# Contents

- About the Report 4
- Message from the Chairman and President & CEO 5
- One Meralco and Sustainability 10
- Understanding What Matters 15
- Engaging Stakeholders 17
- One Meralco’s Contribution to the UN Sustainable Development Goals 20
- One Meralco Sustainability Agenda 23
- Power 24
- Planet 39
- People 56
- Prosperity 65
- Corporate Governance 76
- Moving Forward 79
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMS</td>
<td>Advanced Distribution Management System</td>
</tr>
<tr>
<td>AMI</td>
<td>Advanced Metering Infrastructure</td>
</tr>
<tr>
<td>BCDA</td>
<td>Bases Conversion and Development Authority</td>
</tr>
<tr>
<td>BCM</td>
<td>Business Continuity Management Program</td>
</tr>
<tr>
<td>BESS</td>
<td>Battery Energy Storage System</td>
</tr>
<tr>
<td>BFP</td>
<td>Bureau of Fire Protection</td>
</tr>
<tr>
<td>CAIDI</td>
<td>Customer Average Interruption Duration Index</td>
</tr>
<tr>
<td>CDC</td>
<td>Clark Development Corporation</td>
</tr>
<tr>
<td>CEDC</td>
<td>Clark Electric Distribution Corporation</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CFZ</td>
<td>Clark Freeport Zone</td>
</tr>
<tr>
<td>CSEZ</td>
<td>Clark Special Economic Zone</td>
</tr>
<tr>
<td>CSO</td>
<td>Chief Sustainability Officer</td>
</tr>
<tr>
<td>CSP</td>
<td>Competitive Selection Process</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>CxTP</td>
<td>Customer Experience Transformation Program</td>
</tr>
<tr>
<td>DENR</td>
<td>Department of Environment and Natural Resources</td>
</tr>
<tr>
<td>DER</td>
<td>Distributed Energy Resources</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Energy</td>
</tr>
<tr>
<td>DOTr</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>DLSAU</td>
<td>De La Salle Araneta University</td>
</tr>
<tr>
<td>DU</td>
<td>Distribution Utility</td>
</tr>
<tr>
<td>EE</td>
<td>Energy Efficiency Services</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessments</td>
</tr>
<tr>
<td>EPC</td>
<td>Engineering, Procurement and Construction Services</td>
</tr>
<tr>
<td>ERC</td>
<td>Energy Regulatory Commission</td>
</tr>
<tr>
<td>ESH</td>
<td>Environment, Safety and Health</td>
</tr>
<tr>
<td>EV</td>
<td>Electric Vehicle</td>
</tr>
<tr>
<td>FLISR</td>
<td>Fault Location, Isolation and Service Restoration</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse Gases</td>
</tr>
<tr>
<td>GRI</td>
<td>Global Reporting Initiative</td>
</tr>
<tr>
<td>HELE</td>
<td>High Efficiency, Low Emission</td>
</tr>
<tr>
<td>HEP</td>
<td>Household Electrification Program</td>
</tr>
<tr>
<td>HFP</td>
<td>High Fire Point</td>
</tr>
<tr>
<td>HVAC</td>
<td>Heating, Ventilation, and Air-Conditioning</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IVVO</td>
<td>Integrated Volt-VAR Optimization</td>
</tr>
<tr>
<td>LPIP</td>
<td>Lightning Protection Improvement Program</td>
</tr>
<tr>
<td>LGU</td>
<td>Local Government Unit</td>
</tr>
<tr>
<td>MEP</td>
<td>Meralco Electrification Program</td>
</tr>
<tr>
<td>MERALCO</td>
<td>Manila Electric Company</td>
</tr>
<tr>
<td>MGen</td>
<td>Meralco Powergen Corporation</td>
</tr>
<tr>
<td>MGREEN</td>
<td>MGen Renewable Energy, Inc.</td>
</tr>
<tr>
<td>MIESCOR</td>
<td>Meralco Industrial Engineering Services Corporation</td>
</tr>
<tr>
<td>MMT</td>
<td>Multipartite Monitoring Team</td>
</tr>
<tr>
<td>MRF</td>
<td>Materials Recovery Facilities</td>
</tr>
<tr>
<td>MSERV</td>
<td>Meralco Energy, Inc.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>MWMS</td>
<td>Mobile Work Management System</td>
</tr>
<tr>
<td>NCC</td>
<td>New Clark City</td>
</tr>
<tr>
<td>NSED</td>
<td>Nationwide Simultaneous Earthquake Drill</td>
</tr>
<tr>
<td>NRDC</td>
<td>Natural Resources Development Corporation</td>
</tr>
<tr>
<td>OSRO</td>
<td>Organizational Safety and Resiliency Office</td>
</tr>
<tr>
<td>OFT</td>
<td>One for Trees</td>
</tr>
<tr>
<td>OMF</td>
<td>One Meralco Foundation</td>
</tr>
<tr>
<td>PCB</td>
<td>Polychlorinated Biphenyl Oil</td>
</tr>
<tr>
<td>PELCO II</td>
<td>Pampanga Electric Cooperative II</td>
</tr>
<tr>
<td>PFBSI</td>
<td>Powersource First Bulacan Solar, Inc.</td>
</tr>
<tr>
<td>PHP</td>
<td>Philippine Peso</td>
</tr>
<tr>
<td>PRES</td>
<td>Prepaid Electricity Service</td>
</tr>
<tr>
<td>PSA</td>
<td>Power Supply Agreements</td>
</tr>
<tr>
<td>PUV</td>
<td>Public Utility Vehicle</td>
</tr>
<tr>
<td>PUVMP</td>
<td>Public Utility Vehicle Modernization Program</td>
</tr>
<tr>
<td>PV</td>
<td>Photovoltaic</td>
</tr>
<tr>
<td>RE</td>
<td>Renewable Energy</td>
</tr>
<tr>
<td>RES</td>
<td>Retail Electricity Supply</td>
</tr>
<tr>
<td>RPS</td>
<td>Renewable Portfolio Standards</td>
</tr>
<tr>
<td>SAIDI</td>
<td>System Average Interruption Duration Index</td>
</tr>
<tr>
<td>SAIFI</td>
<td>System Average Interruption Frequency Index</td>
</tr>
<tr>
<td>SBPL</td>
<td>San Buenaventura Power Ltd., Co.</td>
</tr>
<tr>
<td>SCADA</td>
<td>Supervisory Control and Data Acquisition</td>
</tr>
<tr>
<td>SCPHI</td>
<td>Shin Clark Power Holdings, Inc.</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SO</td>
<td>Sustainability Office</td>
</tr>
<tr>
<td>SUP</td>
<td>Single-Use Plastics</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
</tbody>
</table>

**Units of Measurement**

- **CO₂**: carbon dioxide
- **CO₂e**: carbon dioxide equivalent
- **GW**: gigawatt
- **mL**: megaliter
- **MW**: megawatt
- **MWac**: megawatt, alternating current
- **MWdc**: megawatt, direct current
- **MtCO₂e**: megatonnes of carbon dioxide equivalent
- **kW**: kilowatt
- **kWh**: kilowatt-hour
- **kWp**: kilowatt-peak
- **kVA**: kilo-volt-amperes
- **tCO₂e**: tonnes of carbon dioxide equivalent
ABOUT THE REPORT

The commitment of Meralco and its subsidiaries (One Meralco) towards a sustainable future is made evident through the publication of this first sustainability report, which contains the economic, social, and environmental issues most significant to its business and its stakeholders. This report should be read in conjunction with the Meralco 2019 Annual Report, which provides insights on the group’s financial and operational performance.

With this sustainability report, One Meralco also illustrates how its sustainability principles are integrated into the management of enterprise risks and opportunities.

**Scope and Coverage**
The Meralco 2019 Sustainability Report covers the consolidated economic, social, and environmental performance across One Meralco. The data provided is from January 1, 2019 to December 31, 2019, unless otherwise stated. Available data from 2017 to 2018 are also shown for comparability. A number of initiatives of One Meralco Foundation (OMF) are also featured in this report.

The reporting process analyzed One Meralco’s value chain, sustainability framework, and corporate governance structure and strategies.

**Reporting Standards**
This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option.

**External Assurance**
DNV GL is an independent organization and global provider of certification, assurance assessment, and training services. The organization validated the data presented in this report through a two-week external assurance process which included interviews with pertinent data handlers across the group.

**Contact Information**
Your comments and insights matter to us. Feedback on this report and matters concerning the sustainability performance of Meralco may be addressed to:

Meralco Sustainability Office
Lopez Building, Meralco Center, Ortigas Avenue, Barangay Ugong, Pasig City 1605, Philippines
Telephone: +632 1622 3552
Email: sustainability@meralco.com.ph
MESSAGE FROM THE CHAIRMAN AND THE PRESIDENT & CEO

As we gear up for a new decade, we put sustainability at the heart of One Meralco. While it has played a role in the way we manage and expand our businesses, our new strategic focus on sustainability will allow us to better empower people, protect our environment, and foster inclusive growth for a prosperous nation.

As the Philippines’ premier electric distribution utility, Meralco plays a vital role in nation-building. Our primary mandate is to ensure that electricity continually flows from our grid to our customers—to light up homes and offices, to power industries, and to energize our economy. But all this will be for naught, if the communities, cities, and the country we seek to uplift are not equipped to deal with the mounting challenges our world faces.

The world we live in is unwell. Recent scientific studies have shown that human activity has contributed significantly to the increase of greenhouse gases (GHG) which drives adverse climate change. In 2019, the Philippines was found to be the country most at risk from the climate crisis, according to the Institute for Economics and Peace.¹

Extreme weather conditions, such as typhoons and droughts, are increasing the pressure on our farmers and fisherfolk. Rising sea levels are threatening to submerge our major cities and economic hubs. Increasing sea temperatures are harming the marine ecosystems from which we derive food and income. Our forests are losing cover, reducing soil productivity and depleting our sources of drinkable water. Many lack access to basic services, like the 16 million Filipinos who still live without electricity, in addition to millions more without reliable 24x7 service. On top of all this, the gap between the rich and poor continues to widen, leaving about 17 million Filipinos below the poverty line.

It is against this backdrop that we say: business as usual is no longer a viable option. We, in Meralco, believe we have a crucial role to play to shift these adverse realities going forward through the different companies we manage and operate. Indeed, this is the essence of sustainability. It is a commitment to not only build the nation, but also to sustain our future.

Sustainability at our Core

Sustainability is front and center for us in Meralco and is at the core of the Company’s strategy and operations. We, together with our Senior Management Team, take full ownership and accountability for this imperative. To embody our commitment, in 2019, we established a Sustainability Office, staffed with full-time professionals and experts tasked to help define, develop, and drive our sustainability agenda forward.

¹ Institute for Economics & Peace (2019). The Institute for Economics & Peace, is a global think tank that develops global and national peace indices, calculating the economic cost of violence, analysing country level risk and understanding the conditions which underpin highly peaceful societies. Global Peace Index.
In support of this agenda, we have also identified specific metrics for monitoring and measuring our sustainability performance as a Company. Throughout our first Sustainability Report, you will find these indicators we track to manage and address sustainable development in our business operations—from greenhouse gas emissions, to diversity statistics and economic value generated. The intent is to set these current levels as baselines for us to chart our path towards contributing to the Philippines’ and global sustainability goals.

What we have achieved so far is encouraging, but there is much more to do as we join the world in creating a better planet and a better life for all.

**Advancing Global Goals**

The latest report on the progress of countries towards the *United Nations’ Sustainable Development Goals (SDGs)* showed steps in the right direction, with almost all countries lowering their CO\textsubscript{2} emissions while continuing to expand their economies.

Guided by the SDGs, we have crafted our own sustainability agenda as One Meralco. As a leading player in the Philippine energy sector, Meralco is uniquely positioned to contribute to the attainment of the *UN SDG 7: Affordable and Clean Energy*.

With the understanding that economic growth is significantly propelled by equitable access to affordable and clean energy, we strive to go beyond our mandate to ensure Filipinos can provide and power good lives for themselves and their families.

As such, as you go through the Report, you will see how our businesses promote not only SDG 7 but other SDGs as well:

- SDG 1 – No Poverty
- SDG 8 – Decent Work and Economic Growth
- SDG 9 – Industry, Innovation and Infrastructure
- SDG 10 – Reduced Inequalities
- SDG 11 – Sustainable Cities and Communities
- SDG 13 – Climate Action
- SDG 15 – Life on Land
- SDG 17 – Partnerships for the Goals

**4Ps: Focusing on a Brighter Tomorrow**

One Meralco’s sustainability program is marked by a focus on four strategic areas: Power, Planet, People, and Prosperity.

**Power**

*Power* is what makes our sustainability agenda distinctly Meralco. Embracing the ambitious aspiration of ‘energy for all, always’, Meralco is committed to delivering affordable, accessible, and reliable electricity to all whom we serve. In 2019, we achieved 99.6% electrification in our franchise area, while addressing the growing energy demands of our existing and new
customers. We also continued to light up far-flung communities who need electricity the most. Through technology-enabled microgrid solutions, we powered Isla Verde in Batangas and Cagbalete Island in Quezon. Brightening these island communities and fueling their economic and social growth pushes us to achieving 100% electrification in our service area by the first half of 2021.

The optimization and digitalization of our grids allows us to be more productive and reliable. To this end, we have installed an Advanced Distribution Management System, as well as a wide array of distribution and substation automation, asset management, and data analytics technologies which, over the last five (5) years, have helped significantly reduce average outage incidence by 27% and average outage duration by 16% along our distribution grid which supplies 70% of Luzon’s electricity demand.

Beyond these, a significant program under Power is Meralco’s energy transition plan to deliver clean and earth-friendly energy. In September 2019, our power generation arm, Meralco PowerGen Corporation (MGen) switched on the 455 MW (net) capacity San Buenaventura Power Plant in Mauban, Quezon—the country’s first supercritical power plant that uses High Efficiency, Low Emission (HELE) technology and the most efficient operating coal plant in the Philippines. With the anticipated completion of MGen’s first ultra-supercritical plant in Atimonan, Quezon in the next few years, we will achieve even higher efficiency with the production of more energy with less fuel.

We also established our renewable energy arm through MGen’s subsidiary, MGen Renewable Energy, Inc. (MGREEN). Through MGREEN, we begin a very important shift to even cleaner energy as the Company seeks to build a portfolio of reliable, cost-competitive, and highly-sustainable renewable energy projects with a capacity of up to 1,000 MW in the next five (5) to seven (7) years. The first of such projects is the 80 MW DC (50 MW AC) Powersource First Bulacan solar plant in San Miguel, Bulacan, which broke ground in December last year. Furthermore, we have solar projects in the pipeline worth PHP 10 billion with a combined project capacity of 210 MW. Indeed, we are committed to continuing to invest in cleaner and more affordable sources of energy as we grow as a future-ready Company.

**Planet**

This brings us to Planet. Through this focus area, Meralco develops and executes programs to help preserve and protect our common home, Mother Earth. These programs address direct emissions reduction, resource efficiency, and waste management imperatives. Meralco, through its subsidiary companies, MSpectrum, Inc. and eSakay, Inc, is enabled to deploy and scale innovative solutions to address environmental challenges.

For instance, our electric vehicle company, eSakay puts forward green mobility options for everyday commuters. In 2019, it launched the breakthrough Makati-Mandaluyong electric jeep operations, deploying 15 zero-emission vehicles to ply a developmental route in support of the Department of Transportation’s (DOTr) Public Utility Vehicle Modernization Program (PUVMP).
eSakay also professionalized the ranks of its drivers, providing income security to these frontliners who used to be burdened by the traditional ‘boundary’ system.

**People**

Our People pillar captures our investments in our most valuable asset—our employees. We provide utmost support to the men and women who are charged with powering the lives of our customers, day in and day out. With the belief that diversity and inclusion make organizations stronger, Meralco hires more than thrice as many women versus the global average in the energy sector. We also strive for more gender parity in leadership roles. In 2019, the number of women in higher management positions rose by 17%. Moreover, we ensure that our employees enjoy competitive compensation and benefit packages so they may lead the lives they aspire for. In addition, in support of their career development and continuous learning, employees took part in 270,584 hours of training in 2019.

In support of our sustainability program, Meralco also seeks to cultivate a culture of stewardship across our organization, ensuring our employees not only understand sustainability concepts but are also able to put these principles into practice. For instance, in 3Q 2019, we put in place a Company-wide ban on Single Use Plastics which helped instill heightened ecological consciousness internally. A cross-functional team was created to develop informative materials, run roadshows, and facilitate forums to ensure our employees understand the rationale behind the program. Through our efforts, employees have become more aware of their environmental footprint at work, and also at home.

