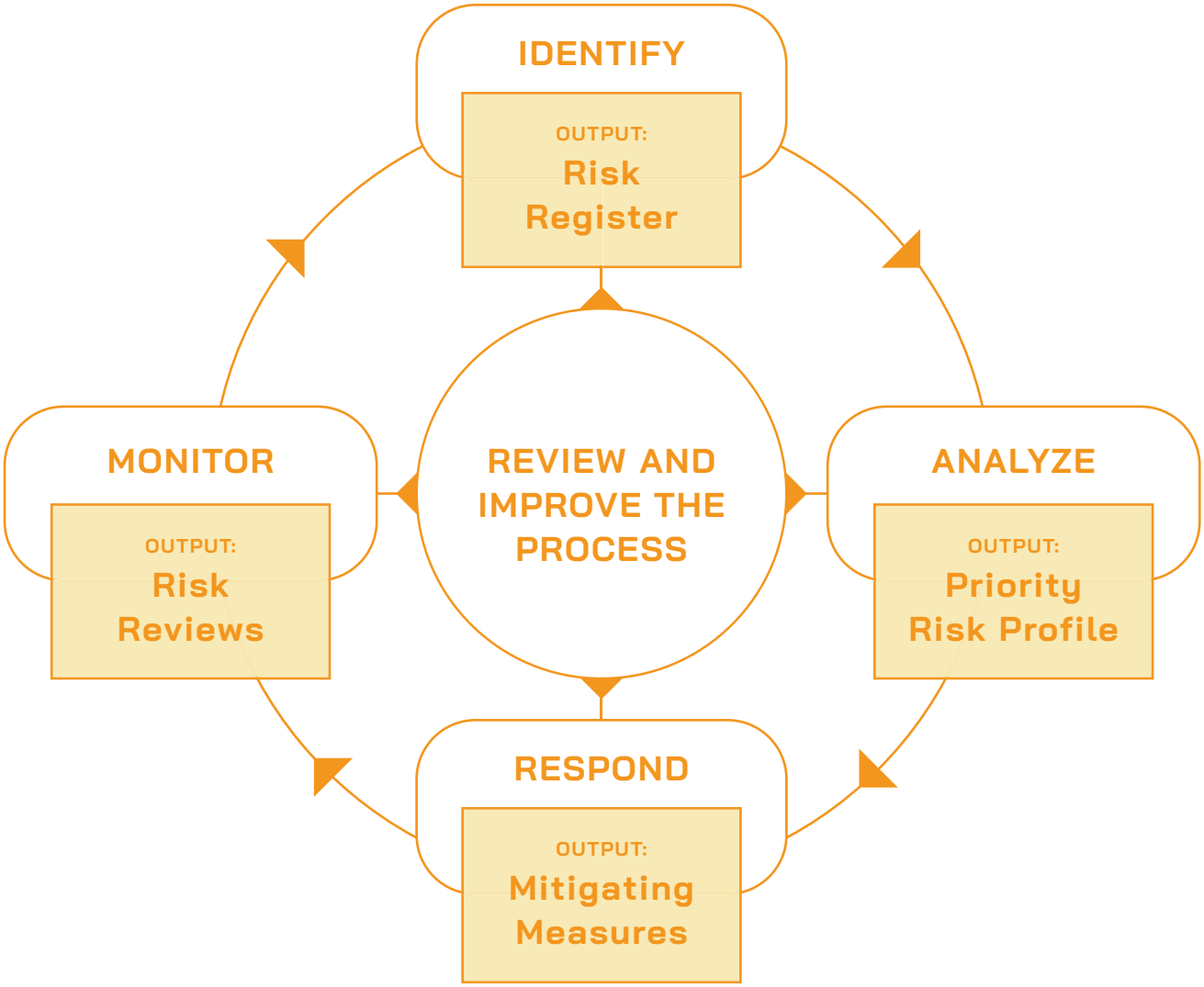
First Gen encourages employees, including their friends and family members, to participate in the Company's CSR programs. Volunteers may participate by allotting time for preparation or joining in the actual activity, or donating leave credits, cash or in-kind provisions for the conduct of the activities. This policy supports the process of planning for volunteer activities by the core team of volunteers, to the actual volunteering, and finally, the documentation of contributions and pertinent data by CSR Department.

GRI 102-21 103-1 103-2 103-3

# Risks and Opportunities

First Gen identifies and assesses the potential risks and feasible opportunities that underpin value creation. Based on these assessments, the Company designs and executes action plans aimed at addressing these risks and opportunities, and further optimizing business operations.

## The Risk Management Process



In reviewing and classifying the risks affecting the Company, First Gen goes through a regular comprehensive risk management process covering all operating plants, projects, and support units. Risks classified as top risks are regularly reported to senior management and the Board Risk Oversight Committee (BROC). For the Group, the Top Risks are:

| EXTERNAL ENVIRONMENT RISKS | MITIGATING MEASURES |
|---|---|
| ▷ Depletion of Indigenous Resources<br>O Operations are highly dependent on the consistent availability of the plants' required fuels, particularly natural gas. | ▷ Gas Plants<br>O In anticipation of the expiry of the Service Contract of the Malampaya Gas Field in the next 5 years, the Company remains on-track with its proposed LNG project, having completed the pre-development work to make the site construction-ready.<br>O The plants (except for San Gabriel) are dual-fired, which means that they can operate using liquid fuel in the absence of natural gas.<br>▷ Geothermal Plants<br>O Maximize modern technology to optimize steam extraction from the wells.<br>O Undertake continuous drilling and non-drilling workovers to ensure steam supply. |
| ▷ Regulatory Risks<br>O The regulatory landscape, including that of power and energy, remains challenging as various regulatory issuances and amendments have either been delayed or are constantly changing. | ▷ Continually engage various regulators and local government officials who are involved in the power and energy sector.<br>▷ Participate in TWG with various regulations in development.<br>▷ Closely coordinate with regulatory groups and institutions in order to aid the progress of key issues. |
| ▷ Climate Change and Natural Catastrophes (NatCat)<br>O Climate change has been observed to lead to climate variability and extreme weather, and consequently, higher probability of natural disasters. | ▷ To reduce vulnerability to climate change and its effect on water supply, the Company is developing a pump storage hydro project that will support its existing hydropower plants.<br>▷ Conduct various natural calamity studies (e.g., typhoon, earthquake, flood, tsunami, etc.).<br>▷ Continuously modify the plants' design and implement various weather-proofing initiatives to safeguard against effects of NatCat incidents.<br>▷ Obtain/maintain natural catastrophe insurance cover (to the extent necessary and possible) for the various sites. |
| ▷ Intense Competition & Increased Market Volatility<br>O Competitors continue to expand capacity and vie for the same contracts. | ▷ Institute systematic and targeted customer acquisition while improving customer stickiness through data-driven analytics for existing customers.<br>▷ Improve plant flexibility to cater to different types of contracts or energy demands. |

GRI 102-15 201-2

## RISKS AND OPPORTUNITIES

| BUSINESS ACTIVITIES / OPERATIONS RISKS | MITIGATING MEASURES |
|---|---|
| ▷ Plant & Equipment Reliability<br>O Many of the plants are over 20 years old and may need more frequent maintenance and rehabilitation. | ▷ Operations & Maintenance systems and processes abide by world-class standards in operational management.<br>▷ As the plants age, the Company proactively implements a more stringent preventive maintenance program to ensure that the plants meet or exceed international performance standards.<br>▷ Strengthen the program to monitor rating and reliability of aging equipment.<br>▷ Obtain/maintain insurance cover for business interruption, machine breakdown, etc. |
| ▷ Financial Risks<br>O The Company has relied on debt-financing, particularly for large projects. | ▷ Continued and timely paydown of debt through the Company's deleveraging program.<br>▷ FX Risk<br>O Majority of operations is naturally hedged; active management of the Finance & Treasury Group through close monitoring and engaging in hedging transactions.<br>▷ Interest Rate Risk<br>O Good mix of fixed and floating rate loans; close monitoring of interest rate movements and regularly engaging Senior Management on funding plans.<br>▷ Liquidity Risk<br>O Prepayment of loans as possible; refinancing bulky maturities to smoothen the repayment profile |
| ▷ Cybersecurity Risk<br>O There is increasing dependence on information systems, plant modernization and construction of new plants with increasing dependence on automation and internet-linked machinery and equipment. | ▷ Conducted IT and OT Vulnerability Assessment Studies and implementation of recommended mitigation plans.<br>▷ Development of related frameworks and policies for cascading to the whole organization. |