**Prosperity**

Finally, underpinning all our efforts is the goal to create Prosperity for all. True sustainable development is measured not by wealth alone, but rather by comfort, well-being, and happiness. The more our business grows and expands, the more we can contribute to economic prosperity in the country by means of taxes, wages, investments, and outreach programs. In 2019, we generated a total of PHP 322.6 billion in economic value—a 4.7% improvement from 2018. Of the amount generated, PHP 253.9 billion went to our operations. Meanwhile, PHP 19.7 billion was paid to providers of capital and PHP 13.1 billion worth of wages and benefits was disbursed to our employees. Tax payments to the government amounted to PHP 9.7 billion. Lastly, our community investments reached PHP 146 million.

Beyond the economic value we create, we are committed to improving the well-being of the customers we serve and of the communities we operate in—truly providing more power to our partners for progress.

With their comfort in mind, we provide our customers the tools they need to transact and communicate with us when, where and how they want to. We have designed Meralco Online to provide simple and convenient solutions for our customers to easily pay bills, to report outages or even, to access energy-saving tips. In 2019, Meralco Online served 385,000 active customer accounts, addressed 17,000 reported outages, and facilitated 545,000 payment transactions.
Meralco Online puts the customer first. This is why it is set to further delight our customers in 2020 through the integration of new and enhanced services.

We also reach out to underserved communities through our social development arm, One Meralco Foundation. We launched the One for Trees program which planted 24,000 trees in the hopes of restoring biodiversity and enriching the lives of our local farmers and communities. In 2019, we also energized over 8,000 low-income households and 20 off-grid public schools through our household and school electrification programs, bringing our total to over 49,000 households and 245 public schools since launching these initiatives in 2012.

Indeed, our commitment to prosperity is a pledge to create better lives for the people we touch through the many ways we are able to create value.

Forging Ahead
The year 2019 provided important starting points from which we can build and expand our positive impact. Across all four focus areas, Meralco is dedicated to continue driving initiatives to build awareness for sustainability, to spur action, and to promote this very important advocacy.

Whereas more challenges lie ahead, Meralco is committed and ready to place our sustainability goals at the forefront while advancing to provide the energy needs of a thriving nation. With this very first Sustainability Report, we hope to not only inform, but more so to inspire as many as we can to join us on this journey to power the best lives for our customers, our community, our country, and most importantly, our children.

MANUEL V. PANGILINAN
Chairman of the Board

RAY C. ESPINOSA
President and Chief Executive Officer
ONE MERALCO AND SUSTAINABILITY

Creating Value throughout the Energy Landscape
With its commitment towards sustaining the future, One Meralco continues to expand its business portfolio, bringing forth better and cleaner energy solutions through its various companies. In energy distribution, Meralco powers the country’s residential, commercial, and industrial sectors to support a thriving economy. Through Meralco’s subsidiaries involved in electric transport, telecommunications, engineering, logistics, and manpower services, it provides new technologies faster and more reliably to those who need it the most.

Energy Value Chain Companies

Meralco
Meralco is the Philippines’ largest electric distribution utility, servicing Bulacan, Cavite, Metro Manila, and Rizal and certain cities, municipalities, and barangays in the provinces of Batangas, Laguna, Pampanga, and Quezon, covering an area of around 9,685 square kilometers. Meralco serves a total of 6.88 million residential, commercial, and industrial customers.

As the largest private power distributor in the Philippines, Meralco contributes to nation-building by supplying electric power to areas where chief government offices, universities, central business districts, and industrial parks are located. It collaborates with industry players to ensure safe, reliable, and quality delivery of service and ensures compliance with rates approved by the Energy Regulatory Commission (ERC). As energy drives economies and provides ways to alleviate poverty, Meralco pursues the provision of accessible energy at a reasonable cost, especially to unserved and underserved communities.

Meralco PowerGen Corporation (MGen)
Meralco PowerGen Corporation (MGen) enables Meralco to contribute towards meeting the country’s rising energy demands by being a source of competitively-priced power. MGen aims to have a diversified power generation portfolio that will provide sufficient, reliable and cost-competitive supply by pioneering High Efficiency, Low Emission (HELE) coal technology and renewable energy.

Committed to bringing additional supply to support the country’s growth momentum and to delivering clean and cost-competitive power supply, the Company expanded into the sustainable energy sector through MGen Renewable Energy, Inc. (MGREEN), a wholly-owned subsidiary of MGen. MGREEN is developing, constructing, and will operate green-energy projects which primarily include utility-scale solar, wind and run-of-river hydro power, with a target of up to 1,000 MW installed capacity.

MPower
MPower is Meralco’s local Retail Electricity Supply (RES) unit, serving customers who opted for voluntary contestability with consumptions of at least 750 kW demand, which is the current contestability threshold allowed by regulators to participate in Retail Competition and Open
Access. MPower accounts for 27 percent market share in MW demand of the total contestable market nationwide where RCOA is effective.

With the increasing demand for renewable energy, MPower also contracts hydro and solar energy sources to augment its supply portfolio and to cater to the renewable energy requirements of its customers.

**MSpectrum (Spectrum)**

Mspectrum, Inc. (Spectrum) was established in 2016 as part of Meralco’s thrust to enter into the renewable energy (RE) space. It was given a mandate to help fulfill Meralco’s commitment to economic and environmental sustainability. Since then, Spectrum has taken market leadership in the industry by completing several solar projects, with a total installed capacity of 17 MW nationwide. Spectrum’s mission is to provide clean, affordable, sustainable, and safe energy solutions to its customers. It operates mainly in the business of providing optimally engineered rooftop and ground-mounted solar PV systems for commercial and industrial businesses. In the near term, Spectrum will rely heavily on three new verticals, aside from its core Commercial and Industrial rooftop business: (1) Spectrum Home, targeted primarily to residential customers, (2) Operations and Maintenance (O&M) services for existing RE installations, and (3) Microgrid hybrid solutions for off-grid customers. Looking ahead, Spectrum will sustain its industry leadership by exploring new RE technologies such as wind and battery energy storage systems.

**Clark Electric Distribution Corporation (CEDC)**

Clark Electric Distribution Corporation is a private distribution utility with a franchise granted by Clark Development Corporation (CDC) in 1997 to distribute power exclusively within the Clark Special Economic Zone (CSEZ) covering the Clark Freeport Zone (CFZ) and sub-zones.

CEDC continues to work around the clock to improve its system reliability and flexibility to ensure continuous and quality electricity supply for its customers, and to help CSEZ become a powerhouse hub for industry, export business, aviation, and higher learning, and Central Luzon’s leisure, entertainment and gaming center.

**Comstech Integration Alliance (Comstech)**

Comstech, a Meralco subsidiary, operates the Pampanga II Electric Cooperative (PELCO II) under an Investment Management Contract. PELCO II is an electric cooperative serving Mabalacat City and the municipalities of Guagua, Lubao, Bacolor, Sta. Rita, Sasmuan, and Porac in the Province of Pampanga.

PELCO II works with local government units and private investors to provide reliable electric services to residents and to support the economic growth brought in by new industrial and commercial locators in its franchise area. Also, as part of making communities sustainable, PELCO II provides electric service for the former victims of the 1991 Mount Pinatubo volcanic eruption, who have now rebuilt their lives in the resettlement areas in Sta. Lucia, Model Community, Palmayo, Madapdap, Mawaque, Camachile, and Wenceslao.
**Shin Clark Power Holdings**

Shin Clark Power Holdings Inc. (SCPHI) is a consortium where Meralco holds a 60 percent stake, with Japanese firms Axia Power Holdings Philippines Corporation (a wholly-owned subsidiary of Marubeni Corporation), KPIC Netherlands BV (a wholly-owned subsidiary of the Kansai Electric Power, Inc.), and Chubu Electric Power Co., Inc., collectively holding the remaining 40 percent. The consortium manages the financing, development, operation, and maintenance of the electric power distribution system in the 9,450-hectare New Clark City (NCC) in Capas, Tarlac, through a Joint Venture Agreement with the Bases Conversion and Development Authority (BCDA).

New Clark City is designed to be the first smart, sustainable, and disaster-resilient metropolis aimed to decongest Metro Manila and be a showcase to the world of Filipino culture and identity. SCPHI will provide reliable power to around 1 million customers at NCC and enable them to enjoy the benefits of affordable energy. SCPHI completed the interim substation with an underground distribution system three months ahead of schedule and successfully provided the energy needs of the NCC sports complex in the recently concluded South East Asian Games held last November 26 to December 12, 2019.

**Energy Related Service Companies**

**MSERV**

Meralco Energy Inc. (MSERV) is a one-stop shop for energy services and solutions with a focus on electro-mechanical engineering, procurement and construction services (EPC), energy efficiency services, and urban services. MSERV is a “AAA” Philippine Contractor Accreditation Board-licensed company and a Department of Energy-accredited Energy Service Company. MSERV is positioned to provide after-the-meter energy solutions to end-users not only within the Meralco franchise, but nationwide. MSERV currently serves the nation’s top companies, including industrial facilities, state-of-the-art data centers, large commercial centers, and high-profile event arenas, among others. MSERV aims to not only help its customers achieve additional business value but also to contribute to environmental sustainability, and enable better quality of life through its solutions.

**eSakay**

eSakay offers end-to-end electric vehicle (EV) and charging infrastructure solutions to help bring the EV future into the streets of local cities and of commercial and industrial complexes. eSakay supports the transportation needs of private and public sector customers by offering a wide range of EV offerings—from electric jeeps and shuttles to electric motorbikes and scooters. It also supplies, operates, and maintains EV charging stations across the country. One of eSakay’s main thrusts is to support the Department of Transportation’s (DOTr) Public Utility Vehicle Modernization Program (PUVMP), which aims to not only upgrade PUVs to cleaner alternatives, but also to professionalize and provide stable livelihood to the men and women who operate these routes.
**Bayad Center**
Meralco-owned Bayad Center, with its over 30,000 payment touchpoints, is the largest and widest multi-channel payment platform to date. Bayad Center is now bringing its sustainable practices and digital facilities to further push its mission of “pay anytime, anywhere” with the launch of its fintech business—the new and improved Bayad Center Online and the Bayad Center super app, which powers bill-payment features of leading financial apps in the country, making payments easy and available at the comfort of Filipino families’ homes. Bayad Center also offers remittance services, prepaid loading, airline ticketing, loan payout, ATM cash withdrawal, as well as insurance and medical reimbursements services, further providing access to the financially underserved. It has evolved from an on-site business to an online business as well, redefining the payment experience, and constantly innovating in response to the rapidly changing lifestyle of the Filipino family. Through its subsidiary, Bayad Center also pioneered outsourced tellering and customer services with Customer Frontline Solutions, providing services to over 600 clients’ sites nationwide.

**Infrastructure Service Companies**

**MIESCOR**
MIESCOR is Meralco’s service provider in electro-mechanical works, engineering, distribution utility, and technical services. It also handles telecommunications projects for its affiliates. It has two subsidiaries: MIESCOR Builders and MIESCOR Logistics. The Philippine Contractor Accreditation Board classified MIESCOR in the “AAAA” category, the highest category for general engineering, building, foundation work, structural steel work, electrical work, mechanical work, and communication facilities. In line with Meralco’s focus on the safety of its workers, it has also been lauded for its health and safety records by the Safety and Health Association of the Philippine Energy Sector and by the Department of Energy.

**Radius**
Radius provides high-speed fiber-based data and internet connectivity solutions that enable businesses to securely transmit critical information in various forms, over a highly reliable, secure, and cost-effective communication superhighway. It also offers tailor-fit solutions to an enterprise’s specific needs, to help these institutions focus on their core businesses and optimize operations. Radius’ telecommunications services have proven to be vital across numerous industries such banking, retail and distribution, outsourcing and offshoring, and manufacturing – industries that are important to the growing economy.

**MRail**
MRail is a company that provides maintenance and asset renewal services to the railway ecosystem in the Philippines. The company has contracts with Sumitomo, LRTA, and LRMC, and was the contractor for the restoration and rehabilitation of 3 Diesel Mechanical Unit Locomotives of PNR in 2015. The company bridges the gap between asset ownership and operating efficiency and asset reliability. It provides technical advisory and project management services in rail construction, maintenance, asset restoration, and rehabilitation and renewal. It has expertise and established experience particularly in the rolling stock, power supply,
overhead catenary, and tracks systems. MRail has undertaken various railway projects, including the LRT-2 Rolling Stock Aircon Replacement, LRT-1 Extension Project, and MRT-3 Power Supply during the Sumitomo regime, among others. MRail is an accredited service provider of the government with a Category B PCAB license and is ISO 9001:2015 certified.
UNDERSTANDING WHAT MATTERS

Contextualizing Sustainability
One Meralco views sustainability in the context of local, regional, and global sustainable development goals. It has therefore identified key economic, social, and environmental areas where its businesses create impact and value, and aligned these with the broader sustainable development agenda. This mapping helps One Meralco address challenges, establish priorities, and achieve the sustainability objectives set forth in its strategy.

Identifying Material Topics
One Meralco’s reporting framework covers four areas: corporate governance, impact management, sustainable development, and future-ready strategies.

The materiality assessment process enabled One Meralco to identify, prioritize, and address the key concerns of stakeholders, guided by the GRI Standards. Using this process, the Group identified its material topics through a series of consultations with key representatives from the different business units who represented the concerns of their respective stakeholders. The senior management team outlined the Group’s business drivers and aspirations, and aligned these business strategies with concrete sustainability goals. A total of 23 sessions were conducted with the various units of Meralco and its subsidiaries. Consultations with the Group’s stakeholders — employees, customers, investors, suppliers, regulators, and communities — were also conducted in order to validate the material topics identified.

The summary of the materiality assessment is as follows:

<table>
<thead>
<tr>
<th>GOVERNANCE</th>
<th>ECONOMIC</th>
<th>ENVIRONMENT</th>
<th>SOCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strict compliance with laws &amp; regulations</td>
<td>Direct economic contribution</td>
<td>Optimization of operations &amp; prudent resource management</td>
<td>Providing employee training &amp; career development</td>
</tr>
<tr>
<td>Observance of ethical business practices</td>
<td>Indirect economic contribution</td>
<td>Effective environmental impact management</td>
<td>Ensuring workplace safety</td>
</tr>
<tr>
<td>Effective &amp; efficient risk management</td>
<td>Effective demand-side management</td>
<td>Integration of climate action into business strategy</td>
<td>Workplace Management</td>
</tr>
<tr>
<td>Robust corporate governance</td>
<td>Power supply availability &amp; reliability</td>
<td></td>
<td>Effective service delivery &amp; customer communication</td>
</tr>
<tr>
<td></td>
<td>Energy affordability</td>
<td></td>
<td>Strengthened cybersecurity and customer privacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proactive community engagement</td>
</tr>
</tbody>
</table>

Collecting and Validating Data
Upon outlining the material topics, relevant disclosures were identified and gathered from each company under One Meralco. Where possible, three years of data were reported to show a
better picture of the overall performance. The consolidated and analyzed data were confirmed with the business groups. Thereafter, the data and process were then validated by DNV GL, the Company’s external assurance partner.

**One Meralco Sustainability Framework**

The Group’s sustainability agenda is embedded in the way it conducts its business, across all of One Meralco. It is a pledge to fulfilling its mandate to provide affordable, accessible, reliable, and clean energy—while ensuring that Mother Earth is protected, preserved, and nurtured. To achieve this, One Meralco develops and empowers its people, ingraining the values of excellence and stewardship in its organization. All these are founded on the Group’s commitment to bringing prosperity and to powering the good life for its customers, its communities, and the country, today, and for generations to come.

**VISION:** To be a world-class company and the service provider of choice.

**SUSTAINABILITY FOCUS AREAS:** POWER, PLANET, PEOPLE, and PROSPERITY

**STAKEHOLDERS:** Customers, Communities, Employees, Investors and Shareholders, Government and Regulators, and Suppliers and Contractors
ENGAGING STAKEHOLDERS

Transparency and accountability are important to the Company. Therefore, stakeholder engagement is imperative to ensure that business goals are aligned with their priorities. Meralco’s stakeholders who are impacted by or have a level of influence over the Company’s operations include its customers, communities, employees, investors and shareholders, government and regulators, and suppliers and contractors.

Customers
Meralco puts its customers at the center of its business operations. To better serve customers and enhance customer experience, Meralco embarked on a Customer Experience Transformation Program (CxTP), designed to empower customers in their various ‘journeys’ or transactions with Meralco — from service application to inquiry management. One tangible product of the program is Meralco Online, which enables residential and business customers to access and manage their accounts – anytime and anywhere. Meralco Online is accessible via the Meralco website or through a mobile app, wherein they can view and pay for their bills, see their account status, and report outages.

Other digital initiatives include leveraging social media platforms to keep customers abreast of rates, outages, and other relevant information. More importantly, Facebook and Twitter are used to immediately respond to account-related concerns.