GRI 102-15

# Opportunities for First Gen

There are situations in the Philippines' energy industry that First Gen can address with its clean and renewable energy portfolio. The following were identified as the top opportunities First Gen prioritized in developing its strategy:

| OPPORTUNITIES | ACTION PLANS |
|---|---|
| The limited supply of indigenous natural gas in the Philippines is compromising the energy security of the country. The Malampaya gas field's depleting supply is becoming more evident in its increasing unreliability. In 2019, it was strained to its capacity and, at times, unable to fulfill the requirement of operating natural gas plants. | First Gen, through its subsidiary FGEN LNG, is developing the FGEN Batangas LNG Terminal Project which could bring LNG to the Philippines as early as the 3rd quarter of 2022.<br><br>The Company is proposing to construct an Interim Offshore LNG Terminal that involves the modification of its existing liquid fuel jetty and the development of an adjunct onshore gas receiving facility. This interim terminal will allow First Gen to bring in a FSRU on an interim basis to serve the existing and future requirements of gas-fired power plants. This also serves as the initial phase of the project.<br><br>The project will ensure that existing gas-fired power plants will continue producing power after the expiration of the Malampaya service contract in 2024. The project will also enable First Gen to take advantage of lower LNG prices due to an oversupplied market in the 2020s by importing LNG to produce cost-competitive baseload and/or mid-merit power.<br><br>In March 2020, the Company filed its application for a PCERM with the DOE. Once the PCERM is granted, the Company will be able to commence the construction of the project. The target commissioning date for the interim terminal is in the 3rd quarter of 2022. |
| Increase in energy demand in the medium to long term | The on-going development of the approximately 1,200-MW Santa Maria CCGT Power Plant Project is expected to provide more flexible and efficient capacity, suited to the needs of a grid that is expected to increasingly rely on intermittent renewable energy sources.<br><br>First Gen's subsidiary, EDC, is working on the addition of binary plants, which will enable EDC's existing geothermal facilities to maximize the geothermal steam it is harnessing. Binary plants may add up to 45 MW of capacity to the existing facilities and leverages on existing power facilities so it is easier and faster to develop. EDC is currently securing the necessary permits and are completing its technical requirements. |

GRI 102-15 EU10

## RISKS AND OPPORTUNITIES

| OPPORTUNITIES | ACTION PLANS |
| --- | --- |
| The need to provide stability to the grid as variable renewable energy projects increase in numbers | First Gen, through its subsidiary FG Hydro, has launched the development of Project Aya, a 100-MW Pumped-Storage Project. The project is envisioned to be the pioneering variable-speed pump-storage facility that can provide power during peak periods and Ancillary Services to the grid for security and stability. It is currently in the development stage.<br><br>For more information on Project Aya, please refer to our discussion of the hydro platforms performance on page 46 of this report. |
| The need to store excess power generated by variable renewable energy projects for later use | Another component of Project Aya is the utilization of the Aya Lake as power storage which has an expected storage capacity equivalent to 8 hours – a capacity unmatched by traditional battery systems. |
| The implementation of the Clean Development Mechanism, where emission reduction projects in developing countries earn saleable certified emission reduction credits (CER) or carbon credits | First Gen has registered all its qualified projects under the Clean Development Mechanism – Energy-Related Projects. This includes the 20MW Nasulo Geothermal Project, the Pantabangan Hydroelectric Power Plant Refurbishment and Plant Upgrade Project, the 300MW Puyo Hydropower Project, the Bac-Man 3 Geothermal Power Project, the Burgos Wind Projects, and the 50MW Mindanao Geothermal Power Plant 3. |

GRI 102-15 EU10

| OPPORTUNITIES | ACTION PLANS |
| --- | --- |
| The implementation of the Renewable Energy Law of 2008 (RE Law) that aims to accelerate the exploration, development, and increased utilization of RE sources to effectively prevent or reduce harmful emissions | There are several incentives under the RE Law including the Renewable Portfolio Standards (RPS), the Green Energy Option Program (GEOP), and the Feed-in-Tariff (FiT) Scheme. First Gen is qualified to avail these incentives.<br><br>The RPS require DUs, RESs, and generation companies for Directly Connected Customers to achieve a minimum annual incremental RE Percentage equal to 1 percent of Net Electricity Sales from the previous year. This is in view of the long-term objective to achieve at least 35 percent Renewable Energy share in the energy mix by 2030. First Gen currently has over 300 MW of capacity eligible for RPS that will generate equivalent Renewable Energy Certificates (RECs). Half of this capacity is under the FiT scheme while the other half can be contracted with mandated RPS participants.<br><br>The GEOP is a mechanism established by the DOE to provide end-users the option to choose RE resources as their source of energy. The end-users with an average peak demand of 100 kW and above may directly enter a GEOP supply contract with RE facilities for their energy requirements. This will be distributed through their respective DUs, or with any eligible RE supplier, on a voluntary basis. Currently, all of First Gen's RE facilities are eligible to participate under the GEOP and can cater to customers with the demand level of 100 kW and above and customers requiring 100 percent RE supply.<br><br>The FiT Scheme is a renewable energy policy mechanism that allows electricity generated from emerging RE technologies to be included in the supply of power at a guaranteed fixed rate per kWh, applicable for a period of 20 years. This policy mechanism aims to accelerate the development of emerging RE resources such as wind, solar, ocean, run-of-river hydropower, and biomass energy resources in order to lessen the country's dependence on imported fossil fuels. EDC's Burgos Wind and Solar Plants enjoy the rates under the FiT scheme. First Gen is also looking to take advantage of the possible DOE extension of FiT for hydro technologies with its several hydro projects in the pipeline. |
| Inadequate access to electricity | First Gen supports the Sikat Solar Challenge Foundation (Sikat), a non-profit organization whose mission is to uplift the lives of Filipinos living in rural communities that do not have access to electricity. The Company works with various organizations and helps them deliver innovative and sustainable renewable energy systems. Sikat recently supported a local NGO install a solar-powered community health clinic in the foothills of Mindoro. |

GRI 102-15

# Sustainability Strategy and Roadmap

The Company began documenting its sustainability initiatives through a sustainability report in 2015. Prior to developing the report, the Company has long started operating its business with environmental conservation in mind, as well as the protection and growth of its employees and the society. First Gen's Sustainability strategy is anchored on Chairman Federico R. Lopez's mandate, to produce power through clean and renewable sources. First Gen does not consider Sustainability as a separate process to protect the environment and the society—it is embedded in the Company's goals, strategies, operations, and day-to-day activities.

First Gen adopts FPH's Corporate Sustainability Policy, embedding the "System Value" principle which manifests the linkage between the business, society and environment. Consistent with this FPH's sustainability principle, First Gen recognizes its dependence on natural resources and therefore its responsibility in preserving the planet's integrity, for society's present and future prosperity.