Aside from its digital and social media presence, Meralco is physically accessible through its 38 business centers and over 700 Bayad Center branches across its franchise area.

Amidst the rapid developments in the technology space, Meralco knows that it is now more important than ever to listen to customers and address their dynamic needs. Through surveys and other research tools, the Company is able to fine-tune its initiatives and ensure the ultimate outcome of elevating customer service and revolutionizing the customer experience.

Communities
To contribute to nation-building, Meralco helps integrate its social and environmental responsibility through the One Meralco Foundation (OMF). Through OMF’s Corporate Social Responsibility programs, the Company aids in poverty alleviation and sustainable development in communities across the country. Collaborating with community leaders in respective local government units (LGUs), OMF carries out numerous initiatives that uplift people’s quality of life, particularly in underserved areas.

MPower annually sponsors kinder classroom projects and tree planting activities in partnership with customers and OMF. Meanwhile, MGen’s CSR program involves social development projects focused on livelihood, education, health, and the environment. Most recently, MGen, in partnership with the local government units of Quezon province, spearheaded the development of a Comprehensive Land Use Plan to facilitate the growth of better connected and more sustainable communities.
**Employees**

Meralco ensures a safe and inclusive workplace for its employees. It seeks to empower its employees to grow and succeed, while attending to their well-being. In addition, a Pulse Survey is done every other year to monitor and measure employee engagement. This provides the Company with better insight not only on how well employees understand the Company’s strategy and direction, but also on how they perceive their working relationships, and their access to career and personal development.

Meralco also provides periodic training avenues for its employees, through targeted programs aimed at improving a wide range of technical competencies. Furthermore, the talent succession plans of employees are continuously evaluated to identify specific interventions.

Employee concerns and grievances are addressed through continuous dialogue with both rank-and-file and supervisory unions. Both unions represent over 80 percent of the workforce. Dialogue is undertaken by maintaining an open line of communication between the unions and the management, particularly, via the conduct of monthly and quarterly union meetings. Further, the Company’s whistleblowing policy encourages employees to report unethical or illegal conduct with the assurance of protection from retaliation.

Meralco also provides its employees with avenues to give back to the community through various employee volunteerism activities facilitated by Meralco’s corporate social responsibility (CSR) arm, the One Meralco Foundation (OMF).

**Investors and Shareholders**

Meralco keeps its line always open for investors and shareholders. Annual Shareholder Meetings are held to showcase Meralco’s performance and to bring forth its business outlook and management strategies. Beyond this, Meralco regularly engages with its shareholders through mail, email, or SMS updates. The Corporate Governance and Compliance Office conveys relevant information in a timely manner and encourages shareholders to exercise their right to participate in decisions, nominate directors, and propose or inquire on agenda items.

**Government and Regulators**

The power industry is a heavily-regulated sector in the Philippines, and regulatory bodies and government agencies play an important role in creating enabling economic systems for businesses to thrive. Meralco contributes to the shaping of the regulatory environment by actively participating in public consultations, focus group discussions, technical working groups, and other activities conducted by these regulatory agencies. It also supports the government’s goal of transitioning to a low-carbon economy. In fact, Meralco was the first distribution utility to implement the Net Metering Program, provides reliable wheeling service to several RE-based generation companies, and continues to pioneer the implementation of the other RE policies such as the Feed-in-Tariff Scheme and Renewable Portfolio Standards.
Meralco was also the only distribution utility adjudged by the Distribution Management Committee to be one hundred percent compliant with the requirements of the Energy Regulatory Commission.

**Suppliers and Contractors**

Meralco values its relationship with its suppliers and contractors. In order to build a network of high caliber and reliable suppliers and contractors, potential vendors need to undergo a rigid accreditation process prior to engagement. The Company regularly reviews supplier performance, which includes compliance to government-mandated employee compensation and benefits.

As it strengthens its relations with its suppliers and contractors, Meralco acknowledges these institutions’ concerns in the areas of compliance to covenants, accreditation requirements, procurement policies, timely release of due payments, as well as the health and safety of their employees. Meralco provides regular updates on accreditation, releases payments on-time, and conducts training programs on health and safety for the workforce of its contractors.
ONE MERALCO’S CONTRIBUTION TO THE UN SUSTAINABLE DEVELOPMENT GOALS

As a leading player in the Philippine energy sector, and relevant to its core mandate of providing accessible, affordable, reliable, and clean energy to its customers, Meralco is uniquely positioned to contribute to the attainment of the UN SDG 7: Affordable and Clean Energy, while being instrumental to achieving UN SDG 1: No Poverty.

SDG 1: No Poverty
- To help bring economic development and social resiliency, Meralco has powered two off-grid island communities—Isla Verde in Batangas and Cagbalete Island in Quezon—energizing over 150 low-income households.
- Through One Meralco Foundation’s household electrification program, Meralco provides electricity to 8,091 low-income households and 20 schools in impoverished and far-flung communities. By doing so, Meralco brightens up their path toward rising above poverty.
- Through its ERC-approved tariffs, electric rate discounts are provided to marginalized households (or those consuming 100kWh or less each month). These customers comprise around 40% of Meralco’s residential customer base.

SDG 7: Affordable and Clean Energy
- The Company sources power through Power Supply Agreements and leverages mechanisms such as the Competitive Selection Process to help ensure least cost of electricity.
- Meralco reduced electricity rates from PHP 8.95 to PHP 8.87 per kWh in 2019.
- Meralco achieved 99.6 percent electrification in its franchise area in 2019, energizing over 250,000 households last year, bringing the total number of customers served to 6.88 million.
- The Company reduced average restoration time per customer from 109 minutes to 106 minutes in 2019.
- One Meralco contributes to addressing the country’s growing energy demand with MGen’s 455 MW (net) capacity San Buenaventura Power Plant—the Philippines’ supercritical coal-fired power plant that uses High Efficiency, Low Emission (HELE) technology.
- One Meralco continues its transition to clean energy through the expansion of its solar subsidiary Spectrum, and through the launch of MGREEN, the Company’s platform for building its portfolio of cost-competitive and renewable energy projects.

While grounded by these goals as the Company’s core contribution to the UN SDGs, Meralco also embeds and aligns various SDG goals with its core business objectives, as guided by its own four sustainability focus areas.

SDG 8: Decent Work and Economic Growth
- One Meralco generated close to PHP 322.6 billion of economic value in 2019.
• One Meralco ensures that its employees are provided compensation and benefits that allow them to afford a decent standard of living. In 2019, the company disbursed PHP 13.1 billion in salaries and wages, to its 8,201-strong workforce.
• Occupational safety is a high priority for Meralco, proven by three consecutive years of zero work-related fatalities.

SDG Goal 9: Industry, Innovation, and Infrastructure
• Meralco innovates and invests in the best available technology to drive energy efficiency and to reduce carbon emissions.
  o LED lights have been retrofitted for most of the Company’s lighting fixtures across its corporate offices and business centers.
  o The air cooling systems of the Lopez Building, where Meralco headquarters is located, have been upgraded to inverter-types
  o Through MSERV, customers are provided energy efficient solutions tailor-fit to their energy requirements.
  o Solar energy is used to power select facilities in the Meralco compound.
• Enabled by the Company’s deployment of smart meters, Meralco’s prepaid electricity service, KLOAD, has benefitted over 100,000 customers allowing them to save up to 16 percent on their monthly electricity consumption.
• Through eSakay, the Group has deployed 75 zero emission e-vehicles serving both private and public sector customers nationwide.
• Meralco has begun electrifying its own vehicle fleets, beginning with electric shuttles, cargo electric tricycles, and electric motorcycles.

SDG 10: Reduced Inequalities
• Women make up 32 percent of the Company’s workforce, with the number of women holding managerial positions climbing by 17 percent in 2019.

SDG 11: Sustainable Cities and Communities
• eSakay ridership totaled over 1.5 million passengers in 2019, providing clean transport options for commuters in Makati and Mandaluyong Cities, as well as for customers of its electric shuttle services.

SDG 13: Climate Action
• Meralco is in active collaboration with the Department of Energy (DOE) and other key players in the energy sector to develop the National Energy Contingency Plan (NECP), which ensures the immediate restoration of electric services to all mission-critical installations during natural disaster occurrences.

SDG 15: Life on Land
• Meralco’s One for Trees (OFT) initiative seeks to restore endangered ecosystems and to support community livelihood through agroforestry. Aiding in reforestation efforts, Meralco aims to plant 3 million trees by 2025 through this initiative.
MGen prepared reforestation initiatives, carbon sink programs, and coastal resource management plans specific to each of its power plant projects. Such plans and programs support biodiversity management and are based on scientifically-gathered environmental data from periodic environmental monitoring programs.

**SDG 17: Partnerships for the Goals**
- Through One Meralco Foundation, the Company works hand-in-hand with government, private, and non-government organizations and partners to promote and support advocacies (e.g., Energy Education, One for Trees, Household and School Electrification, etc.) in grassroots communities.
ONE MERALCO SUSTAINABILITY AGENDA

One Meralco has been championing sustainability through its core business by pushing for affordable and clean energy for all, which directly aligns with the UN’s Sustainable Development Goal (SDG) 7. With direction and guidance from new management, Meralco embarks on a journey to deepen and strengthen its sustainability agenda and efforts across all its businesses. These initiatives will allow Meralco to monitor and increase its impact through baselining, planning, and proper sustainability management – all while integrating these with its corporate goals. By doing so, Meralco helps to provide good lives for Filipinos, today and tomorrow.

One Meralco’s sustainability framework outlines its goals through four focus areas guided by the key material topics that are significant to its businesses.

**Power:** Energize all areas of the franchise by providing affordable, accessible, reliable, and clean energy solutions to all, prioritizing unserved and underserved areas.

**Planet:** Champion environmental stewardship in all that the Company does by investing and innovating in environment-friendly programs, products and services both in the short-term and long-term.

**People:** Embed a sustainability mindset within the organization, while promoting a culture of growth, inclusivity, and diversity.

**Prosperity:** Create prosperity for all stakeholders as the Company balances corporate initiatives and ESG (environmental, social, and governance) sustainability goals, delivering both economic and non-economic value to better peoples’ lives.

<table>
<thead>
<tr>
<th><strong>Power</strong> – Providing energy for all, always</th>
<th><strong>Planet</strong> – Environmental stewardship to protect and preserve Mother Earth</th>
<th><strong>People</strong> – Embedding a culture of excellence, sustainability and inclusivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prosperity</strong> – Creating better lives for all</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Energy security is at the core of Meralco’s efforts towards a sustainable future. It is determined by a country’s ability to secure sufficient, reasonably-priced, and reliable energy supply for its various energy needs—including domestic, commercial, and industrial requirements—to meet its current and future goals. As the Philippines’ leading energy distributor, Meralco’s mission is to serve affordable, accessible, reliable, and clean energy—reinforcing its duty towards SDG 7: Affordable and Clean Energy—in support of nation-building and sustainable growth.

Affordability
Sustainable development is propelled by people’s ability to secure energy at competitive and fair prices. Lower energy costs also contribute to healthy economic ecosystems where various industries may flourish and grow. With the drive towards energy security, the availability of supply is a key consideration in ensuring that costs stay low, for all levels of society to afford.

One Meralco works to achieve energy security and affordability through power generation. MGen contributes towards meeting the country’s rising energy demand by being a source of competitively-priced power. MGen plans to develop a diversified power generation portfolio that will provide sufficient, reliable, and cost-competitive supply. This effort is embodied in MGen’s first major power plant development—the San Buenaventura Power Ltd. Co. in Mauban, Quezon, which was commissioned in September 2019. The 455 MW (net) capacity baseload power plant was built to help address the country’s energy security imperative and to help meet the growing energy needs of the Luzon Grid.

From a distribution utility standpoint, Meralco secures supply based on its “least cost” mandate, in support of energy affordability. The mechanisms that help in fulfilling this mandate include the Competitive Selection Process, as well as prudent energy sourcing practices in general. Meralco conducted a Competitive Selection Process (CSP) from July to September 2019 in accordance with DOE Department Circular No. DC2018-02-0003. The terms of reference for the 10-year Power Supply Agreement for the supply of 1,200 MW (net) baseload, and the 5-year PSA for the supply of 500 MW (net) mid-merit capacity, which began last December 26, 2019, was technology agnostic and pro-consumer with the requirement of 100 percent guaranteed availability and a straight, all-peso energy price over the contract term.

After a successful CSP, the Power Supply Agreements were awarded to power suppliers that use conventional and renewable sources of energy. The resulting prices were significantly lower than the reserve price and the existing average generation cost. It is expected that once implemented, the new PSAs will bring down the generation charge and save Meralco consumers around PHP 0.40 per kWh, or PHP 14 billion per year.

In 2019, despite the rising costs in energy generation due to the tight supply conditions in Luzon, the overall average retail rate of electricity went down by PHP 0.12 per kWh—from PHP 8.95 per kWh in 2018 to PHP 8.87 per kWh in 2019. The higher cost of generation was partially offset by reduced pass-through charges which include, transmission, system loss, taxes,
subsidies, and universal charges. In line with its mandate to offer affordable energy for all, Meralco has not increased its distribution tariffs since July 2015.

**Accessibility**

Economic growth and social progress depend heavily on the ability of residential, commercial, and industrial partners to access energy. To help power the archipelago towards progress, affordable and reliable energy needs to be made easily accessible to large economic hubs as well as to remote or indigent communities and islands.

While it serves only less than 3 percent of the Philippine land mass, Meralco powers the epicenter of business and economy, which is responsible for around half of the Philippine GDP, and services about a quarter of the total population of the country.

Meralco distributes energy to its franchise area covering Bulacan, Cavite, Metro Manila and Rizal, and parts of the provinces of Batangas, Laguna, Pampanga, and Quezon. Meralco also distributes to the Clark Special Economic Zone and its subzone in Cavite, the Cavite Economic Zone through its subsidiaries, CEDC and Comstech, and business unit, Meralco Ecozone Power.

**Increasing Distribution to Support Load Growth**

The electric distribution system has been enhanced and expanded to meet the growing energy demand in the franchise area.

These improvements enabled the energization of over 260,000 new customers representing a 4 percent increase in its customer base from 2018 to 2019, ending the year with 6.88 million connections. It delivered a consolidated energy sales of 46,871 GWh of electricity, which represents an increase of 6 percent versus 2018.

Overall, in 2019, Meralco's total franchise area had reached 99.6 percent electrification. Meralco installed 41.4 kilometers of distribution lines on 1,862 poles and 216 distribution transformers with a total capacity of 11,125 kVA, which energized a total of 130 new sites with 3,713 households.
Total Energy Sales (in GWh)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meralco</td>
<td>13,055</td>
<td>13,549</td>
<td>14,581</td>
</tr>
<tr>
<td>CEDC</td>
<td>5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>13,060</td>
<td>13,555</td>
<td>14,589</td>
</tr>
<tr>
<td><strong>Commercial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meralco</td>
<td>16,378</td>
<td>17,211</td>
<td>18,172</td>
</tr>
<tr>
<td>CEDC</td>
<td>219</td>
<td>252</td>
<td>311</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>16,597</td>
<td>17,463</td>
<td>18,483</td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meralco</td>
<td>11,960</td>
<td>12,887</td>
<td>13,394</td>
</tr>
<tr>
<td>CEDC</td>
<td>349</td>
<td>269</td>
<td>265</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>12,309</td>
<td>13,156</td>
<td>13,659</td>
</tr>
<tr>
<td><strong>Flat Streetlights</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meralco</td>
<td>135</td>
<td>138</td>
<td>139</td>
</tr>
<tr>
<td>CEDC</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>136</td>
<td>139</td>
<td>140</td>
</tr>
<tr>
<td><strong>CONSOLIDATED</strong></td>
<td><strong>42,102</strong></td>
<td><strong>44,313</strong></td>
<td><strong>46,871</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meralco</td>
<td>5,811,307</td>
<td>6,085,023</td>
<td>6,338,287</td>
</tr>
<tr>
<td>CEDC</td>
<td>762</td>
<td>812</td>
<td>1,004</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>5,812,069</td>
<td>6,085,835</td>
<td>6,339,291</td>
</tr>
<tr>
<td><strong>Commercial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meralco</td>
<td>498,404</td>
<td>512,422</td>
<td>526,720</td>
</tr>
<tr>
<td>CEDC</td>
<td>1,163</td>
<td>1,236</td>
<td>1,268</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>499,567</td>
<td>513,658</td>
<td>527,988</td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Meralco’s power services also extend to the Clark Special Economic Zone and subzone, and Cavite Economic Zone, through its subsidiaries CEDC, Comstech, and its business unit Meralco Ecozone. PELCO II, which is managed by Comstech, powers the municipalities of Mabalacat, Porac, Santa Rita, Bacolor, Lubao, and Sasmuan.