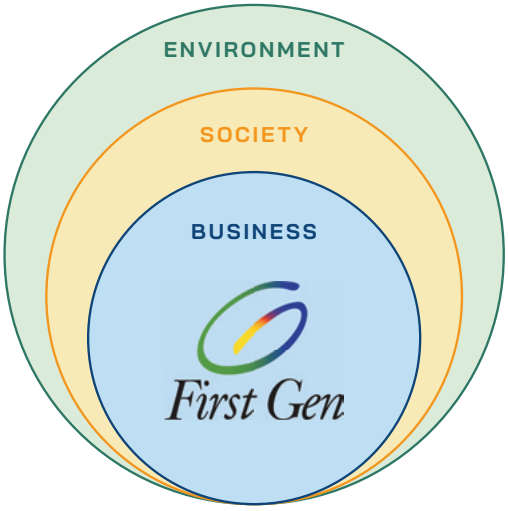
### THE FPH SUSTAINABILITY POLICY

We are committed to improving people's lives and futures by ensuring that as our business grow, the environment, our employees and our other stakeholders progress with us.

We are constantly working to transform the Philippines in positive and innovative ways through our responsible growth investments.

We resolve to contribute to a low carbon world as we search for sustainable solutions for the benefit of everyone.

All of these are made possible through our values. As a Lopez company, we work with nationalism, integrity, social justice, unity, excellence, a pioneering entrepreneurial spirit for the service of our nation.




**FEDERICO R. LOPEZ**
Chairman of the Board & Chief Executive Officer

## SUSTAINABILITY ROADMAP

### 2015-2017

- Crafted the First Gen Corporate Social Responsibility Policy
- Development of the Sustainability TWG Charter
- Baseline profiling, employee embedding and capacity building
- Stakeholder engagement and selection of indicators
- Adopted the FPH Corporate Sustainability Policy
- Carbon reduction targets and programs
- Continued CSR programs and projects
- Published ESG initiatives and performance through annual Sustainability Reports in reference to GRI Standards

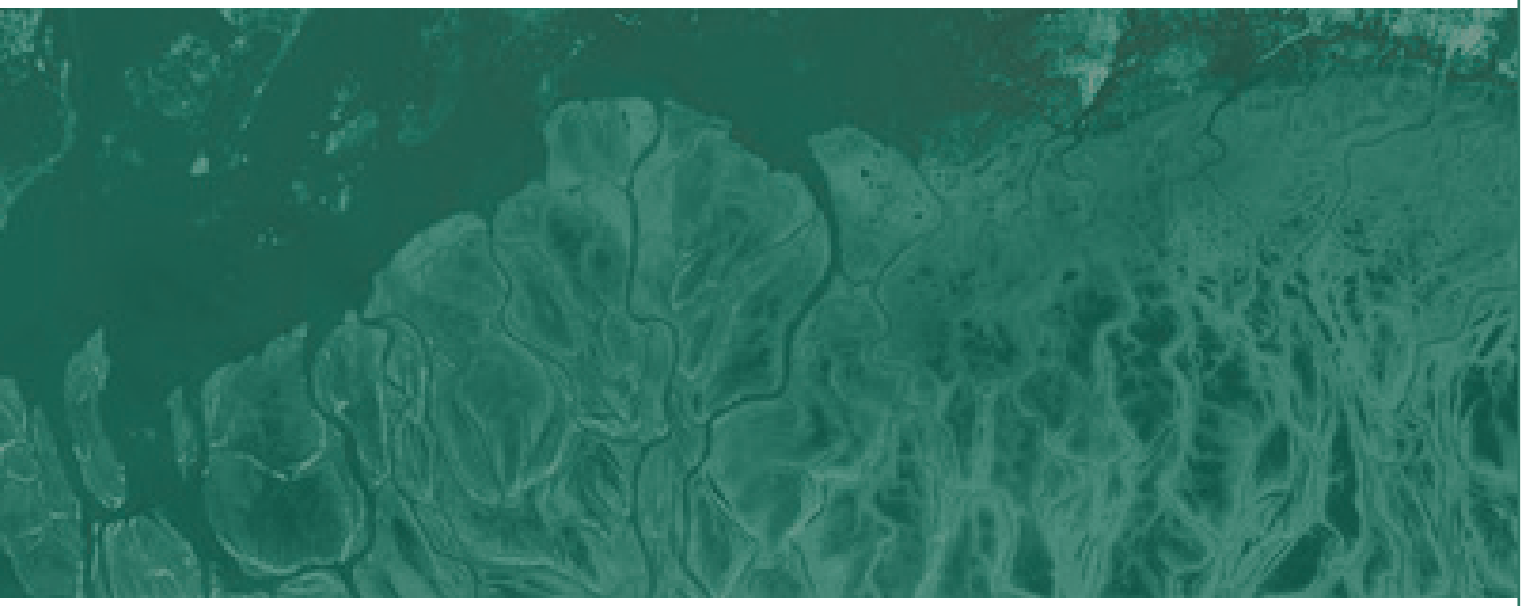
### 2018

- Participation in crafting FPH-wide policies
- Dissemination of ESG policies to all First Gen subsidiaries
- Utilization of the integrated FPH Sustainability development database
- Identification of relevant SDGs and the Company's contributions to the SDGs
- Partnership with organizations aspiring for 100 percent RE
- Continued capacity building and employee embedding
- Published 4th Sustainability Report in reference to GRI Standards
- Stakeholder engagement and determination of topics

### 2019

- Continued capacity building and employee embedding
- Continued energy reduction programs and monitoring
- Participation in the Climate Change Scenario Study for FPH subsidiaries
- Initiated the Water Management Study
- Participation in the Carbon Offset Project initiated by FPH
- Adopted the International Integrated Reporting <IR> Framework along with the GRI Standards in its 5th Sustainability Report
- Inclusion of EDC and FG Hydro in the scope of First Gen's IR

First Gen's Sustainability Report enables the Company to disclose how it manages its operations while performing ways to protect the environment and ensuring that its stakeholder requirements are complied with. To ensure that the expectations of investors as well as stakeholders are managed better this reporting period, First Gen adopted the International <IR> Framework in addition to the GRI Standards used in previous sustainability reports.



# Contributions to the UN Sustainable Development Goals

First Gen's processes and initiatives contributed to the following Sustainable Development Goals for 2019.

## MAJOR CONTRIBUTIONS TO SDGs 7 AND 13

The Company made major contributions to these goals through the production of power using natural gas and renewable sources:

### 7 AFFORDABLE AND CLEAN ENERGY

- Reliable plant operations from clean and renewable sources
- Proper maintenance of existing power plants
- Seeking innovations to sustain resilience of the Company's power generation assets
- Continuous development of clean and renewable power plants and LNG regasification terminal to sustain fuel for the Company's natural gas power plants

### 13 CLIMATE ACTION

- Commitment to the use and promotion of clean and RE energy sources
- Promotion of awareness and education on climate change to the communities
- Testing of preparedness and readiness during emergency situations through drills and tabletop exercises

## CONTRIBUTIONS TO OTHER SDGs

First Gen and its subsidiaries also contributed to the following SDGs:

### 3 GOOD HEALTH AND WELL-BEING

- Lower carbon concentration from First Gen's power plants compared to coal-fired power plants
- Maintaining balanced OSH programs (physical, mental and social) for zero incidents and occupational illnesses and diseases in the workplace
- Access to healthcare for 14,464 individuals through medical missions and community clinics
- Completed training for 113 Barangay Health Workers on Basic Life Support. First Aid, Capture of Vital signs and Operation Timbang (weight) Management
- Construction of sanitation facilities

### 4 QUALITY EDUCATION

- Building the capacities and competencies of residents within host communities to increase their employment opportunities by:
  - Granting college, technical/vocational and high school scholarships
  - Providing a work immersion program for high school students
  - Conducting a financial literacy workshop for students and parents
- Supporting the Brigada Eskwela, and participating in the rehabilitation of school facilities and provision of school supplies

GRI 203-1 203-2 413-1

## 5 GENDER EQUALITY

- No discrimination in recruitment, job functions and designations
- Conducting training and forums for employees regarding Gender Sensitivity and the implementation of the Anti-Sexual and Harassment Policy

## 14 LIFE BELOW WATER

- Continuous protection of the Center of Center, a marine biodiversity conservation program supporting the province of Batangas in implementing marine law enforcement covering 1,554 hectares with 35 marine protected areas
- Conducting monthly coastal clean-ups participated by 2,332 volunteers from the Company, the Community and LGU in Batangas City
- Maintenance of the mangrove reforestation area within FGCEC

## 8 DECENT WORK AND ECONOMIC GROWTH

- Patronizing the products of local producers for business operations and services of local providers for contracted and outsourced requirements
- Providing decent employment opportunities for all regardless of gender, age and race, and compensate employees based on performance
- Establishing a policy and implementing a management system on OSH for a safe and healthy workplace for all employees and workers
- 22 farmer association/people's organizations (FA/PO) benefitting from BINHI contracts
- Building the capacity and competencies of host communities through scholarships and Work Immersion Program

## 15 LIFE ON LAND

- Conservation of mountain ecosystems, including their biodiversity through:
- Monitoring the flora and fauna biodiversity of the Pantabangan-Carranglan watershed
- Mainstreaming of native Philippine threatened species by producing more than 141,000 seedlings through the BINHI program
- Maintaining 1,181 hectares and developing additional 26 hectares for the BINHI plantation
- Planting indigenous forest and fruit trees within 30 hectares of the various RE power plant locations
- Conducting more than 600 forest patrols within 34,770 hectares of watershed areas within the conservation locations of geothermal sites
- Reforestation of 9,449 hectares of watershed areas in Project areas and other areas through BINHI since 2009

GRI 203-1 203-2 413-1

# GRI Content Index

## GRI STANDARDS ("IN ACCORDANCE - COMPREHENSIVE")

This report has been prepared in accordance with the GRI Standards: Comprehensive option. The content index lists Universal and Topic-specific Standards Disclosures and Electric Utilities Sector Disclosures issued in 2016/2018 and 2013, respectively. It also summarizes First Gen's coverage and details where we report in relation to each Standard Disclosure. For the Materiality Disclosures Service, GRI Services reviewed that the GRI Content Index is clearly presented and references for disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. For a detailed explanation of GRI Standard Disclosures, please visit www.globalreporting.org.


| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **GRI 101: FOUNDATION 2016** | | | | |
| **GRI 102: DISCLOSURES 2016** | | | | |
| **ORGANIZATIONAL PROFILE** | 102-1 | Name of the organization | 1 | |
| | 102-2 | Activities, brands, products, and services | 6, 8, 9 | |
| | 102-3 | Location of headquarters | | 6/F Rockwell Business Center Tower 3, Ortigas Ave, Pasig City, 1604 |
| | 102-4 | Location of operations | | (1) Philippines |
| | 102-5 | Ownership and Legal Form | 11 | https://www.firstgen.com.ph/our-company/corporate-structure/ |
| | 102-6 | Markets served | 6 | MERALCO, CEPALCO, NPC (for power generation & steam sales), WESM, NGCP, electric cooperatives and industrial customers pursuant to the PPAs and PSAs, and FIT located in Luzon, Visyas and Mindanao Grid. |
| | 102-7 | Scale of the organization | 7, 9, 32 | |
| | 102-8 | Information on employees and other workers | 32 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 102-9 | Supply chain | 30, 31 | |
| | 102-10 | Significant changes to organization and its supply chain | | There was no significant change in the location and supply chain from 2018 to 2019. In 2019, First Gen bought back a total of 33.0 million common shares from the open market under its existing share buyback program. Outstanding common shares as of December 31, 2019 was 3,609.9 million and the public float was 31.5%. There was no new share issuance to raise funds, and FPH remains the majority shareholder of the Company. |
| | 102-11 | Precautionary Principle or approach | 28, 29 | |
| | 102-12 | External initiatives | 27, 28, 46 | In addition to the ISO certification, First Gen discloses its environmental performance in the CDP portal and follows the GRI Standards and Integrated Reporting Framework in its Integrated Report |
| | 102-13 | Membership of Associations | | Philippine Independent Power Producers Association<br>Philhydro Association Inc.<br>Semiconductor and Electronics Industries in the Philippines<br>Business for Sustainable Development<br>National Renewable Energy Board<br>Philippine Disaster Resilience Foundation<br>Pollution Control Association of the Philippines, Inc.<br>Retail Electricity Suppliers Association |
| **STRATEGY** | 102-14 | Statement from senior decision-maker | 12, 13 | |
| | 102-15 | Key impacts, risks and opportunities | 32, 69, 70, 71, 72, 73 | |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| ETHICS AND INTEGRITY | 102-16 | Values, principles, standards and norms of behavior | 4, 5, 64 | |
| | 102-17 | Mechanism for advice and concerns about ethics | 64 | |
| GOVERNANCE | 102-18 | Governance structure | 53, 54 | |
| | 102-19 | Delegating authority | 54 | |
| | 102-20 | Executive level responsibility for economic, environmental and social topics | 26 | Mr. Renato A. Castillo, Senior vice president and Chief Risk Officer, is part of the Company's senior management. He leads and oversees the company's sustainability initiatives and activities with the guidance from the company's sustainability champion and President, Francis Giles B. Puno. His functions include determining the underlying needs, risks and opportunities for the company; identifying enhancements in the sustainability efforts and programs; and overseeing the performance and engagements of the company with the stakeholders for a mutual-benefit-relations. He also collaborates with the FPH Corporate Sustainability Group Head, Agnes De Jesus for synergy of direction and alignment of strategies. |
| | 102-21 | Consulting stakeholders on economic, environmental and social topics | 2, 66, 67 | |
| | 102-22 | Composition of the highest governance body and committees | 53, 54, 55, 56, 57 | |
| | 102-23 | Chair of the highest governance body | 55 | Mr. Federico R. Lopez is both the Chairman of the Board, and the Chief Executive Officer of First Gen. The particulars regarding this, and the functions as Chairman and CEO are disclosed in the Integrated Annual Corporate Governance Report (as of May 2018), Recommendation 5.4, pp. 66 - 71. |
| | 102-24 | Nominating and selecting the highest governance body | 54 | The company's Manual on Corporate Governance requires the members of the company's Nomination and Governance Committee to review and evaluate the qualifications of all persons nominated to the board to ensure that each board election will result in a mix of proficient directors, each of whom will be able to add value and bring prudent judgment to the board. The committee does not discriminate against any person by reason of that person's age, race, sex, religion, and marital status. Among the factors considered by the committee are: expertise in the power industry; financial, marketing, international, risk management, legal, human resources, technological, and operational expertise; and gender diversity. Stockholders votes for or against the election of qualified nominees to the Board are also taken into account in the process. |
| | 102-25 | Conflicts of Interest | 64 | The process and mechanism laid down to detect, determine and resolve any possible conflict of interest between the company and/or its group and their directors, officers, and significant shareholders are disclosed in the Company's Integrated Annual Corporate Governance Report (as of May 2018), Recommendation 7.1, pp. 81 - 82. |
| | 102-26 | Role of setting governance body in setting purpose, values, and strategy | 53, 54 | |
| | 102-27 | Collective knowledge of highest governance body | 54, 58 | As per the Manual on Corporate Governance, the Board may require a newly-elected Director to attend a seminar on corporate governance conducted by any duly-recognized private or government institution. Appropriate training opportunities for both existing and potential directors may from time to time be identified and undertaken as assessed. The enumerated list of the trainings attended by the Directors are listed in the Annual Corporate Governance Report (as of May 2018). |
| | 102-28 | Evaluating the highest governance body's performance | | The process followed and critera used in assessing the annual performance of the board and its committees, individual director, and the CEO/President are disclosed in the Annual Corporate Governance Report (as of May 2019), |
| | 102-29 | Identifying and managing economic, environmental, and social impacts | 26, 27, 28, 54 | |
| | 102-30 | Effectiveness of risk management processes | 26, 54 | |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| GOVERNANCE | 102-31 | Review of economic, environmental, and social topics | 26, 54 | |
| | 102-32 | Highest governance body's role in sustainability reporting | 1 | |
| | 102-33 | Communicating critical concerns | 28, 54 | |
| | 102-34 | Nature and total number of critical concerns | 54 | The classification and nature of critical concerns depends on the internal business unit directly involved in or handling the concerns.These concerns typically involve operations, financing and/or regulations covering the Company. Critical issues are verified and assessed and raised to management and/or the Board of Directors, as needed. |
| | 102-35 | Remuneration policies | 54 | |
| | 102-36 | Process for determining remuneration | | The Compensation and Remuneration Committee has the principal function of studying and recommending an appropriate compensation and/or rewards system, and designate the amount of remuneration which shall be in a level sufficient to attract and retain directors and officers who are needed to run the Corporation successfully. The Committee also reviews the Company's human resources development or personnel handbook to strengthen provisions on conflict of interest, policies on salaries and benefits, and directives on promotion and career advancement.<br><br>Members of the Compensation and Remuneration Committee can directly consult and confer with any member of management or employee of the Corporation to ask questions and request reports and other documents relating to any issue that is of interest to the committee. Likewise, members of the Board can directly confer and consult with external advisors. |
| | 102-37 | Stakeholders' invoivement in remuneration | | As per the Compensation and Remuneration Committee Charter, which is publicly available in the Company website (http://www.firstgen.com.ph/corporate-governance/board-committees/board-committee-charter/), the Compensation and Remuneration Committee shall establish a policy on remuneration of directors and officers to ensure that their compensation is consistent with the Company's culture, strategy, and the business environment in which it operates. In May 2010 the stockholders passed a resolution fixing the annual compensation of the Board of Directors at an amount not to exceed ¾ of 1% of the company's net income before income tax for the preceding year. This decision was approved by stockholders on May 12, 2010. |
| | 102-38 | Annual total compensation ratio | | Omission: Provision of information is restricted by confidentiality and security considerations. |
| | 102-39 | Percentage increase in annual total compensation ratio | | Omission: Provision of information is restricted by confidentiality and security considerations. |
| STAKEHOLDER ENGAGEMENT | 102-40 | List of stakeholder groups | 2 | |
| | 102-41 | Collective bargaining agreements | | First Gen is non-unionized. EDC has 12 unions covering 32% of its employees. |
| | 102-42 | Identifying and selecting stakeholder | 2 | |
| | 102-43 | Approach to stakeholder engagement | 2 | |
| | 102-44 | Key topics and concerns raised | 3 | |
| REPORTING PRACTICE | 102-45 | Entities included in the consolidated financial statements | | First Gen Corporation and operating companies First Gas Power Corporation (FGPC), FGP Corp. (FGP), First Natgas Power Corporation (FNPC), First Gen Hydro Corporation (FG Hydro), First Gen Energy Solutions, Inc. (FGES), FG Bukidnon Power Corporation ((FG Bukidnon) and Energy Development Corporation (EDC). |
| | 102-46 | Defining report content and topic boundaries | 2 | |
| | 102-47 | List of material topics | 3 | |
| | 102-48 | Restatements of informaton | | There are no restatements of information |
| | 102-49 | Changes in reporting | | The scope of reporting has included performance of EDC and FG Hydro. |
| | 102-50 | Reporting period | 1 | |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| REPORTING PRACTICE | 102-51 | Date of most recent report | | May 9, 2019 |
| | 102-52 | Reporting cycle | 1 | |
| | 102-53 | Contact point for questions regarding the report | 1 | |
| | 102-54 | Claims of reporting in accordance with the GRI Standards | | This report has been prepared in accordance with the GRI Standards: Comprehensive Option |
| | 102-55 | GRI Content Index | 78 | |
| | 102-56 | External Assurance | | Omission: The report is currently not externally assured. Measures were taken internally to ensure accountability and accuracy of reported information to the extent possible. |
| **GRI 200 ECONOMIC STANDARD SERIES 2016** | | | | |
| **ECONOMIC PERFORMANCE** | | | | |
| GRI 103: MANAGEMENT APPROACH 2016 | 103-1 | Explanation of the material topic and its boundaries | 26 | |
| | 103-2 | The management approach and its components | 26 | |
| | 103-3 | Evaluation of the Management Approach | 26 | |
| GRI 201: ECONOMIC PERFORMANCE 2016 | 201-1 | Direct economic value generated and distributed | 7, 32 | |
| | 201-2 | Financial implications and other risks and opportunities for the organization's activities due to climate change | 69 | |
| | 201-3 | Defined benefit plan obligations and other retirement plans | | First Gen has distinct, funded, noncontributory, defined benefit retirement plans, which covers all permanent employees, each administered by the committees of each subsidiary |
| | 201-4 | Financial assistance received from government | 32 | Actual duties waived in 2019 amounted to USD 1,365,925.86 |
| **MARKET PRESENCE** | | | | |
| GRI 103: MANAGEMENT APPROACH 2016 | 103-1 | Explanation of the material topic and its boundaries | 27, 54, 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-2 | The management approach and its components | 27, 54, 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-3 | Evaluation of the Management Approach | 27, 54, 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| GRI 202: MARKET PRESENCE 2016 | 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage | | First Gen complies with the minimum wage rate set by the DOLE, regardless of the gender of the employee. |
| | 202-2 | Proportion of senior management hired from the local community | 35, 36 | Majority of the members of senior management are from significant locations of operations: the Head Office and operating plants in various places in the Philippines |
| **INDIRECT ECONOMIC IMPACTS** | | | | |
| GRI 103: MANAGEMENT APPROACH 2016 | 103-1 | Explanation of the material topic and its boundaries | 28 | |
| | 103-2 | The management approach and its components | 28 | |
| | 103-3 | Evaluation of the Management Approach | 28 | |
| GRI 203: INDIRECT ECONOMIC IMPACTS 2016 | 203-1 | Infrastructure investments and service supported | 51, 76, 77 | |
| | 203-2 | Significant indirect economic impacts | 35, 36, 76, 77 | |
| **PROCUREMENT PRACTICES** | | | | |
| GRI 103: MANAGEMENT APPROACH 2016 | 103-1 | Explanation of the material topic and its boundaries | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-2 | The management approach and its components | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-3 | Evaluation of the Management Approach | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **GRI 204: PROCUREMENT PRACTICES 2016** | 204-1 | Proportion of spending on local suppliers | 33 | 94.5% of purchases and services sourced from Local Suppliers. Local in this disclosure pertains to suppliers that are Philippine-based |
| **ANTI-CORRUPTION** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 54, 64 | |
| | 103-2 | The management approach and its components | 54, 64 | |
| | 103-3 | Evaluation of the Management Approach | 54, 64 | |
| **GRI 205: ANTI-CORRUPTION 2016** | 205-1 | Operations assessed for risks related to corruption | | First Gen has a Policy on Anti-Bribery and Corruption, where the company, in upholding the principles of honesty, integrity, and transparency in conducting business, strictly prohibits any form of bribery and corruption within the Company as well as in dealing with business partners, service providers, customers and governmental agencies and instrumentalities. Part of the Risk Management process is the assessment of operational and project risks based on general risk classifications which include political, regulatory and social risks. Under these classifications, the probability and impact of perceived and/or actual attempts for corruption are identified, analyzed and mitigated. In the existing Risk Management classifications, Risks related to Corruption falls under Political Risk: Governance (perceived or actual attempts for corruption) to which all business units were assessed. In the risk classifications of the ERM group, Risks related to Corruption will be covered by Fraud and Ethical risks. |
| | 205-2 | Communication and training about anti-corruption policies and procedures | | The Company's Policy on Anti-corruption and bribery is published in its website and open for the public's viewing. Thus, all concerned members, business partners, and stakeholders of the organization are expected to, and are free to access such information. |
| | 205-3 | Confirmed incidents of corruption and actions taken | | There are no confirmed cases of corruption for the reporting period. |