Clark Electric Distribution Corporation (CEDC) grew its customer base by 10 percent and ended the year with 585 GWh of electricity, increasing its distribution by a significant 11 percent versus the previous year.

In line with its mandate to aid in the country’s economic and social development, in April 2019, Meralco’s subsidiary Shin Clark Power Holdings, Inc. (Shin Clark) signed a joint venture agreement with the Bases Conversion and Development Authority for the financing, design and engineering, construction, development, operation and maintenance of the electric power distribution system in New Clark City. New Clark City is a new community development envisioned to accommodate some 1 million people, which will be equipped with smart and disaster-resilient features. Shin Clark successfully installed an interim substation with a 69 kV line and 13.8 kV overhead and underground lines, 95 days before the November 26, 2019 start of the Southeast Asian Games (SEA Games).

**Meralco Electrification Program and Microgrids**

While Meralco successfully supports the energy needs of Metro Manila and its nearby economic hubs, a few areas remain that have no access to electricity because of their remoteness or their current lack of infrastructure. By the first half of 2021, however, Meralco aims to achieve 100 percent electrification within its service area, to brighten the path of the most unserved and underserved communities.

In line with its commitment of providing “Energy for All, Always,” Meralco heightened its efforts to energize as many communities as it can within its franchise area under the Meralco Electrification Program (MEP).

Meralco continues to seek innovative and sustainable ways to bring electricity to isolated, island communities. The Company understands that providing for the energy needs of small islands is important, as they are one of the most vulnerable to changes in the climate. Access to reliable energy empowers them to be more resilient in the event of natural calamities.
In 2019, Meralco went to great lengths to reach and energize the communities in Isla Verde, Batangas and Cagbalete Island in Mauban, Quezon with innovative microgrid solutions, to bring about sustainable development in their islands.

Isla Verde is an internationally acclaimed dive spot, known as an important center for biodiversity. Roughly six kilometers from the Batangas Port, the island had historically been dependent on diesel-fired power generator sets that provide electricity from 6:00PM-10:00PM. Together with the local government and the United States Agency for International Development (USAID), Meralco was able to energize the 1st phase of the project powering 29 households through the installation of a microgrid composed of 32 kWp solar PV system combined with 192 kWh battery energy storage.

Meanwhile on the eastern coast, Cagbalete Island is a popular tourist destination during the summer months, but it is 14 kilometers away from the port of Mauban. In the past, citizens relied on gensets provided by the national government but these facilities have been proven to be unreliable and costly. Meralco, together with Spectrum, worked to energize 2 barangays on the island powering 154 households, as part of the 1st phase of the project, with 60 kWp solar PV and a 30 kW (150 kWh) Battery Energy Storage Systems.

With the goal of energizing the remaining households as well as small businesses and resorts within these islands, Meralco is currently expanding by building larger-scale microgrids, about 25 times the 1st phase implementations.

**HIGHLIGHT: Bringing Light to Cagbalete Island**

Cagbalete Island in Mauban, Quezon is known for its sandbars and white beaches, being a bustling tourist destination during the summer months. Little did we know, its own people were living dark and difficult days.


Geographic constraints and low access to development have pushed the locals to settle for unsystematic and expensive means for day-to-day survival. People have struggled to secure the basic conveniences such as electricity. Residents typically pay generator owners PHP 20 for a lightbulb, PHP 35 to operate a television set and an electric fan, and around PHP 70 for a whole night of power. This may seem reasonable for a whole night of uninterrupted electricity service but summed up, to be connected at this rate would amount to up to PHP 2,000 per month—three to four times more versus a metered Meralco rate - given that all that residents get is one lightbulb and limited hours of electricity.
Meralco partnered with the Department of Energy, the Mauban local government and community leaders, as well as One Meralco Foundation to fast track the design, development, and construction of the necessary facilities to finally bring light to the island community. The solar microgrid for Cagbalete Island consists of a 60 kWp solar photovoltaic system, a 150-kWh lithium-ion battery energy storage, and two units of 30 kW generators. These systems will be able to effectively, reliably, and affordably power up to 200 households, schools, and their community halls in Barangay Cagbalete I.

On May 2, 2019, Meralco energized its first beneficiary household: from spending about PHP 2,000 per month for electricity, residents now enjoy accurately measured readings that amount to only around PHP 200 per household.

“We, at Meralco, are very proud to finally be involved in the electrification of an island community that is in need of light and power,” says Meralco President and CEO Atty. Ray C. Espinosa. By the end of the year, the distribution utility was able to energize over 150 households—but for Meralco, this is just the beginning.

“We, at Meralco, are very proud to finally be involved in the electrification of an island community that is in need of light and power,” says Meralco President and CEO Atty. Ray C. Espinosa. By the end of the year, the distribution utility was able to energize over 150 households—but for Meralco, this is just the beginning.


**Democratizing Household Electrification**

By collaborating with local government units, the Company is able to be a source of light for a rising number of households/communities through the One Meralco Foundation's Household Electrification Program (HEP).

Through HEP, OMF paved the way for the electrification of 8,091 homes of low-income families in the Meralco franchise area. This core advocacy brings together the consolidated efforts of Meralco's business centers and sector offices, the local government and the beneficiaries themselves (represented by their homeowners’ association leaders) to provide assistance to urban and rural communities that are unable to attain electrification because of financial, legal, right-of-way or occupancy issues.

**Reliability**

Economies grow best when provided an uninterrupted flow of goods and services. In the path towards energy security, the provision of reliable and quality power is crucial. Therefore, Meralco commits to steady and stable power delivery to all its stakeholders by optimizing its load capabilities, improving its response to outages, digitizing its grid, and building resilient infrastructure.

**Optimizing Grids for Load Growth**

Meralco addresses load growth in its service area by constructing new distribution assets to augment system capacity, reduce exposure to external disturbances, and enhance operational...
flexibility to support the growing energy demands in the franchise area, while adhering to international and local standards. Employing a proactive approach, Meralco uses various forecasting tools to project energy demand requirements and to identify high-growth areas to properly plan for the needed infrastructure in a timely manner.

To effectively provide reliable energy, Meralco expands its distribution network and constructs new substations that result in shorter distribution lines and less customers per circuit. Thus, it effectively reduces the grid’s exposure to external disturbances, either natural or man-made.

Moreover, adding more distribution lines and substations enhances the system’s flexibility by allowing the network to be reconfigured, usually in response to abnormal system conditions. In effect, Meralco can isolate faulted segments and easily transfer healthy portions of circuits to alternate sources to minimize the number of affected customers.

**Keeping the Lights On**

The provision of stable, reliable, and accessible energy is of prime importance to Meralco. Therefore, the Company strives to reduce the occurrence and duration of power interruptions that may be caused by planned outages due to construction and maintenance activities, or unplanned outages caused by man-made accidents or by natural calamities such as typhoons, floods, and earthquakes.

Meralco conducts preventive maintenance activities to keep the integrity of its electrical infrastructure and reduce the incidence of unplanned outages. Regular inspections are conducted on-site, and aging equipment are replaced with new and upgraded specifications in accordance with the latest requirements stated under industry standards and national codes. These preventive measures also help ensure the safety of Meralco’s customers and its workforce.

In 2019, there were marked improvements across Meralco’s operational metrics for outage management. The average frequency of system interruptions was 1.769, as indicated by the System Average Interruption Frequency Index (SAIFI). As for the Customer Average Interruption Duration Index (CAIDI), restoration time took 106.479 minutes per customer. This led to a total average interruption duration of 188.362 minutes, a 4.2 percent improvement vis-à-vis last year’s System Average Interruption Duration Index (SAIDI) performance.
With the commitment to provide reliable electric services to its customers, and in response to the tightening performance targets set by the Energy Regulatory Commission (ERC), Meralco envisions reducing its SAIFI to 1 and its SAIDI to 100 minutes within the next three to five years, to provide its customers with the most reliable and resilient energy distribution service in the country.

Preparing for the Grid of the Future: Decentralized, Decarbonized, Digitalized

With the emergence and growth of intermittent distributed energy resources such as solar and wind, Meralco must continue to enhance its management of the distribution network with modern and digital grid technologies, collectively known as Smart Grid. Brought about by digitalization, decarbonization, and decentralization, the energy industry faces an unprecedented evolution of the traditional grid with new realities such as the rise of renewables and the emergence of “prosumers”. Smart Grid allows Meralco to improve reliability, efficiency, and power quality amid this new normal.

To keep the lights on for more than 6 million customers, Meralco leverages technological advances to solve traditional challenges. For one, Meralco addresses the biggest bane of electricity consumers — power outages and power quality problems — through Smart Grid technologies which allow the Company to monitor its entire grid in real-time, using its Supervisory Control and Data Acquisition (SCADA) system. It is also able to apply analytics to provide real-time diagnoses; and with the installation of advanced communication facilities, it can remotely monitor operations and control field devices (i.e. switches and reclosers) to quickly address problems along the grid.
Meralco has also upgraded its outage and distribution management systems to help decrease the duration and frequency of power interruptions. The Company has adopted the Advanced Distribution Management System (ADMS), an intelligent software that supports the full suite of outage management, distribution management and optimization functions. ADMS analyzes all outage notifications from customer reports, smart meters, smart sensors, and remote switches, and automatically displays itemized summaries and geographical views of all trouble calls, including locations of outages and affected customers. This enhances the end-to-end management of all incidents of different scales—from system-wide to household-level outages—as well as facilitates efficient outage reporting.

Meralco is also capable of Fault Location, Isolation and Service Restoration (FLISR), which isolates the location of outages and reroutes power to as many customers as quickly as possible. With real-time network information, Meralco is better able to detect and respond to outages. In addition, ADMS’s feature called Integrated Volt-VAR Optimization (IVVO) allows system operators to improve the voltage and power factor conditions of the grid via the coordinated control of voltage-regulating field devices. The application is expected to cut technical losses, improve power quality, and lower peak demand for more reliable service delivery.

The Mobile Work Management System (MWMS), working with information received from Enterprise Asset Management, Geographic Information System, and ADMS, delivers an integrated solution for automating field workforce operations such as resolving unplanned outages. MWMS manages the dispatch of the nearest available crews to repair faults in the system. Critical information from field crews are processed in real-time, resulting in productivity improvements and increased customer satisfaction.

Considered as a critical enabler and fundamental infrastructure of the Smart Grid, information and communication technology (ICT) supports the entire Smart Grid deployment. A reliable and advanced ICT infrastructure is essential as it links smart field devices with IT platforms. Leveraging all these technologies, Meralco empowers customers with up-to-date outage-related information through various channels and provides them with the capability to report outages online. At the same time, to provide information on outages and their resolution status, the Company uses a variety of channels to reach customers, such as Meralco’s Online Outage Portal. With the help of Smart Grid technologies, the Company’s distribution network is capable of reconfiguring and repairing itself, and through remote intervention, it helps minimize the duration of disruptions and impact to customers.

**Building a Resilient Network**

The reliability and resiliency of its electric service to its customers is among Meralco’s top priorities. One Meralco exerts every possible effort to make its entire distribution system resilient to extreme weather disturbances and other natural calamities, which the Philippines is prone to. The Philippines is hit by an average of 20 tropical cyclones a year. Because of climate change, these extreme weather events are intensifying—as seen in the strongest storms happening just in the last decade. These weather conditions may translate to damages and outages along Meralco’s
distribution facilities and increase the costs for repair and rehabilitation. Therefore, Meralco invests in resilient infrastructure to help ensure the reliability of its energy provision.

Recognizing that occurrences of lightning strikes are responsible for some power outages in its franchise area, Meralco intensified its Lightning Protection Improvement Program (LPIP). The program is aimed at arresting voltage surges caused by lightning strikes as well as at helping prevent power outages. This involved the installation of surge arresters, overhead static wires, and the reinforcement of pole and system-neutral grounding. Recently, Meralco also introduced a lightning detection system where near real-time data, including the magnitude and approximate location of all the lightning strikes within Meralco’s franchise area, are made available to key Meralco personnel to identify areas where lightning protection deployments should be prioritized. Since the introduction of LPIP, forced outages due to lightning were reduced by 67 percent.

To address climate change-related risks, One Meralco continuously implements storm hardening measures to make its distribution facilities withstand strong winds and other natural hazards. In 2019, some 7,860 line and equipment covers were installed near building work sites. Around 6,330 wooden cross arms were also converted to lighter, easier-to-install, and more durable fiberglass crossarms, and around 7,808 aging wood poles were replaced with concrete poles. Meralco’s use of stronger synthetic materials also supports its sustainability goals – helping the environment by curbing deforestation.

With the enhanced resiliency and intelligence of the network, Meralco is able to quickly recover from widespread disturbances, enabling it to help other local distribution utilities or electric cooperatives in times of crisis.

As an example, during typhoon “Tisoy” in December 2019, the majority of the 1.62 million customers of Meralco affected by the said typhoon had their service up and running in less than 24 hours—as opposed to several days if no distribution automation systems were in place. Given its speedy restoration of affected areas in its service area, Meralco was able to send personnel to Bicol to also help local electric cooperatives with their typhoon restoration efforts. In recent years, Meralco has sent personnel to 14 areas across the country to assist in their own service restoration initiatives in times of need.

**HIGHLIGHT: Championing Business Continuity Management**

The prime objective of Meralco’s Business Continuity Management Program (BCM) is to ensure the safety of its employees, the protection of its assets and the continuity of its service delivery in times of crisis; while strategically reinforcing its response efforts through partnerships with local government units and external support agencies to respond effectively when disasters strike.

Meralco aims to be the most resilient organization in the Philippine power industry. Meralco’s BCM includes a five-year facility structural rehabilitation program to ensure the earthquake resilience of all buildings inside the Meralco Operating Center. Additionally,
emergency back-up sites have been operationalized to mirror all the capabilities of the company’s primary system control center.

As well, Meralco actively collaborates with the DOE and other key players in the energy sector in the development of the National Energy Contingency Plan, which ensures the immediate restoration of electric service to all mission-critical installations. Meralco also continues to upgrade its rescue and response capabilities through the training of an additional cohort of over 100 personnel.

Further, in 2019, Meralco collaborated with several local government units, the Metro Manila Development Authority, the Metro Manila Disaster Risk Reduction and Management Council, and the Bureau of Fire Protection (BFP) in conducting over 300 exercises and drills for various types of response operations. In November 2019, the company hosted the 4th Quarter Nationwide Simultaneous Earthquake Drill (NSED), a program spearheaded by the Office of Civil Defense in preparation for “The Big One”—a 7.2 magnitude earthquake which can be triggered by the West Valley Fault. Together with Pasig LGU, DOE and BFP, Meralco demonstrated various emergency drills on Incident Command System, Emergency Operation Center, Emergency Back-up Sites, emergency evacuation, fire suppression, emergency communications, search, rescue and retrieval, triaging, and power restoration.

Meralco serves as a core member of the DOE’s Task Force on Energy Resiliency, and renders assistance to other electric companies through Task Force Kapatid, a group organized by electric cooperatives, to help each other in restoration and rehabilitation efforts in cases of disasters and calamities. Initiatives like these are very important as the Philippines is a hotbed for different types of natural and man-made calamities and crises.

**Clean Energy**

According to the United Nations, 60 percent of the world’s greenhouse gases are produced by the energy sector, making it the primary contributor to climate change. However, energy is integral to sustainable development, as it propels economic growth and helps societies live better, more prosperous lives. A global transition to cleaner sources of energy, from fossil-based energy sources to zero-carbon sources, is thereby needed to secure a healthy planet for generations to come.

One Meralco supports the transition to clean energy in various ways. The Company sources and distributes from renewable energy-generating partners, it generates its own energy with High Efficiency, Low Emission (HELE) technology, it is building its own renewable energy power plants, and it provides customers and communities on-site power solutions to help them generate their own earth-friendly energy.

In 2019, 40 percent of the electric energy that was distributed in the Meralco system came from natural gas, 32 percent from coal, and 27 percent from multiple fuel sources including solar power and other renewable sources. In compliance with the Renewable Portfolio Standards (RPS) requirements under the Renewable Act of 2008, the Company will continue to build its
supply portfolio to progressively increase sourcing from renewable sources. This means building on its existing supply partnerships with solar power plants. Presently, Meralco has 20-year contracts with solar power plants in Tanauan, Batangas with 50 MW capacity; and in Concepcion, Tarlac with 75 MW capacity for the first five years and 85 MW capacity for the next 15 years.

The global push towards lowering carbon emissions has resulted in some technological breakthroughs in power generation. Meralco, through its subsidiary MGen, has started to build HELE coal-fired power plants which are equipped to produce energy using much less coal than traditional coal-fired power generation facilities, potentially reducing carbon emissions by as much as 35 percent compared with older and less efficient plant technology.²

San Buenaventura Power Ltd., Co. (SBPL), runs the 455 MW (net) coal-fired power plant in Mauban, Quezon Province, that utilizes state-of-the-art supercritical technology, which allows the plant to operate at increasingly higher temperatures and pressures to obtain higher efficiencies and significant CO₂ reductions.

Supercritical technologies form part of the United Nation’s “Clean Development Mechanism” aimed at encouraging the reduction of carbon emissions. A supercritical power plant raises temperatures and pressure levels to boost power generation efficiency, thereby cutting back fuel consumption and in turn, reducing emissions. The improvement in thermal efficiency leads to an operational efficiency of around 44 percent versus older plants with efficiencies of 33 percent.³

The commercial operations of the plant started on September 26, 2019 – less than four years after it started construction in December 2015. The project was partly funded by a PHP 42.15 billion financing plan that holds the record as the Philippines’ largest all-peso project finance facility to date.

The SBPL Project marks Meralco’s first majority-owned commercially operating power plant since the Company decided to return to the power generation business.

MGen further pursues cleaner energy by developing and building ultra-supercritical power plants. These generation facilities will further reduce greenhouse gas emissions and other pollutants by using even higher pressure and temperature, which could attain efficiency levels of up to 50 percent.

Already in the pipeline is MGen’s first ultra-supercritical coal-fired generation plant, the 2x600 MW Atimonan One Energy, Inc. Power Plant in Quezon, targeted for completion by 2024.

**MGreen: Transitioning to Renewables**

One Meralco is embarking on its energy transition journey to green energy in support of UN SDG 7: Affordable and Clean Energy. The Company understands that effectively reducing carbon

---

² World Coal Association (2018). New report shows why HELE remain imperative for ASEAN countries.
emissions while sustainably powering homes and cities requires a major shift into generating energy from renewable sources, which pave the best path to mitigate the effects of climate change.

MGen Renewable Energy, Inc. (MGREEN) was incorporated in 2019 to serve as the platform for MGen’s strategic push to develop renewable energy projects, primarily solar, wind and run-of-river hydro.

As a wholly owned subsidiary of MGen, MGREEN plans to invest in up to 1,000 MW of renewable energy projects over the next five to seven years in a bid to bring in additional supply to support the Philippines’ growth momentum and to help ensure availability of clean and green power supply in the coming years.

Among its projects in the pipeline is an 80 MWdc (50 MWac) solar power plant in San Miguel, Bulacan, which is being developed by PowerSource First Bulacan Solar, Inc. (PFBSI) where MGREEN holds a 40 percent interest. The mobilization for this solar farm’s construction started in December 2019, with a commercial operations date scheduled for November 2020. Through MGREEN, Meralco will be better poised to be a driving force in the renewable energy sector in the Philippines. This will also allow the Company to cater to a growing market of commercial and industrial partners who prefer securing power from renewable energy sources.

**Innovating through Battery Energy Storage Systems**

Beyond investments in RE generation facilities, Meralco also piloted a 2 MW lithium-based Battery Energy Storage System (BESS) in San Rafael, Bulacan. It is the country’s first grid-scale BESS system connected to the distribution network, which allows Meralco to provide reliable and stable energy, free from intermittency. This program will also demonstrate the actual capability of energy storage systems to improve grid operations amidst rising renewable energy adoption.

On September 6, 2019, together with Japanese firm Hitachi Ltd., Meralco inaugurated the San Rafael Battery Energy Storage System in Bulacan. The Japanese engineering and technology company provided Meralco with more than 2,300 battery cells that can deliver 2 MW of power intermittently or continuously. This pilot project is fully primed as Meralco fortifies its preparation for the grid of the future – one that is decentralized, digitalized, and decarbonized.

**Spectrum: Harnessing the Sun’s Energy**

Global trends show an increasing interest in Distributed Energy Resources (DER), which, unlike traditional power plants, are commonly on-site and for own-use and have the advantage of less energy loss from traveling long transmission distances. Typically leveraging renewable technologies such as solar and wind, DERs are not only cost-effective but also sustainable.

As early as 2016, Meralco launched its subsidiary, Spectrum, to advance tailor-fit solar solutions for industrial, commercial, and residential customers. With these on-site power solutions,
Spectrum provides customers not only the ability to generate their own renewable energy from their homes or their offices, but also more resilience to power interruptions from the grid. Spectrum completed 119 projects in 2019. Two-thirds of these projects were for commercial and industrial users, while one third was for residential customers.

The global trend towards consumer-driven, small-scale solar installations is expected to accelerate from 146 GW in 2017 to 2,116 GW in 2050.\(^4\) In anticipation of this, Spectrum is assisting more and more customers to install own-use solar facilities as the economics of this technology continues to improve.

**Building Energy Partnerships for a Greener Future**

Meralco incentivizes the transition to cleaner energy through a program which allows consumers to lower their energy costs by producing their own renewable energy supply. Meralco is the first distribution utility in the country to implement the Net Metering Program under the Renewable Energy Act, with its first net metering customer in 2013. Through this program, customers have the option to contribute some of the energy they produce, back to the grid, in exchange for credits on their electricity bill. Customers with a generating capacity of up to 100 kW are qualified for this program.

To improve the overall net metering process, the Company enhances internal procedures and collaborates with the Energy Regulatory Commission, Local Government Units, and solar panel providers and installers. In addition, distribution-grid customers and their solar installers can also work with Meralco to help ensure the safety of their solar installations.

The road to clean energy is complex, but the long-term rewards are significant for the environment, society and business. Meralco is committed to continuing to be a driving force in the Philippine’s road towards clean energy.

---

PLANET

The prosperity of humankind is powered by a thriving ecosystem. For businesses, acting in an environmentally responsible way is not only a legal duty but also a moral one. To take on this responsibility, One Meralco is exploring and applying new ways to fulfill its mission as a steward of the environment.

The Company’s efforts include managing its greenhouse gas emissions, energy consumption, solid waste, water, effluents, and impacts on biodiversity. Moreover, Meralco seeks to inculcate a sustainability mindset throughout its businesses and organizations by initiating sustainable-practice programs such as an initiative to plant three million trees by 2025, policies on waste segregation and recycling, and most recently, a ban on single-use plastics.

Looking outward, in service of its public and private sector customers, Meralco launched its own electric vehicle (EV) company, eSakay, which, as part of its strategic thrusts, has launched an electric jeep operation to provide commuters with zero-emission transport options as they travel through the cities of Makati and Mandaluyong.

Regulating Greenhouse Gas Emissions

The battle against climate change entails a reduction of emissions and ultimately in greenhouse gases (GHG) in the atmosphere. The most significant of these are carbon dioxide, methane, nitrous oxide, fluorinated gases, and water vapor. In monitoring and managing Meralco’s emissions it uses the international standard of GHG Protocol which uses the following scopes:

Scope 1 emissions are direct GHG emissions that occur from sources that are owned or controlled by the company; for example, emissions from combustion in owned or controlled vehicles, boilers, etc.

Scope 2 emissions account for GHG emissions from the generation of purchased electricity consumed by a company. These emissions physically occur at the facility where electricity is generated.

Finally, Scope 3 emissions are an optional reporting category that allows for the treatment of all other indirect emissions. These emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company.

---

5 All MGen-related data in this section are from September to December 2019 only since the San Buenaventura Power Ltd. plant was commissioned in September 2019.
Scope 1 Emissions
In 2019, the Scope 1 emissions of One Meralco, with the exclusion of MGen and its power plants, translated to 0.00878 megatonnes of carbon dioxide equivalent (MtCO$_2$e). The 43 percent decrease from 2018 was primarily driven by the SF6 leakage recovery mechanism established by Meralco.

Meralco has been closely monitoring SF6 leakages from all its substation equipment. The Company also facilitates efficient recovery and recycling of SF6 gases. Strict procedures have been put in place to avoid unintentional gas releases during servicing and maintenance activities.

Another driver of emissions in this scope is fuel consumption. In 2019, Meralco used 187,641 gigajoules of fuel for its Company vehicles, generator sets, and other motorized equipment. The 5.7 percent rise from previous year’s fuel consumption was due to the Company-wide expansion of operations in support of customer load growth, the government’s “Build, Build, Build” program, and the establishment of more substations within Meralco’s franchise area. Meralco strives to lower its fuel consumption through the Clean Fleet Management Program, a training program on fuel-efficient driving practices for the Company’s employee drivers. The Company observes the 5S of Good Housekeeping Program for its fleet to ensure that only essential materials and tools are transported for official trips. Meralco also implements a regular maintenance program to keep its fleet reliable and fuel-efficient.

Additionally, Meralco continues to electrify its fleet to further lower its overall fuel use and emissions. To this end, the Company has purchased 59 electric motorbikes for deployment to Business Centers for field representatives to use in performing meter inspections. Apart from the 3 electric shuttles helping employees easily move around the Meralco compound, the Company also offers employees an electric bike sharing facility as an alternative means to get to different points inside the center. It has also recently deployed 3 cargo electric trikes to help its facilities personnel move materials, such as electric meters, within the Meralco Ortigas Center.

Furthermore, the Company is continuously scanning its fleet (which includes service vehicles, pick-up trucks, and motorpool cars, among others) to determine which ones it can begin electrifying.
Greening Philippine Transport through eSakay

Launched in 2018, eSakay is Meralco’s response to the burgeoning interest and demand for electric vehicles in the Philippines. The Company offers end-to-end electric transport and charging infrastructure solutions to help bring ‘green mobility’ to the streets of local cities and sprawling commercial or industrial complexes.

Working in collaboration with the Department of Transportation (DOTr), eSakay also provides e-vehicle replacement, operatorship, and charging infrastructure solutions in the Public Utility Vehicle (PUV) space. Compared with traditional jeepneys, eSakay’s electric jeep offerings are highly technologically-enabled; with automated fare collection systems, GPS tracking systems, and CCTV cameras to help ensure passenger security. These e-PUV’s also have greater capacities, accommodating up to 40 persons, and are conveniently equipped with charging ports, electric fans, and free WiFi.

It is also noteworthy that the drivers employed by eSakay receive regular monthly salaries and benefits, an arrangement which replaced the traditional boundary system of jeepney operators and drivers. This is in line with the DOTr’s PUV Modernization Program, which aims to provide these transport sector front-liners with sufficient and stable livelihoods.

In 2019, eSakay deployed 75 e-vehicles through supply and operatorship activities. Among these are the 15 e-jeepneys serving the riding public via the MRT Buendia-Mandaluyong City Hall developmental route and two electric vans transporting students and faculty members in the De La Salle Araneta University (DLSAU) campus in Malabon City. The Company also deployed 58 charging stations in Cavite, Batangas, Laguna, Valenzuela, Bulacan, and Alabang, servicing primarily the electric tricycles deployed by the Department of Energy (DOE) in LGU’s across the country.
An estimated 1.53 million individuals boarded eSakay’s e-vehicles in 2019. Currently, eSakay is exploring and striking partnerships with local government units to further deploy other types of electric vehicles (such as electric buses and electric tricycles) all over the country, in an effort to accelerate its drive to provide solutions towards a safer, cleaner, and more modernized transport sector in the Philippines.

**Beyond Minimizing Fuel Consumption**

Apart from its fuel consumption reduction initiatives, and in order to proactively contribute to climate change mitigation, One Meralco has also embarked on carbon offsetting initiatives such as the Communitrees initiative of MPower in 2015 and the One for Trees project of One Meralco Foundation in 2019.

**FEATURE STORY**

**MISSION THREE MILLION: The One for Trees Story**

As one of the most biodiverse countries in the world, the Philippines is home to a wide variety of plants and animals. However, the continued loss of its forests remains a significant and growing threat to the country’s ecosystem. According to the Department of Environment and Natural Resources, the Philippines is losing approximately 47,000 hectares of forest cover every year. One of the simplest yet most effective ways to address this is to plant more trees.

Fundamentally, trees absorb a major greenhouse gas, carbon dioxide. At the same time, it produces oxygen, protects coastal communities, prevents soil erosion, and retains water, among many other benefits. And it all begins by planting a single seedling.
Meralco, through its One Meralco Foundation, launched the reforestation program One for Trees (OFT) in 2019. The program seeks to partner with like-minded foundations and organizations to nurture forests and communities.

One for Trees’ initial goal is to plant at least 3 million trees in conservation sites within and outside Meralco’s franchise area in the next six years, nurturing them by empowering communities through local farmers, peoples’ organizations, and other non-profit organizations. “This is not just a Meralco advocacy. We want this to be a collective effort of our Company and our customers, and really, of every Filipino who wants to help protect and preserve Mother Earth.” says Meralco President and CEO, Atty. Ray C. Espinosa.

To bring greater awareness to the public, the One for Trees website and Facebook page were launched in October 2019. Through these platforms, people are informed about the advocacy and mission of the project through interactive content aimed at educating and engaging all those who access the site. In less than a month, over 100 people messaged asking how they could participate, while social media posts reached over 1,000,000 engagements.

In 2019, despite challenges posed by an extended dry season, One for Trees signed-up almost 2,000 employee-volunteers, who planted 23,366 trees in 13 sites during the last two quarters of the year. The foundation also raised PHP 2.1 million from employees and Meralco customers through the “Puno ng Liwanag Ang Pasko” Christmas fundraising campaign, allowing OFT to bring to life at least 11,000 more trees in 2020.

“Through the years, these trees will help mitigate the effects of climate change,” says Jeff Tarayao, One Meralco Foundation President. “I believe that through One for Trees, we are able to contribute to our shared responsibility of providing a livable, more sustainable world for our children.”

One for Trees hopes to grow more trees, protect mangroves and watersheds, and build a community of eco-warriors and advocates of the environment.

**Scope 2 Emissions**

One Meralco’s Scope 2 emissions increased by 2.6 percent, from 1.92 MtCO\textsubscript{2}e in 2018 to 1.97 MtCO\textsubscript{2}e in 2019. This was mainly due to an increase in system loss (from a volume standpoint), which represents almost 98 percent of the Company’s emissions in this scope. This increase would have been significantly higher had Meralco and CEDC not been able to reduce their system losses relative to the amount of energy purchased from generation companies. Another driver of Scope 2 emissions is the amount of electricity consumed by the Company, which has declined by 1 percent versus 2018 due to the Company’s energy efficiency measures.
Managing System Loss
To sustain the efficient and affordable delivery of energy to its customers, and to optimize the utilization of the Company’s distribution assets, Meralco continuously works towards reducing system losses. Apart from helping lower Meralco’s carbon footprint, the reduction of system losses also helps protect consumers’ access to fair and competitive energy prices, as system loss charges are passed on to consumers subject to certain regulatory parameters.

Incurring system losses is inherent in the delivery of an electric distribution utility’s service, as proportions of the electricity being delivered will always dissipate as heat and noise. This is called technical loss. However, losses may also occur from incidences of electric theft or pilferage (i.e. non-technical loss), which Meralco also continues to address. In as much as system
losses cannot be eliminated completely, there are economic limits to the level to which it can be reduced. While Meralco’s system loss charge is significantly lower than what regulations dictate, Meralco and CEDC regularly conduct technical and socio-economic studies to strike the right balance between the benefits of lower system losses and the cost entailed to reduce such losses. In 2019, Meralco and CEDC’s total system loss volume was at 2,707 GWh—up 2.8 percent from 2018. This was naturally driven by the higher volume of energy consumed in the Company’s franchise areas.

However, if compared percentage-wise against the total amount of energy purchased from generation companies, the system loss decreased for both companies. In particular, system loss decreased to 5.54 percent for Meralco and 2.15 percent for CEDC which resulted in PHP 5.2 billion in financial savings for customers.

Since 2017, however, the financial savings from improvements in system loss have trended downward due to the lowered system loss cap enforced by the government on distribution utilities. Nonetheless Meralco and CEDC continue to upgrade existing infrastructure and strengthen anti-electricity pilferage programs to ensure that these losses are mitigated.
Reducing Electricity Consumption through Energy Efficiency

Electricity is an important resource in One Meralco’s day-to-day operations. The Company’s energy consumption consists mainly of grid-purchased electricity used for powering its head office and sector offices, as well as Meralco’s business centers, and substations. The amount of grid-purchased electricity used by One Meralco totaled 62.1 GWh in 2019, down by one percent from 2018 due to the Company’s energy efficiency initiatives throughout its working spaces.

For instance, Meralco replaced the majority of its lighting fixtures with LED lights across its business centers and corporate offices, while also upgrading the air cooling system of the Lopez Building, Meralco’s headquarters, from single-speed drive to variable-speed so that the power consumption of the cooling system can be adjusted to better match actual demand. This not only lowers costs but also enhances the working environment for employees.

Scope 3 Emissions

One Meralco’s Scope 3 emissions increased by 6 percent, with the primary driver of the Company’s other indirect GHG emissions being its total energy sales. Another contributor is the fuel consumption of the Company’s employees.