| **ANTI-COMPETITIVE BEHAVIOR** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 54, 64 | First Gen complies with the anti-competitive laws (Republic Act No. 10667, or the Philippine Competition Act (PCA)), and the spirit of the EPIRA law. The company only participate in competitive bids to ensure arms-length transactions. The commitment is to remain compliant to the regulating laws and policies of the industry and to take an active part in defending the company's rights and business interests during the proposition of new or adjustments to laws and policies. The power marketing and legal departments handle this topic in the organization. They ensure the compliance with government regulations as well as monitor relevant laws and guidelines. |
| | 103-2 | The management approach and its components | 54, 64 | |
| | 103-3 | Evaluation of the Management Approach | 54, 64 | |
| **GRI 206: ANTI-COMPETITIVE BEHAVIOR 2016** | 206-1 | Legal actions for anti-competitive behavior, anti-trust and monopoly practices | | There are no confirmed cases for the reporting period. |
| **GRI 300 SERIES ENVIRONMENTAL STANDARDS SERIES 2016/2018** | | | | |
| **MATERIALS** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 301: MATERIALS 2016** | 301-1 | Materials used by weight or volume | 32 | |
| | 301-2 | Recycled input materials used | | Omission: The power plants use fuel as sources of energy, which is not recyclable. |
| | 301-3 | Reclaimed products and their packaging materials | | Omission: The Company is engaged in the business of electricity generation. This disclosure is not applicable to our operations or value chain. |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **ENERGY** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 302: ENERGY 2016** | 302-1 | Energy consumption within the organization | 32 | |
| | 302-2 | Energy consumption outside of the organization | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 302-3 | Energy Intensity | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 302-4 | Reduction of energy consumption | 41 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 302-5 | Reductions in energy requirements of products and services | | There are no reduction programs implemented during the period. |
| **WATER AND EFFLUENTS** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 303: WATER AND EFFLUENTS 2018** | 303-1 | Interactions with water as a shared resource | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 303-2 | Management of water discharge-related impacts | 29 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 303-3 | Water withdrawal | 32 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 303-4 | Water discharge | 32 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 303-5 | Water consumption | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| **BIODIVERISTY** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **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 | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 304-2 | Significant impacts of activities, products, and services on biodiversity | 33 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 304-3 | Habitats protected or restored | 41 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 304-4 | IUCN Red List species and national conservation list species with habitats in areas affected by operations | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **EMISSIONS** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 305: EMISSIONS 2016** | 305-1 | Direct (Scope 1) GHG emissions | 33 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 305-2 | Energy indirect (Scope 2) GHG emissions | 33 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 305-3 | Other indirect (Scope 3) GHG emissions | 33 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 305-4 | GHG emissions intensity | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 305-5 | Reduction of GHG emissions | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 305-6 | Emissions of ozone-depleting substances (ODS) | | There were no production, import and export of ODS during the period. |
| | 305-7 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| **EFFLUENTS AND WASTE** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 306: EFFLUENTS AND WASTE 2016** | 306-1 | Water discharge by quality and destination | 29 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 306-2 | Waste by type and disposal method | 33 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 306-3 | Significant spills | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 306-4 | Transport of hazardous waste | | No hazardous waste is transported out of the country. |
| | 306-5 | Water bodies affected by water discharges and/or runoff | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| **ENVIRONMENTAL COMPLIANCE** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 307: ENVIRONMENTAL COMPLIANCE 2016** | 307-1 | Non-compliance with environmental laws and regulations | 28, 33 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| **SUPPLIER ENVIRONMENTAL ASSESSMENT** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT 2016** | 308-1 | New suppliers that were screened using environmental criteria | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | 308-2 | Negative environmental impacts in the supply chain and actions taken | | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **GRI 400 SOCIAL STANDARDS SERIES 2016/2018** | | | | |
| **EMPLOYMENT** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27, 65 | |
| | 103-2 | The management approach and its components | 27, 65 | |
| | 103-3 | Evaluation of the Management Approach | 27, 65 | |
| **GRI 401: EMPLOYMENT 2016** | 401-1 | New employee hires and employee turnover | 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | | The company provide its employees with all benefits mandated by the Philippine labor code such as 13th month pay, paternal leaves and overtime pay. |
| | 401-3 | Parental leave | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **LABOR/MANAGEMENT RELATIONS** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27 | |
| | 103-2 | The management approach and its components | 27 | |
| | 103-3 | Evaluation of the Management Approach | 27 | |
| **GRI 402: LABOR/ MANAGEMENT RELATIONS 2016** | 402-1 | Minimum notice periods regarding operational changes | | For First Gen, no minumum notices. For EDC, at least four weeks or 30 days before an operational change is implemented. For EDC, the CBAs have a provision on venue for discussion between labor and management, the frequency of meetings specified, and which consultation may include on operational changes in the organization. |
| **OCCUPATIONAL HEALTH AND SAFETY** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27, 28 | |
| | 103-2 | The management approach and its components | 27, 28 | |
| | 103-3 | Evaluation of the Management Approach | 27, 28 | |
| **GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018** | 403-1 | Occupational health and safety management system | 27 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-2 | Hazard identification, risk assessment, and incident investigation | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-3 | Occupational health services | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-4 | Worker participation, consultation, and communication on occupational health and safety | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-5 | Worker training on occupational health and safety | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-6 | Promotion of worker health | 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-8 | Workers covered by an occupational health and safety management system | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-9 | Work-related injuries | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 403-10 | Work-related ill health | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **TRAINING AND EDUCATION** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27, 65 | |
| | 103-2 | The management approach and its components | 27, 65 | |
| | 103-3 | Evaluation of the Management Approach | 27, 65 | |
| **GRI 404: TRAINING AND EDUCATION 2016** | 404-1 | Average hours of training per year per employee | 33, 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 404-2 | Programs for upgrading employee skills and transition assistance programs | 52, 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 404-3 | Percentage of employees receiving regular performance and career development reviews | 65 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **DIVERSITY AND EQUAL OPPORTUNITY** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27, 64 | |
| | 103-2 | The management approach and its components | 27, 64 | |
| | 103-3 | Evaluation of the Management Approach | 27, 64 | |
| **GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016** | 405-1 | Diversity of governance bodies and employees | 58 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 405-2 | Ratio of basic salary and remuneration of women to men | | Omission: Provision of the information is restricted by confidentiality and security considerations. |
| **NON-DISCRIMINATION** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27 | |
| | 103-2 | The management approach and its components | 27 | |
| | 103-3 | Evaluation of the Management Approach | 27 | |
| **GRI 406: NON-DISCRIMINATION 2016** | 406-1 | Incidents of discrimination and corrective actions taken | | No incidents of discrimination was reported during the reporting period. |
| **FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27 | |
| | 103-2 | The management approach and its components | 27 | |
| | 103-3 | Evaluation of the Management Approach | 27 | |
| **GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING 2016** | 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | | None |
| **CHILD LABOR** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27 | |
| | 103-2 | The management approach and its components | 27 | |
| | 103-3 | Evaluation of the Management Approach | 27 | |
| **GRI 408: CHILD LABOR 2016** | 408-1 | Operations and suppliers at significant risk for incidents of child labor | | There are no reported incidents of child labor during the reporting period among the employees of the Company. We ensure hiring of applicants who are at least 18 years old. |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **FORCED OR COMPULSORY LABOR** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27 | |
| | 103-2 | The management approach and its components | 27 | |
| | 103-3 | Evaluation of the Management Approach | 27 | |
| **GRI 409: FORCED OR COMPULSORY LABOR 2016** | 409-1 | Operations and suppliers at significant risk for incidents of forced labor | | For forced labor, no reports have been made as of date with regard to our operations and our suppliers. For our suppliers, the Company has a Vendor Accreditation Policy to validate their legal existence and financial capability to provide the product or service. |
| **SECURITY PRACTICES** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 27 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-2 | The management approach and its components | 27 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-3 | Evaluation of the Management Approach | 27 | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **GRI 410: SECURITY PRACTICES 2016** | 410-1 | Security personnel trained in human rights policies or procedures | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **RIGHTS OF INDIGENOUS PEOPLES** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28 | |
| | 103-2 | The management approach and its components | 28 | |
| | 103-3 | Evaluation of the Management Approach | 28 | |
| **GRI 411: RIGHTS OF INDIGENOUS PEOPLES 2016** | 411-1 | Incidents of violations involving rights of indigenous peoples | | No incidents of violations involving the rights of indigenous peoples for the period. |
| **HUMAN RIGHTS ASSESSMENT** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-2 | The management approach and its components | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 103-3 | Evaluation of the Management Approach | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **GRI 412: HUMAN RIGHTS ASSESSMENT 2016** | 412-1 | Operations that have been subject to human rights reviews or impact assessments | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 412-2 | Employee training on human rights policies or procedures | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 412-3 | Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **LOCAL COMMUNITIES** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 66, 67 | |
| | 103-2 | The management approach and its components | 28, 66, 67 | |
| | 103-3 | Evaluation of the Management Approach | 28, 66, 67 | |
| **GRI 413: LOCAL COMMUNITIES 2016** | 413-1 | Operations with local community engagement, impact assessments, and development programs | 36, 47, 76, 77 | All sites have local community engagement, impact assesments and developemnt programs. |
| | 413-2 | Operations with significant actual and potential negative impacts on local communities | | No negative impacts on local communities. Preventive measures were conducted to manage potential risks. |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| **SUPPLIER SOCIAL ASSESSMENT** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28 | |
| | 103-2 | The management approach and its components | 28 | |
| | 103-3 | Evaluation of the Management Approach | 28 | |
| **GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016** | 414-1 | New suppliers that were screened using social criteria | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | 414-2 | Negative social impacts in the supply chain and actions taken | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| **CUSTOMER HEALTH AND SAFETY** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28 | |
| | 103-2 | The management approach and its components | 28 | |
| | 103-3 | Evaluation of the Management Approach | 28 | |
| **GRI 416: CUSTOMER HEALTH AND SAFETY 2016** | 416-1 | Assessment of the health and safety impacts of product and service categories | | All of our operting plants were designed , built and designed per Industry Safety Standard. |
| | 416-2 | Incidents of non-compliance concerning the health and safety impacts of products and services | | There were no incidents during the reporting period. |
| **MARKETING AND LABELING** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | The management approach and its components | 28 | |
| | 103-2 | Evaluation of the Management Approach | 28 | |
| | 103-3 | Assessment of the health and safety impacts of product and service categories | 28 | |
| **GRI 417: MARKETING AND LABELING 2016** | 417-1 | Requirements for product and service information and labeling | | First Gen discloses the various sources of electricity to all its customers. |
| | 417-2 | Incidents of non-compliance concerning product and service information and labeling | | None. |
| | 417-3 | Incidents of non-compliance concerning marketing communications | | None. |
| **CUSTOMER PRIVACY** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28 | |
| | 103-2 | The management approach and its components | 28 | |
| | 103-3 | Evaluation of the Management Approach | 28 | |
| **GRI 418: CUSTOMER PRIVACY 2016** | 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | | No substainated compliants on customer privacy for the period. |
| **SOCIOECONOMIC COMPLIANCE** | | | | |
| **GRI 103: MANAGEMENT APPROACH 2016** | 103-1 | Explanation of the material topic and its boundaries | 28, 29 | |
| | 103-2 | The management approach and its components | 28, 29 | |
| | 103-3 | Evaluation of the Management Approach | 28, 29 | |
| **GRI 419: SOCIOECONOMIC COMPLIANCE 2016** | 419-1 | Non-compliance with laws and regulations in the social and economic area | | There no incidents of non-compliance for the period. |