In 2019, the amount of energy sold by Meralco and CEDC was 46,871 GWh compared with 44,313 GWh in 2018.

6 There are no available data on grid-purchased electricity consumption for CBCI, MRail, Spectrum, and Radius since electricity consumption is part of their leasing fees.
Helping Customers Become Energy Efficient

Meralco strives to equip its commercial and industrial partners with energy solutions that optimize their efficient and sustainable use of energy. To this end, Meralco’s subsidiary, MSERV provides a broad range of high-quality, end-to-end energy solutions for customers through its electro-mechanical engineering, procurement and construction services (EPC), urban services, and energy efficiency services (EE).

MSERV’s EE solutions provide customers with energy-saving alternatives. These solutions include lighting efficiency services; heating, ventilation, and air-conditioning (HVAC) efficiency services; and power quality audits—providing valuable insights on the clients’ energy management plans. As an illustration, in 2016, MSERV replaced four chillers for the Insular Life Corporate Center (ILCC) in Alabang with a guarantee of improving energy efficiency. The old chillers were installed as early as 2001 when the ILCC was inaugurated. This equipment was no longer operating efficiently and was due for replacement. MSERV’s total scope of work included the replacement of four conventional oil-lubricated chillers with energy-efficient, magnetic oil-free chillers, and the installation of a chiller management system, enabling the accurate monitoring and control of the newly-installed units.

The MSERV chiller retrofit project, which was completed in 2016, resulted in a reduction in energy consumption of around 53 percent (2.8 million kWh), delivering a project payback period of only 4 years. These savings do not include the spend reduction achieved from the lower maintenance costs of the newly installed chillers, estimated to be 30 percent less expensive vis-à-vis conventional chillers.

Meralco sees clear business potential in these energy efficiency services. For instance, the demand for newer and more efficient HVAC systems is expected to rise with the foreseen rapid increase in new office spaces, estimated to total 2.1 million square meters in Metro Manila.
alone. Furthermore, Republic Act 11285, also known as the Energy Efficiency and Conservation Act of 2019, is seen to spur the adoption of energy efficiency measures and technologies on the part of end-users, businesses, and relevant stakeholders. MSERV will continue to play a pivotal role in formulating, developing, and implementing energy conservation plans, helping customers succeed in their own energy consumption reduction drives.

**Decreasing Emission Intensity**

While emissions concurrently increase as a result of the growth of Meralco’s business, the Company’s emission intensity has grown at a considerably slower pace than that of Meralco’s sales growth.

In particular, the Company measures its GHG emission intensity using tCO$_2$e per PHP million of revenue. As such, One Meralco’s emission intensity progressively decreased from 6.79 tonnes CO$_2$e per million pesos of revenue in 2017 to 6.14 tonnes CO$_2$e per million pesos of revenue in 2019, despite its revenue growth. This improvement is attributed to Meralco’s system loss reduction initiatives coupled with Group-wide energy conservation programs.

**Managing Solid Waste**

Meralco’s Solid Waste Management Program aims to complete the circular economy cycle which complies with regulatory requirements and environmental standards. The program focuses on minimizing generated wastes, segregating at source, segregating transport and storage, implementing solid waste treatments like recycling and composting, and ensuring proper disposal.

In addition, to support the recycling of various materials and wastes, materials recovery facilities (MRFs) in all Networks Operating Sectors and corporate offices encourage Meralco’s employees to adopt more sustainable habits. The reusable and recyclable wastes are brought for further
classification (into paper/cartons, tin cans, glass, rubber, etc.), and are then sold to recyclers, while biodegradable wastes are composted. While segregation and recycling help, Meralco highly encourages the use of reusable materials.

In 2018, National Geographic found that only 9 percent of plastics produced around the globe are recycled. Over 90 percent of all plastic accumulates in landfills or pollutes oceans, at a massive cost to biodiversity. Single-use plastics are the most avoidable kind of plastic waste, and yet they have become very widely used for modern conveniences.

Meralco thus imposed a Company-wide ban on single-use plastics, starting in October 2019, to help inculcate a culture of eco-friendliness amongst its employees. The ban was initially enforced at Meralco’s premises, and subsequently covered MIESCOR, MGen, MRail, Spectrum, eSakay, Bayad Center, MSERV, Radius, Comstech, Meralco Ecozone Power, CEDC, and the Shin Clark Power Group. These units are now free from single-use plastics, which include plastic shopping bags, wrappers and containers, cutlery, straws, cups, stirrers, and water bottles.

Meanwhile, the single-use plastic ban was also communicated to Meralco’s supply chain partners to ensure full compliance by the start of 2020, further broadening Meralco’s influence on sustainable habits in its larger business ecosystem. As of end-2019, Meralco was able to eliminate a significant percentage of single-use plastics from its supply chain.

In its effort to uphold the highest standards in environmental sustainability, all 11 Networks Operating Sectors (Distribution and Sub-transmission Services) and the Meralco Operating Center have obtained ISO:14001:2015 Certification for Environmental Management System. This ISO stamp of approval reassures customers that Meralco has taken all the steps necessary to minimize its organizational impact on the environment.

On top of this program, more initiatives are in the pipeline to sustain the on-going effort to protect the environment and to reduce Meralco’s total ecological footprint. Through these efforts, Meralco seeks to create a Company-wide culture of environmental stewardship where employees are given the right tools to understand and live out sustainable habits—not only in the office but also at home, with their families.
The amount of non-hazardous waste generated by One Meralco in 2019 totaled 101.8 tonnes. About 81 percent were residuals such as food waste and used tissue paper, while the rest were recyclables including tin cans, paper, carton, and plastic bottles. Recyclables are processed in Meralco’s MRFs while residuals are collected by accredited municipal waste collectors and thereafter transported to sanitary landfills.

In contrast, used oil, busted fluorescent lamps, and contaminated materials\(^7\) comprise the 1,187 tons of hazardous waste generated by One Meralco in 2019. Meralco continues to comply and support the Department of Environment and Natural Resources’ (DENR) directive on the proper disposal of polychlorinated biphenyl (PCB) oil and contaminated equipment.

\(^7\) There are no available data on grid-purchased electricity consumption for CBCI, MRail, Spectrum, and Radius since electricity consumption is part of their leasing fees.
In collaboration with DENR’s subsidiary, Natural Resources Development Corporation (NRDC), a total of 58 metric tonnes of low-concentration PCB was treated in Bataan. Likewise, a total of 122 metric tonnes of high-concentration PCB wastes were exported to Tredi, France, through its DENR-accredited hazardous waste transporter, for proper treatment and disposal.

Meanwhile, One Meralco’s hazardous wastes are properly handled and disposed through DENR-accredited transporters and treaters as prescribed by Republic Act 6969, also known as the Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990.

To keep the work environment safe, Meralco developed procedures and guidelines on the proper management of hazardous chemicals and wastes. The Company provided a designated storage area for hazardous waste materials in all Networks Operating Sectors as well as its head office. Hazardous wastes are temporarily stored in sealed containers, properly labelled, and provided with secondary containment until final disposal. These safety and sustainability measures help safeguard the environment and communities at large from being exposed to harmful chemicals.

**HIGHLIGHT: Using Ester Oil in Distribution Transformers**

As Meralco delivers its promise of safe, reliable and quality service while considering environmental sustainability, the Company has replaced the use of mineral oil to natural ester oil for all its pad-mounted distribution transformers. Natural ester oil comes from vegetable oil and as such, it is biodegradable, non-toxic and non-hazardous to the environment.

The use of ester oil extends the asset life of the transformers, leading to as much as 20 percent savings, while contributing to overall system reliability by reducing the frequency of outages due to transformer failures. It also reduces maintenance costs because unlike mineral oil, ester oil does not sludge. This transition, which began in 2006, has led to the 100 percent use of this earth-friendly oil in the Company’s 5,217 pad-mounted and vault-type transformers.

To heighten its sustainability efforts, Meralco will extend the use of High Fire Point (HFP) insulating oil to other types of transformers. This year, the Company is collaborating with its major supplier to pilot the use of HFP oil in its overhead distribution transformers, thus making these vital distribution assets 100 percent recyclable and biodegradable.

**Managing Water and Effluents**

Sustainable water management helps Meralco improve its responsible use of water, which remains a scarce yet essential resource. As part of its environmental efforts, One Meralco keeps track of its consumption of water resources and implements its Water Conservation Programs throughout its businesses. The Company also ensures that effluents are properly treated before being discharged.
In full support of the government’s call for water conservation, Meralco, through its Water Conservation Program, promotes the responsible use of water among all employees, contractors, and customers through information drives.

The decline in the water consumption of One Meralco from 497 megaliters in 2018 to 470 megaliters in 2019 is attributable to the Company’s water conservation initiatives, which include using recycled water for flushing in some facilities or water-less urinals in others, as well as the installation of automatic meter reading devices for Meralco’s Central Water System.

Aside from the installation of water meters, engineering solutions such as water level indicators, and automatic shut-off features in water pumps were put in place to prevent the overflowing of water and to regulate water consumption in all facilities.

To ensure conformance to the Philippine Clean Water Act, the Corporate Office and 11 Networks Operating Sectors have been equipped with Sewage Treatment Plants (STPs) that have undergone rehabilitation to conform with the new General Effluent Standards.

While more needs to be done to conserve water, Meralco is committed to improving its systems while continuing its sustainability information campaigns throughout the Company’s businesses and organizations.
Established in 2010, MERALCO PowerGen (MGen) Corporation is a wholly-owned subsidiary of Meralco, representing the Company’s power generation arm. As one of the Company’s most strategic investments, MGen aims to transform Meralco from being a pure energy price-taker to a highly reliable source of competitively-priced electricity.

Moving to Cleaner Coal

Coal has long been the major fossil fuel used to produce electricity; it is the most abundant in supply and often the most inexpensive of fuel options. However, the burning of coal for fuel produces greenhouse gas emissions, and is proven to be one of the top contributors to climate change.

The global move towards the use of cleaner and renewable sources of energy to address climate change is happening, but not at a pace that could fully replace the use of coal in the near to medium term. In an effort to move towards cleaner electricity production, MGen commissioned, in September 2019, the country’s first supercritical coal-fired power plant—the San Buenaventura Power Ltd. (SBPL) plant in Mauban, Quezon. This marks the Company’s first majority-owned commercially-operating power plant, since Meralco’s return to the generation business. With its state-of-the-art High Efficiency, Low Emission (HELE) technology, the plant is able to burn coal at more efficient levels, (i.e. 40 to 45 percent versus 30 to 35 percent in traditional subcritical coal plants).

| Energy generated from coal       | 1,019 GWh   |
| Grid-purchased electricity for own use | 2,443 kWh   |
| Scope 1 emissions                | 927,435 tCO₂e |
| Scope 2 emissions                | 1.74 tCO₂e  |

From August 2019 to November 2019, MGen consumed a total of 2,443 kWh of grid-purchased electricity – the bulk of which is attributed to the commissioning of the SBPL plant in September. The electricity used in the day-to-day operations of the plant translated to Scope 2 emissions, amounting to 1.74 tonnes CO₂e. Meanwhile, from September 2019 to December 2019, the SBPL plant generated 1,019 GWh of energy from coal, which was sold to distribution utilities in Luzon. This translated to Scope 1 emissions, amounting to 927,435 tonnes CO₂e.

Responsible Development

MGen is deeply committed to protecting Mother Earth and the health of the citizens in the surrounding communities where the SBPL plant operates.
**Waste Management**

The solid waste produced by the SBPL plant is segregated and disposed of in accordance with the Ecological Solid Waste Management Act of 2001.

In 2019, about half of the plant’s 15.4 tonnes of non-hazardous waste was composed of recyclables; the remainder of which were residuals. Recyclables are disposed of via recycling facilities in the plant; residuals, via a solid waste sanitary landfill in Montalban, Rizal.

Additionally, the plant’s organic waste is delivered to a composting facility in Atimonan, Quezon. More than 90 percent of the 7.4 tonnes of hazardous waste produced by the plant in 2019 was used oil; the remainder included busted lamps, ink cartridges, lead acid batteries, and contaminated materials which were stored, transported and disposed compliant to RA6969.

**Water Treatment**

From September 2019 to December 2019, the SBPL plant consumed a total of 131,787 megaliters of water (all seawater), which was used for cooling, desalination, screenwash, and water treatment.

The plant withdraws and discharges up to 5,145 megaliters of water each day. The effluents are processed with an in-house water treatment facility (classified as Class SC in accordance with the relevant Administrative Order of the Department of Environment and Natural Resources) before being discharged to Lamon Bay.

All wastewater underwent different treatments based on their categories. Sewage and domestic waste pass through the sewage treatment plant; run-off water passes through the clarifying/settling pond; and used water from Seawater Flue Gas Desulfurization (SWFGD) pass through the neutralization and oxidation pond. All treated water is analyzed in the laboratory based on the parameters specified in the latest DENR effluent standards and are confirmed compliant before final discharge to Lamon Bay.

**Biodiversity Conservation**

In operating its state-of-the-art power plant, MGen conducts thorough environmental impact assessments (EIA), which include air dispersion modeling, to identify any adverse effect on biodiversity—from vulnerable to critically endangered species. Moreover, MGen employs monitoring systems to keep track of and manage identified impacts on biodiversity and on the natural environment, as a whole.

Before the SBPL plant was built, MGen conducted an EIA to identify the environmental impacts of plant operations on biodiversity at an early stage, and find ways to reduce any adverse impacts. Identified elements with direct impact are air pollution and effluent discharge to nearby water bodies; those with indirect impact include noise during the plant’s construction phase.
Moreover, MGen enacts reforestation and carbon sink programs, and coastal resource management plans specific to each of its power plant projects. Such plans and programs are based on scientifically-gathered environmental data from quarterly and semi-annual environmental monitoring programs. These programs are guideposts for each of the power plant projects to manage their impacts on biodiversity.

**Responsible Impact Management**

To manage its pollution, MGen installed various anti-pollution technologies in the SBPL plant, such as flue-gas desulfurization, electrostatic precipitators, and other such technologies and devices. All necessary environmental management programs incorporated in the EIA were implemented diligently per project phase.

To ensure safe and efficient plant operations, MGen exercises strict adherence to international and government-set environmental standards and good operating practices (e.g., regular facility maintenance).

Further, MGen created a Multipartite Monitoring Team (MMT) to ensure that SBPL complies with all the conditions set forth under the Environmental Compliance Certificate issued by the DENR. The MMT is composed of representatives from different sectors, including the Department of Environment and Natural Resources (DENR), the Department of Energy (DOE), the Quezon provincial government, the Mauban local government, the host communities, and non-government organizations.

An Environmental Guarantee Fund was likewise created in accordance with DENR guidelines, which can be drawn upon in case any untoward incidents impacting the environment might occur.

**Moving to Evergreen**

To align with the global direction towards the use of renewable sources of energy, MGen created MGen Renewable Energy, Inc. (MGREEN), which will serve as the Company’s platform for strategic investments in renewable energy projects—primarily solar, wind, and run-of-river hydro. As a wholly-owned subsidiary incorporated in 2019, MGREEN plans to invest in up to 1,000 MW of renewable energy projects over the next five to seven years, in a bid to bring in additional supply to support the Philippines’ growth momentum, and to help ensure the availability of green and cost-competitive power supply in the coming years.

MGREEN’s first project is an 80 MWdc (50 MWac) solar power plant in San Miguel, Bulacan, which is being developed by PowerSource First Bulacan Solar, Inc. (PFBSI), where MGREEN holds a 40 percent interest. In October 2019, PFBSI signed an engineering, procurement and construction contract with SUMEC Complete Equipment & Engineering Co. Ltd. for the construction of the PHP 4.25 Billion power plant, which started in December 2019.
PEOPLE

One Meralco sees its people as its most valuable resource. With the drive towards sustainability requiring bold ideas, strong passion, and a shared vision for a brighter future, Meralco believes its diverse and driven teams are able to push sustainability forward in a meaningful way. By cultivating a culture of sustainability, the Company engages its talent pool to find better solutions to operate in an eco-friendly and socially responsible manner.

Sustainability starts from within. Meralco understands that an engaged and empowered talent pool contributes to its success, therefore it advocates to reduce inequalities and ensures inclusion at all levels of its organization. Moreover, Meralco respects international human rights—pledging to create a safe, fair and open working environment for all its employees.

The Company also invests in its people’s learning and development by providing various opportunities for career growth. Because Meralco cares about the welfare and well-being of its workforce, it offers competitive benefits and retirement packages to make certain that its people also provide good lives to their families, today and in the future.

Working Towards Diversity and Inclusion

Strategic and operational progress are dependent on diversity and inclusion in the workplace. In particular, creating an environment where diverse perspectives and opinions are heard and respected strengthens the Company as a whole. To uphold these principles, Meralco adheres to strict anti-discrimination policies and recruits employees based on merit.

According to the Global Energy Talent Index Report 2019, women account for only 9 percent of the workforce in the global power generation and distribution sector (GETI, 2020, p.45). In Meralco, women make up more than thrice the average, at 32 percent of the Group-wide workforce. Furthermore, Meralco understands the value of gender parity in positions of leadership. In 2019, the number of women holding managerial positions climbed by 17 percent over the prior year. While Meralco engages more women than industry averages, it acknowledges that more can be done to narrow the gender gap through the implementation of better enabling policies.
Safeguarding Human Rights
Meralco respects internationally recognized human rights, and works to protect the rights of its workforce and those living in communities affected by its business activities. Meralco rejects forced labor, and involuntary servitude as embedded in its Code of Ethics. It supports Collective Bargaining Agreements, and other existing policies that ensure employees are protected from unfair labor practices.

Meralco enjoins its employees, suppliers and customers to report human rights violations and unethical behavior should they occur in the workplace or in its business operations. Through the Company’s online whistleblowing portal, E-Report Mo, anyone can report violations of corporate governance policies and other malfeasance, with the promise of confidentiality and non-retaliation.

Ensuring a Safe Workplace
The right to safe and healthy working conditions is globally recognized by the International Labor Organization, and is also protected by national regulations. Meralco sees safety not only as a corporate duty but more importantly as a central principle, especially when it comes to its workforce and its customers. Meralco’s Organizational Safety and Resiliency Office (OSRO) is the central office that helps drive the safety culture in the Company and coordinates all organizational safety and health-related tasks and initiatives. In each facility, sector, and business center, there is an Environment, Safety and Health (ESH) Committee, to whom employees can raise health and safety issues. Meralco’s employees are enjoined to attend the monthly ESH general meetings to keep abreast with all safety and health updates and measures.

To inculcate safety in the minds of Meralco’s employees, the Company began the Unang Hakbang Para sa Kaligtasan: First Working Day Safety Campaign in 2018. With a “safety first” mindset, the one-day event held at the start of each year includes a review of the previous year’s safety performance, a sharing of learnings, the recognition of excellent safety performers, an
audit of line crew personal protective equipment and a call for employees’ commitment to the aspiration of an “incident-free” workplace.

To further elevate the Company’s safety culture, and achieve its aspiration of zero incident and zero harm, the TARGET ZERO program was launched in 2019. The existing safety programs were further improved, which led to more effective safety trainings and programs that focus on the compliance with all Occupational Safety and Health (OSH) regulatory requirements. Safety innovation through the use of information technology was also adopted through the Hazard Hunter Mobile App and Incident Report Management System which enable all employees to easily report hazards and incidents.

In addition, a strong collaboration has been formed with the Bureau of Fire Protection (BFP) with a focus on promoting public awareness for fire prevention. Meralco supported 52 BFP Fire Square Roadshow events held at various schools, malls and LGU’s within the National Capital Region. The BFP has also conducted multiple training sessions for Meralco employees to help drive better understanding of fire safety measures.

Because of these initiatives, there have been no fatal occupational injuries to regular employees from 2016 to 2019. In addition, Meralco maintained a low level of disabling injuries, with 10 incidents tallied in 2019. The Company has also assessed its preventive efforts as having positive effects throughout its businesses, as disability days in 2019 dropped by over 50 percent compared with 2018.

**Performance Highlights**

**One Meralco**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSH Training Hours</td>
<td>9,547</td>
<td>12,908</td>
<td>59,972</td>
</tr>
<tr>
<td>Injury Frequency Rate</td>
<td>1.27</td>
<td>0.94</td>
<td>0.81</td>
</tr>
</tbody>
</table>

**Meralco and CEDC**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Manhours</td>
<td>11.72 million</td>
<td>11.86 million</td>
<td>12.47 million</td>
</tr>
</tbody>
</table>

As a reflection of all its efforts towards safety, Meralco received 23 Safety Performance Awards from the Safety Organization of the Philippines from 2017 to 2019. Likewise, the Company received five Corporate Safety and Health Awards and two Outstanding Safety and Health Professional Awards from the Safety and Health Association of the Philippine Energy Sector, Inc. in 2019.

**Empowering Employees through Benefits and Rewards**

Beyond the fundamental focus on human rights and safety, Meralco attracts, retains and motivates a highly competent workforce by providing a compensation and benefits package that is internally equitable and externally competitive vis-à-vis the industry and the general market. All Company rewards programs are based on the philosophy and market best practice of pay for performance.

The basic salary levels across employee groups are well above government-mandated levels and are competitive against industry standards. High-performing employees are further recognized through annual merit pay and promotion programs.

In addition, employees who consistently deliver value and contribute to the achievement of the Company’s business goals are rewarded through performance-based short-term and long-term incentive plans. Over time, the granting of these incentives has proven to be Meralco’s key market differentiator in providing a more holistic pay package, enabling employees to not only meet their basic daily needs, but also create short and long-term wealth to satisfy needs for housing, education, and investment, among others.

Meralco also provides a wide array of employee benefits, including paid leaves, healthcare, wellness, insurance and retirement benefits, which are compliant to statutory laws and competitive compared with those provided by the industry and general market.

**Pursuing Excellence**

Meralco fosters a culture of high performance and excellence. This pursuit of excellence is aided by Meralco’s provision of the requisite programs and tools allowing employees, throughout their career journeys in the Company, to do the right things and to do things right. This is further enabled by a robust employee performance management system and mechanisms allowing employees to better understand how they are advancing vis-à-vis individual goals, which are in turn, clearly linked to corporate objectives.

On the technology front, Meralco was one of the first Philippine companies to invest in cloud-based systems which help ensure the alignment of employee performance objectives with corporate business goals through the provision of readily-available HR systems and data which employees can access through their computers and mobile phones.
In addition, mentorship and coaching sessions strongly support formal learning and development interventions. In addition, frequent and informal performance discussions between supervisors and direct reports are the norm, on top of structured mid-year and annual performance reviews.

**Developing a Future-Ready Workforce**
Recognizing that high-performing and highly-capable employees are a necessary component of success, Meralco continuously invests in developing the technical and leadership competencies and skills of its employees. Individual development plans are thus created based on each employee’s required capabilities.

In 2019, One Meralco had a combined number of 8,201 full-time and part-time employees, with the great majority working in energy distribution. To keep the skills and competencies of Meralco’s talents up to par, varying training needs are identified in each Meralco Company. In 2019, employees received an average of 31.08 training hours. Company-wide, this meant a total of 270,584 hours of training, which is a 33 percent increase from the previous year’s 206,423 hours.

To ensure that the right people continue to lead the Company, Talent Management and Succession Planning Programs are put in place to identify and develop top-notch leaders, enabling upward mobility in key business roles. In 2019, some 80 executives rolled-out talent review sessions for 386 middle management employees, aided by customized programs like coaching, on-the-job training and classroom learning to help prepare them for greater and more important roles.

**Motivating and Engaging Employees**
It is important to Meralco that its people feel empowered, united, and engaged. As validated by the One Meralco Pulse Survey conducted every other year, employees have expressed a strong sense of belonging to the Meralco family. Their engagement scores have shown an increasing trend over time, ranging from 88 to 90 percent.
Drilling down the engagement scores, attributes or drivers such as their pride in working for the Company, their understanding of Company goals, the impact of their work on the Company, and their compatibility with their immediate supervisor, all recorded scores in the high 90s.

To further heighten employee engagement, Meralco has established an overall wellness and well-being program, the Company’s Orange Fit program, which adopts a holistic approach to target physical, mental and spiritual well-being. To develop physical wellness, Orange Fit emphasizes the use of the Company’s sports and health facilities, which include the Meralco Fitness Center and the ‘Orange Lane’—a simple solution to encourage walking or jogging within the Meralco Ortigas Center and the Meralco Sectors. Beyond that, the program espouses physical health by institutionalizing the following: employee sports, hobby and interest clubs, after-work partnerships with yoga studios and gyms across Mega Manila (e.g., Urban Ashram, OneLife Studios, 360 Fitness, Arrowland by Gandiva, Elorde Boxing Gym, Electric Studio), employee sports events (e.g., sports fests, inter-office sports competitions), and bi-weekly group exercises such as Zumba and Crossfit.

Orange Fit also maximizes the use of digital platforms by offering discounts to employees through partnerships with shopping sites, restaurants, concerts, theater institutions, and hotels, among others. Additionally, both physical and digital means are used to publish and disseminate regular health reminders.

Emotional and mental wellness are also part of Orange Fit’s total wellness program with the provision of in-house counsellors and medical experts. Spirituality is also as important. The Company ensures that different beliefs and religions are accommodated and have an appropriate venue for worship.

In all, more than 3,400 Meralco employees actively participate in these different Orange Fit initiatives.

Finally, as a key contributor to employee engagement, the Employee and Labor Relations Office is instrumental in the planning, development, and execution of programs and activities that not only promote camaraderie and a sense of family, but also strategically align all employees to share in one corporate vision.

These engagement activities include the One Meralco Cool-tural Festival (to showcase employees’ talents), Service Awards (to give recognition to employees’ loyal and dedicated service), One Meralco Salu-Salo (to build camaraderie as One Meralco family), Meralco Foundation Day (to encourage participation from employees’ families), and monthly and quarterly Union Meetings (to bridge the gap between management and its unionized employees). These Company-wide activities serve as an avenue to not only sustain industrial peace within the organization, but also to help attain its corporate goals.
Effective October 1, 2019, the Company, through a memo from President and CEO, Atty. Ray C. Espinosa, banned Single-Use Plastics (SUP) and related products in all the offices and facilities of Meralco, including Company events and activities. The ban was also applied to all the major subsidiaries of Meralco such as MIESCOR Group, Bayad Center Group, MSERV, Radius Telecoms, MRail, MGen group, eSakay, CEDC as well as affiliated companies Comstech and Shin Clark Power Group and the Meralco operating unit, Meralco Ecozone Power. At the same time, Meralco’s supply chain partners were enjoined to fully comply with the ban as well, effective January 1, 2020.

To create greater awareness and appreciation for the initiative, and to build a stronger and more unified sustainability mindset, a cross-functional communications team was tasked to identify pain points and challenges that need to be addressed to ensure the successful implementation of the program. Members of the team came from various offices: The Office of the President and CEO, Sustainability Office, Human Resources, Supply Chain and Logistics Management, Internal Communications, Security, Organizational Safety and Resilience, among others. This Group worked together to create venues to listen to and address the concerns of employees, suppliers, and even visitors.

Roadshows, facilitated by the Employee Engagement Office, included not only presentations explaining the SUP ban, but more importantly, paved way for conversations to better understand and respond to the questions of employees in various Meralco offices including those outside the Meralco Headquarters. Communication materials and collaterals like tarpaulin banners were displayed at the gates, specifying banned single-use plastics and possible alternative items. Various social media platforms such as Meralco’s own Meralco and Me digital news advisory and Facebook at Work (Workplace) were also used to promote the advocacy.

Soon after, employees developed a better understanding and appreciation of the initiative, driven by greater consciousness on the effects of SUPs to the environment. Many employees started being seen carrying tumblers, reusable food containers and utensils, even when dining outside of the Meralco compound.

To prepare Meralco suppliers and vendors for the January 1, 2020 implementation, Meralco’s Supply Chain business unit scheduled and organized conversations to clarify issues and next steps with the said contractors. The program was well-received by these third parties and to date, over 70 percent of plastics from the supply chain has been reduced.

The ban on single-use plastics provided Meralco the opportunity to have impactful conversations with its employees and suppliers about sustainability, highlighting the role of every individual to support and share in the move towards more eco-conscious living.
Employee Volunteerism: The Power to Give Back

Not many other initiatives can unite an organization better than a concerted effort to do good for others. When teams collaborate to help people in need or to help heal the environment, positive energies flow, souls get recharged, and bonds form which help create a greater sense of a Meralco family—united in its efforts for the greater good. To this end, the Company provides numerous opportunities and venues for employees to give back to communities.

Through One Meralco Foundation, employees of Meralco and its subsidiaries are able to contribute in different ways to the mission of the Foundation. Beyond donating funds to support its programs, what employees typically find most meaningful is volunteering their time and efforts in numerous community projects and activities.

Over 2,000 employee-volunteers participated in various activities throughout the year 2019 – from back-to-school programs to household electrification projects and tree-planting initiatives. Through employee-volunteerism, One Meralco Foundation raised PHP 2.3 million to provide "Laging Handa" all-weather preparedness kits to 6,212 primary students in public schools in the Meralco franchise area during the back-to-school season.

Employee-volunteerism programs are a gateway for Meralco to make its community efforts known, loved and promoted by all employees across its different businesses, ensuring participation and ownership from the whole organization for the Company’s important drive to build sustainable communities.
PROSPERITY

The UN SDGs were globally crafted and adopted to “ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature”.  

The goal of prosperity forms the foundation upon which all of Meralco’s other strategic sustainability focus areas—Power, Planet and People—are founded upon. Progress on these fronts would not be meaningful if it did not amount to helping people live their best possible lives. The promise of prosperity extends from the Company and the many hardworking employees that propel it, to communities and to the country. For Meralco, prosperity simply means that no one should be left behind.

Economic growth is imperative in making sure that every person is able to live a prosperous and dignified life. Sustainable economic growth, one which is not achieved at the cost of the environment or social justice and one which does not cripple the future, will help the marginalized gain access to basic requirements for decent living such as food, water, shelter and energy, today and in years to come.

In this light, Meralco drives sustainable economic growth through value creation—and that value accrues to all its stakeholders. At a basic level, Meralco generates value through the creation of jobs for its employees and through its larger contribution to the economy through tax contributions. But beyond these, what gives greatest meaning to Meralco’s work is the value it delivers to its customers and communities—beyond delivering affordable, reliable, and high-quality products and services to truly giving them power to prosper.

---

Economic value is the measurement of the benefit derived from a good or service by an individual or a company. As Meralco and its subsidiaries continue to expand and grow in relevance and in reach, materialized through revenue growth, the economic value it disperses grows larger as well.

Meralco ensures that its generated economic value flows equitably to all of its stakeholders. In 2019, Meralco distributed 91.9 percent of its revenues to its stakeholders, which is equivalent to PHP 297 billion.

Higher electricity sales volumes raised Meralco’s economic value, in comparison with 2017 and 2018.

From 2018 to 2019, the increase in operating costs came from Company-wide expansions and expenses incurred from administration and maintenance.

Employee wages and benefits also rose in 2019 as a result of a growing workforce as well as salary upgrades.

Excluding special dividends declared and paid out amounting to PHP 4.436 per share in 2017, Meralco’s payments made to providers of capital increased from 2017 to 2019.

In 2019, Meralco took up the 95.5 percent of investments earmarked for corporate social responsibility (CSR). The rest came from MGen (2.4 percent), and Corporate Information Solutions (1.8 percent). CEDC, MIESCOR, and MRail also contributed to the Company’s investments in CSR.
Capital expenditures increased from 2018 to 2019 to address load growth, asset renewals, disaster hardening imperatives and regulatory compliance, and to support the national government’s “Build, Build, Build” program. All this is in line with Meralco’s commitment to deliver better customer experience and operational excellence. Also, among the new expenditures were the deployment of eSakay’s electric public utility vehicles.

**Providing Customers Real Power**
Meralco’s customers are the reason for the Company’s being. The Company invests and innovates not only to deliver reliable energy to its customers but mainly to provide them real power—the power to know and better understand their consumption patterns, the power to launch and control energy efficiency measures, and the choice to engage Meralco on their own terms.

**KLoad: Knowledge on Kilowatt Hours**
Apart from network digitalization and automation, a major part of Meralco’s Smart Grid Roadmap is the deployment of Advanced Metering Infrastructure (AMI), which involves the propagation of smart meters to customers and the building of a robust infrastructure in the distribution utility that will enable two-way communication between Meralco and its customers. Meralco’s first AMI-enabled project is the Prepaid Electricity Service (PRES), commonly known as Kuryente Load (KLoad) to its residential customers. KLoad utilizes smart meters which enables Meralco to perform remote reading of electric consumption, remote disconnection and reconnection of service, and automatic detection of outages which ensures efficient responses to customers’ different needs.

KLoad works by having customers purchase electricity “patingi-tingi”, or in small quantities, through local mom and pop stores or various loading channels, replicating the familiar experience of “sachet” purchases. Customers on KLoad receive SMS notifications regarding their remaining balance, reload confirmation, low load balance, disconnection or reconnection messages, as well as rate adjustments.