| GRI Standard | Disclosure Number | Disclosure Title | Page Number | Direct Answers and Omissions |
|---|---|---|---|---|
| ELECTRIC UTILITIES SECTOR DISCLOSURES | EU1 | Installed capacity, broken down by primary energy source and by regulatory regime | 7, 9 | |
| | EU2 | Net energy output broken down by primary energy source and by regulatory regime | 33, 35, 40, 45, 50 | |
| | EU3 | Number of residential, industrial, institutional and commercial customer accounts | 33 | |
| | EU5 | Allocation of $CO_2$ emission, allowances or equivalent, broken down by Carbon Trading Framework | | The Philippines is a Non-Annex 1 country and therefore has no binding carbon reduction targets or alllowances in the Kyoto Protocol. |
| | EU10 | Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime | 33, 35, 37, 46, 48, 71, 72 | |
| | EU11 | Average generation efficiency of thermal plants by energy source and by regulatory regime | 35 | |
| | EU13 | Biodiversity of offset habitats compared to the biodiversity of the affected areas | 33, 42 | https://2019integratedreport.firstgen.com.ph/sustainability/environmental-performance |
| | EU15 | Percentage of employees eligible to return in the next 5 and 10 years broken down by job category and by region | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | EU17 | Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities | | https://2019integratedreport.firstgen.com.ph/sustainability/social-performance |
| | EU18 | Percentage of contractor and subcontractor employees that have undergone relevant health and safety training | | All of our contractors have undergone relevant health and safety training needed for their kind of work. |
| | EU22 | Number of people physically or economically displaced and compensation, broken down by type of project | | There were no construction of new plants and expansion of existing plants during the reporting period. Thus, no people were displaced or relocated. |
| | EU25 | Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements, and pending legal cases of diseases | | No individuals from the public were affected by our operations during the reporting period. |
| | EU26 | Percentage of population unserved in licensed distribution or service areas | | Omission: This is not applicable since the Company is primarily involved in power generation. |
| | EU27 | Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime | | Omission: This is not applicable since the Company is primarily involved in power generation. |
| | EU28 | Power outage frequency | | Omission: This is not applicable since the Company is primarily involved in power generation. |
| | EU29 | Average power outage duration | | Omission: This is not applicable since the Company is primarily involved in power generation. |
| | EU30 | Average plant availability factor by energy source and by regulatory regime | 35, 40, 45, 50 | |

# Acknowledgements

## FIRST GEN 2019 INTEGRATED REPORT

Office of the Chairman and CEO
Office of the President and COO
Accounting
Corporate Social Responsibility
Enterprise Risk Management
Integrated Corporate Communications
Investor Relations
Legal
Quality Environment Safety and Health
EDC Corporate Communications
EDC Investor Relations
EDC Technical Working Group

## COVER

FPH Integrated Corporate Communications
with Publicis JimenezBasic

## EDITORIAL AND DESIGN

Drink Sustainability Communications

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## OPERATIONAL PHOTOGRAPHY

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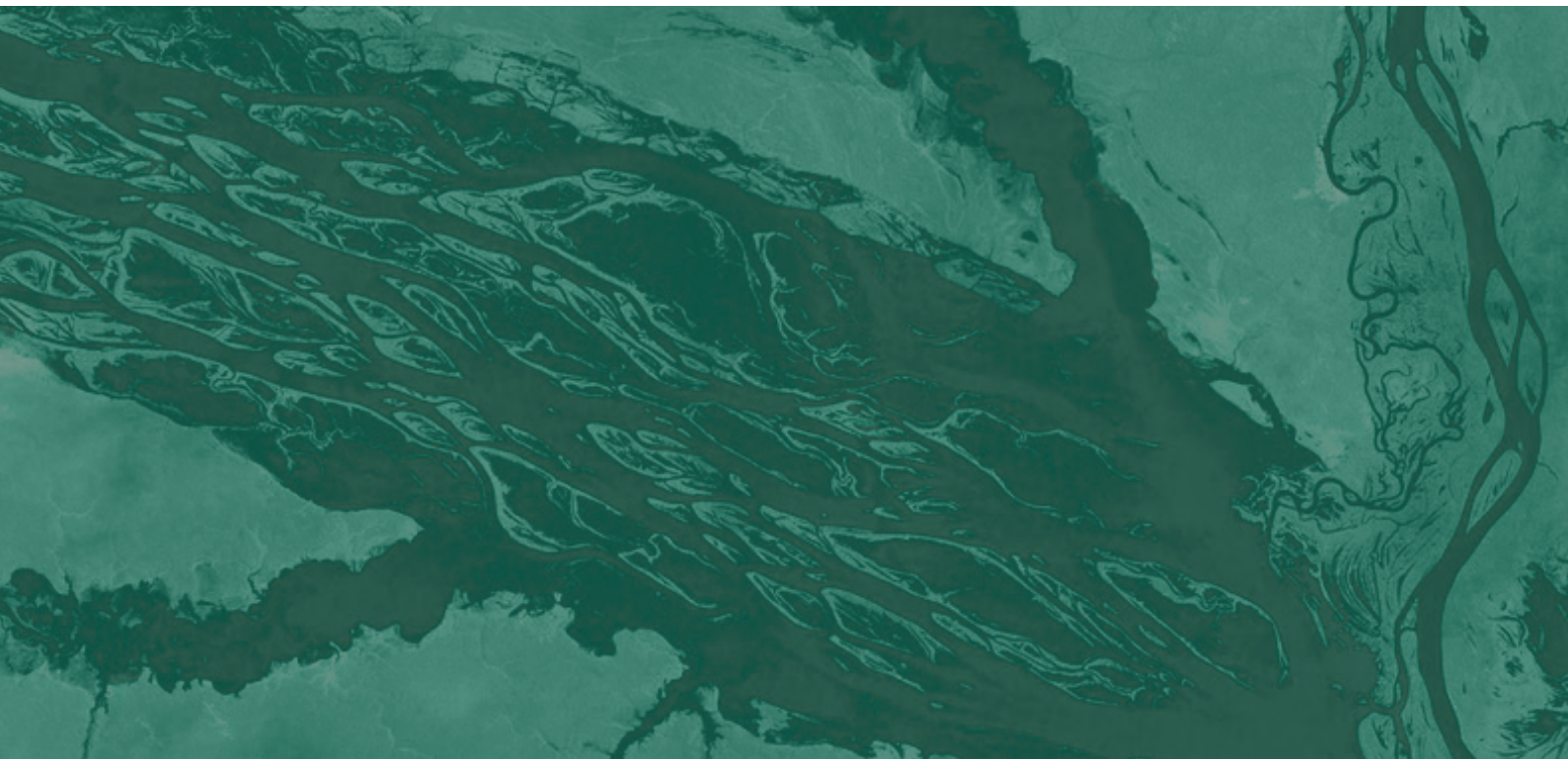
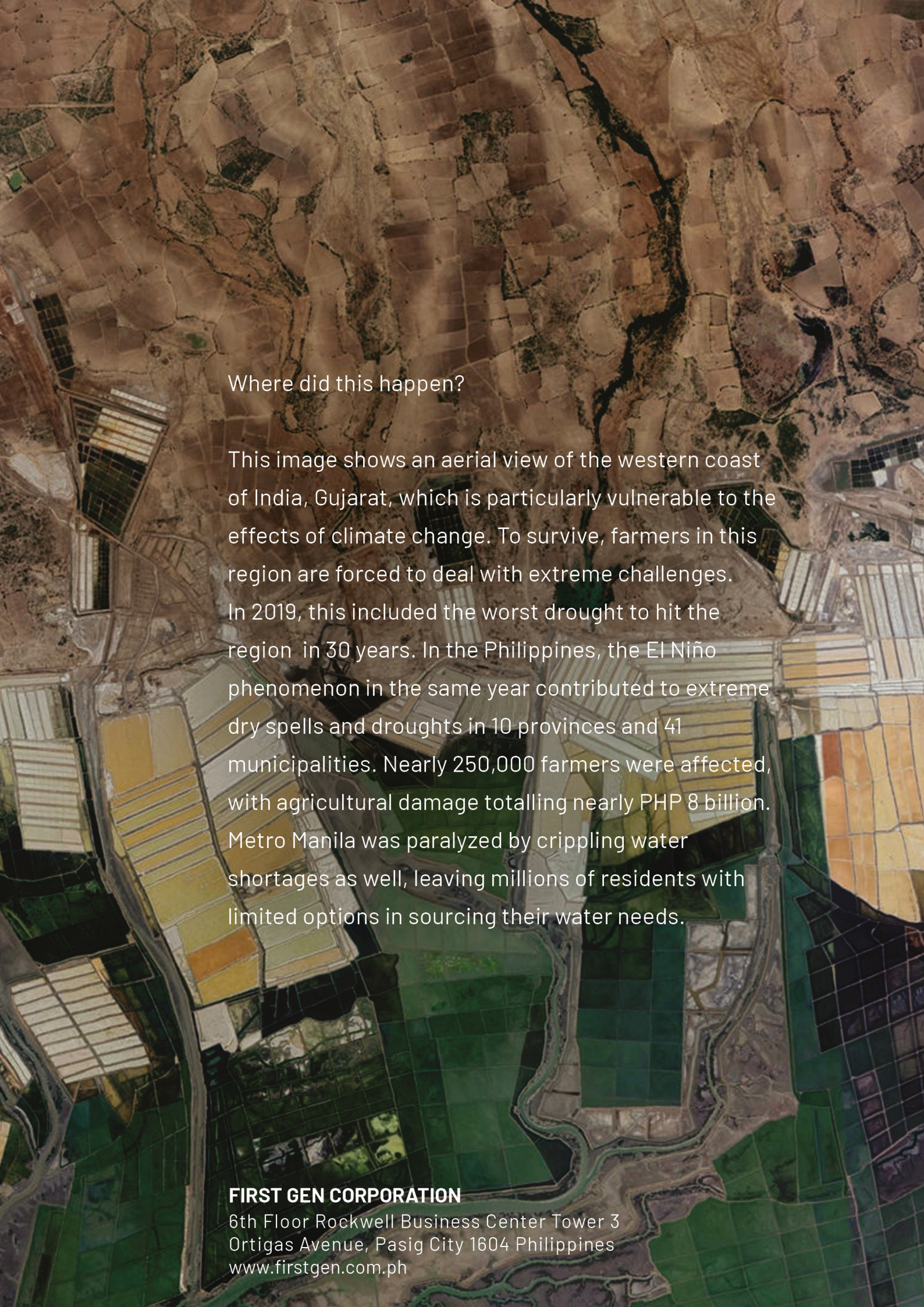
**2019integratedreport.firstgen.com.ph**





Where did this happen?

This image shows an aerial view of the western coast of India, Gujarat, which is particularly vulnerable to the effects of climate change. To survive, farmers in this region are forced to deal with extreme challenges. In 2019, this included the worst drought to hit the region in 30 years. In the Philippines, the El Niño phenomenon in the same year contributed to extreme dry spells and droughts in 10 provinces and 41 municipalities. Nearly 250,000 farmers were affected, with agricultural damage totalling nearly PHP 8 billion. Metro Manila was paralyzed by crippling water shortages as well, leaving millions of residents with limited options in sourcing their water needs.

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