Today, Meralco has over 100,000 satisfied KLoad customers, and on average, they save 13-18 percent on their electricity spend in comparison to when they were on postpaid. Based on interviews, these savings are driven by the customers’ ability to better know, understand and control their consumption. Since KLoad customers are notified of their balances every morning, they are more conscious of their consumption and can manage it actively by either setting a budget or by restricting appliance use within the day, especially if their load is running low. Beyond this, KLoad also has a significant social dimension. Numerous researches conducted have shown that households previously resorting to illegal connections preferred subscribing to KLoad than risking having fires. These customers perceive KLoad as a brilliant solution which has empowered them and, in their words, “restored their dignity”.
Today, KLoad is available within residential areas in Manila, Mandaluyong, Makati, and Pasig; in the municipalities of Angono, Cainta, Binangonan, and Taytay; and in parts of Taguig, Pasay, San Juan, Paranaque, Novaliches, Caloocan, Cavite, Tagaytay, and Bulacan.

In 2020, Meralco plans to expand to more sites and offer this service to more households. Meralco also aims to further empower its customers by offering the same monitoring capability of KLoad consumers to its postpaid consumer base, so they too may closely monitor and know their kWh consumption.

**Control over Consumption**

Beyond providing customers with information on their energy consumption, Meralco also endeavors to share insights on more efficient energy use. Meralco Bright Ideas, for instance, is aimed at empowering customers to make informed decisions on appliance purchase and usage by providing customers information on an appliance’s cost to operate and by educating them on energy-related technologies, gadgets and energy-efficiency practices.

Bright Ideas provides consumers with practical tips to save on electricity cost. Its most popular suggestions include the use of inverter appliances, aircon right-sizing or matching the air conditioner’s horsepower to the size of the room, and ensuring that refrigerators are only 2/3 full and not covering the appliance’s air vents. These pieces of advice are disseminated through various channels—Meralco’s website, Facebook, Instagram, and even traditional media. Additionally, to help customers make smart choices at the point of purchase, Meralco launched the Orange Tag: “Alamin sa isang tingin”, or to know at one glance. The Orange Tag is an appliance label which informs buyers about the estimated cost to operate different appliance brands and models according to tests conducted by the Meralco Powerlab. It provides consumers other relevant information such as the peso value per use, the estimated kWh consumption of the appliance, its specifications and wattage—all at one glance.

To support this initiative, Meralco established partnerships with leading appliance manufacturers and distributors such as Samsung, LG, Whirlpool, Condura, Daikin, 3D and others across the different appliance categories, even offering exclusive promos beyond providing useful information and tips, which in turn, brings more value to customers.

In 2019, Meralco engaged with 38 appliance brands and released 102 Orange Tags, covering 7 appliance categories and most recently, electric scooters.

These initiatives prove to be continuously relevant to customers, as seen by the results of a customer survey denoting the increase of the relevant scores for both Bright Ideas and Orange Tag. Bright Ideas’ relevance rose to 93 percent in 2019 from 83 percent in 2018; while Orange Tag’s relevance grew to 89 percent in 2019 from 75 percent in 2018.

Beyond equipping customers with the capability to control and manage their consumption, these efforts also help customers lead more sustainable lifestyles through energy-efficient living.
**Meralco Online: Choice in Connecting**

In order to adapt to and better serve the emerging energy needs of its consumers, Meralco embarked on a Customer Experience Transformation Program (CxTP) in 2016. This program aimed to deliver a simple, fast and convenient customer experience through the automation of back-end processes and the introduction of a digital platform. Through the CxTP, Meralco took strides in heightening its understanding of its customers by mapping out the major journeys they go through when transacting with Meralco, identifying ways of addressing pain points and enhancing each experience.

CxTP revolutionized 4 major customer journeys: service application (‘I Join’), bills presentment and payment (‘I Pay’), customer inquiries (‘I Ask’) and outage restoration (‘I Need Repair’). Pivotal to the CxTP was the launch of Meralco Online—a digital platform which allows customers to connect with Meralco whenever, wherever. Through Meralco Online, customers are given 24/7 access to their Meralco accounts, enabling them to file service applications, view and pay their bills, report outages and concerns, and see planned power outages.

As an example, Meralco Online transformed the “I Need Repair” journey by providing alternative means to connect with the Company during outages. With Meralco Online, customers need not call Company hotlines to report an outage or to seek for updates on outage queries already reported. Customers are also given the capability to track the status of outages via an Outage Map which displays the location and extent of the outage, the status of repair activities and the estimated time of restoration. Further, planned outages in the area are made visible to the customer, allowing them to plan their activities ahead of time.

In addition, with its paperless billing functionality garnering 19,000 subscriptions, Meralco Online also supported the Company’s sustainability drive as it enabled Meralco to forego the need to print and mail billing statements and reduced the customer’s inclination to go to business centers or Bayad Center for payment transactions, thus reducing the Company’s (and its customers’) carbon footprint.

With its functionalities already delivering 17,000 filed outage reports and facilitating 545,000 payment transactions, Meralco Online is set to further enhance online customer experience in 2020 through the integration of Postpaid+ and Smart Home that will provide real-time consumption information, ultimately allowing customers to control and manage their electricity bills.

**HIGHLIGHT: Power Up Forums: Providing Platforms for Sustainability**

Meralco, being an advocate of nation-building, provides platforms where business and government leaders converge and discuss relevant topics and issues affecting the Philippine energy sector and the country. As an exemplar of sustainable development, Meralco utilizes these platforms to promote global initiatives on sustainability and to support the United Nations’ Sustainable Development Goals—particularly the goal of ensuring affordable and clean energy (SDG 7), where Meralco acknowledges its capability to significantly contribute and add value.
One such platform is the Meralco Power Up Forum series, which in 2019 was attended by leaders from close to 1,000 companies to discuss the latest developments in the energy sector, such as the energy efficiency and conservation law, power supply forecasts and various energy solutions.

In September 2019, Meralco held a special forum on sustainability in the energy sector which focused on the importance of sustainability reporting and complying to standards; discussing how sustainability reporting works, how it can help businesses, and most of all, how it can benefit communities.

Meralco invited the chairman of the Global Reporting Initiative (GRI), Eric J. Hespenheide, to be the keynote speaker in the said forum. GRI is an international and independent organization that aims to help businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social well-being.

“With sustainability reporting, companies are forced to look at themselves in the mirror and to study aspects of their business model... It creates an objective framework that considers all stakeholders”, highlighted Mr. Hespenheide.

To further support Mr. Hespenheide's presentation, a panel discussion led by industry experts and government leaders tackled topics on energy efficiency, the transition from coal to renewable sources of energy and the importance of sustainability. Comprising the panel were Senator Sherwin T. Gatchalian, Chairman of the Senate Committees on Energy and Basic Education; Roberto de Ocampo, GRI Board Member and former Finance Secretary; Jesus Cristino Posadas, Senior Undersecretary of the Department of Energy; Eric. J. Hespenheide, Chairman of GRI; and Rogelio Singson, President and CEO of Meralco Powergen, Inc.

**Sustaining Communities**

As the Philippines’ premier electricity distributor, Meralco takes its responsibility towards bettering the lives of its larger community very seriously. Meralco forwards its commitment of prosperity for all through initiatives that benefit those who are most vulnerable and in greatest need: the youth and the marginalized.

**Empowering the Future Generation**

By brightening off-grid classrooms and by gifting the power of education to the youth, Meralco enables the future generation to make better informed decisions not only on energy use and energy safety but also on financial matters—knowledge that is imperative for the challenges of the future.

**School Electrification**

Meralco, through its corporate social responsibility arm, One Meralco Foundation, brings electricity and learning technology to off-grid public schools through its school electrification program.
To brighten the learning experience of children in remote communities, Meralco energized 20 island and mountain schools in the provinces of Rizal, Occidental Mindoro, Oriental Mindoro, Leyte, Negros Oriental, Western Samar, Sarangani, and Tawi-tawi. The Company equipped these education facilities with solar photovoltaic (PV) technology to facilitate the use of their own solar energy to power their schools, thereby adhering to Meralco’s aim to provide accessible and clean energy to all.

In order to broaden and deepen its impact, Meralco partnered with 11 foreign energy companies in 2019 to contribute to the cause—successfully raising USD 49,606 (PHP 2.6 million). These contributions funded the energization of 11 out of the 20 schools in 2019. To date, the school electrification program has benefited 245 schools nationwide since its inception in 2012. This initiative made electricity available to 77,498 students in these hard-to-reach communities.

Based on the impact assessment conducted by the University of the Philippines Public Administration Research and Extension Services Foundation, Inc., the program succeeded in making students more productive and creative, enhanced learning delivery, digitized records management and reporting, and improved safety.

To further support its beneficiaries, Meralco, through its foundation, held trainings to equip the school leaders with the knowledge to properly operate and maintain their solar photovoltaic systems. The trainings provided 221 teachers from 111 schools with an improved understanding of solar technology and better first-line troubleshooting skills, while linking them to a network of solar PV technicians in their respective areas.

**Energy Efficiency Education**

Meralco believes that efficient and sustainable energy use is important in the transition to a low carbon future. The Company believes it must do what it can to educate our country’s younger generation on this topic.

To foster good habits towards sustainable energy use, the One Meralco Foundation equipped 1,180 public schools and about 700,000 students with Energy Ed Kits—a learning package with 200 flashcards, featuring interesting electricity and energy-efficiency topics. In 2019 alone, these kits, which were made in partnership with trained educators, benefitted 48 elementary schools and 31 high schools.

OMF’s partner in this advocacy, the Coalition for Better Education, completed an impact assessment study to gauge the program’s contribution to the knowledge gains of students using the kits.

The results of the study were astounding, finding that the flashcards met the standards of learning resource materials; and that the respondents found the topics simple and straightforward and the pictures on the flashcards eye-catching and consistent with what was
being taught. Teachers also reported that their students were more participative, collaborative and attentive; and they, themselves were becoming more creative while using the flashcards as a teaching tool.

Although the flashcards are usually taught in Science and English classes, teachers were able to integrate them into other subjects because of the flash cards’ dynamism and interdisciplinary nature. The cards were also sometimes used as diagnostic tools to check for reading comprehension, or for remedial or advanced sessions for mainstream and SPED classes.

**Electrical Safety in Schools**

Meralco, through its foundation, also plays an active role in promoting electrical safety in schools across the Philippines.

Meralco helped the Department of Education during the government office’s Brigada Eskwela (schools maintenance week) by inspecting 139 public schools within its franchise area for electrical safety.

OMF, in partnership with the DENR’s Environmental Management Bureau, also awarded schools with electrical safety and energy efficiency programs in place, in order to boost awareness and friendly competitiveness in this area. Of the 176 participating schools, a total of 39 regional winners and 3 national winners received the Meralco Leadership Award. The national winners were Pagudpud Central Elementary School in Ilocos Norte, Diplahan National High School in Zamboanga Sibugay, and Batangas State University.

**Financial Literacy**

Beyond energy-related knowledge topics, Meralco also helps in educating the youth on financial literacy through its subsidiary, Bayad Center.

In partnership with DepEd and Marylindbert International, Bayad Center launched a program that integrates financial education in the curricula of Grades 9 and 10 students in public schools in Cebu. Dubbed the “Sapat Dapat Comprehensive School Program” in 2018, the program helps impart young students with skills to develop critical savviness in finance, savings, and investment. Now on its second year, Bayad Center’s campaign introduces the values of budgeting and savings to the formative minds of the country’s future leaders and professionals.

**Lifting the Marginalized**

Given Meralco’s scope and reach, it is well equipped to help vulnerable groups in society lead more prosperous lives.

**Breaking the boundary system**

Jeepneys are beloved traditional passenger utility vehicles in the Philippines, most famously used in the country’s urban centers. While they support the Philippine transport system, their engines emit high amounts of carbon and, as they are organized today, provide poor working conditions for their drivers, too.
Jeepney operators in the Philippines require their drivers to pay a fixed base rate, called a “boundary” which is a daily rental fee that drivers must pay for the right to use jeepney operators’ vehicles as a source of livelihood. The driver can only begin to earn an income from plying the route after raising the amount to pay the “boundary”.

This system leads to a number of inefficient and oftentimes harmful practices. Firstly, drivers normally require that their jeepneys are full before running, wasting the time of commuters who board the vehicles first, and disabling the possibility for fixed and reliable time schedules to be put in place. Secondly, given the typically high boundary fees required, it is not uncommon for jeepney drivers to constantly rush and recklessly drive just to make enough money to live on. Safety, unfortunately, takes a backseat to making ends meet.

When eSakay decided to operate the Makati-Mandaluyong route, it made an important decision to not only upgrade the vehicles that it would deploy (in the form of modern, zero-emission electric jeeps), but also to help upgrade the lives of its drivers by providing income security. This is consistent with the tenets of the Department of Transportation’s (DOTr) Public Utility Vehicle Modernization Program (PUVMP).

Under eSakay management, all drivers are considered professionals and are thereby provided regular salaries and benefits, which include 13th month pay, Social Security, basic health care, and the like. Having eliminated the competitive chaos of the traditional boundary system, eSakay drivers are incentivized not to meet ‘fare targets’ but more importantly, to provide safe and high-quality service to the riding public.

**HIGHLIGHT: Ang Kwento ni Edgar, eSAKAY DRIVER**

*Ang Kwento ni Edgar Macairan, Jr., 33 taong gulang. May asawa at dalawang anak.*


*Sa briefing ng eSakay, narinig ko ang modernization program ng ating pamahalaan na naglalayong para sa ating industriya ng transportasyon sa pamamagitan ng pagdala ng mga makabagong jeepney sa mga kalsada. Natuwa po ako sa naring ko dahil ilang taong kong nakita at naranasan ang hirap ng mga driver at mananakay dahil sa kasalukuyang lagay ng mga lumang jeepney at dahil sa sistemang ‘boundary’.*
Bukod dito, nalaman ko rin ang pangako ng eSakay ng mas siguradong kabuhayan at kita. At dahil dito, hindi naging mahirap ang aking desisyon na mag-apply. At sa kapalaran palad, ako naman ay natanggap.


Dahil sa eSakay, mayroon na po kaming naaasahan. At mas maliwanag din ang tingin namin sa kinabukasan.

**Empowering Beyond our Borders**

Meralco promotes “Bayanihan”—a spirit of communal unity distinct to the Filipino tradition—by always reaching out to help others, especially in times of crisis or natural calamities. Part of Meralco’s thrusts towards nation-building is the provision of various measures of help and support to those who need it the most, even beyond our service area.

The Philippines has always been a hotbed for natural calamities, given its location on both the ring of fire and the earthquake belt, and as a pacific archipelago facing open seas. The country regularly experiences floods, torrential rains, tropical storms, droughts, earthquakes and volcanic eruptions. Amid all these realities, however, the resiliency of the nation lies more in the spirit and culture of the Filipino, rather than in anything material.

**Providing Disaster Relief**

The Philippines went through 21 major weather disturbances in 2019, 15 of which were within Meralco’s franchise area, causing disruptions. For instance, when typhoon Tisoy ravaged the country on December 3, 2019, the fast response of Meralco personnel enabled 420,000 of the 500,000 customers cut from power to get electricity back within 24 hours. Within two days, Meralco’s operations were back to normal levels.

While Meralco continues to support and prioritize the needs of the communities within its area of business, the Company always does what it can to respond and to extend assistance to other hard-hit areas as well.
One of the ways in which Meralco helps is by assisting other electric cooperatives in their restoration efforts. From December 8 to 22, 45 linemen, engineers and contractors and 13 stake trucks were deployed to assist Albay Electric Cooperative to correct, replace and re-connect 400 electric poles and 358 spans of lines. Three pick-up crews were also deployed to Albay Power and Energy Corporation to assist in their cluster metering activities.

The One Meralco Foundation supported the team of 46 Meralco linemen and staff who volunteered to help ALECO. With the help of Meralco’s volunteers who worked around the clock for 14 days, power was finally restored in 7,962 households before Christmas day. In addition, the Company put together a working team to help buy, pack, and distribute care packages for many of the typhoon victims.

In 2019, the country was also hurt by three strong earthquakes: one in April, in Pampanga; a second in August, in Batanes; and a third one in October, in Cotabato.

In partnership with the Philippine Disaster Resilience Foundation, OMF sent relief goods to hundreds of displaced families in Batanes. The foundation also gave support to Meralco’s personnel who bravely participated in the rescue and retrieval efforts of the people who were stuck under a collapsed grocery building in Pampanga. In addition, the foundation also provided drinking water containers in evacuation centers in Mindanao.

The Foundation directly reached out to a total of 7,729 families affected by various disasters throughout 2019.

**Lighting Up Safety Shelters**

Meralco teamed up with the Armed Forces of the Philippines (AFP) through the One Meralco Foundation, to energize an off-shore shelter which provides Filipino fishermen in Batanes a safe place to stay in times of bad or extreme weather. In addition, it provides a sound venue for the Philippine Army to monitor the area against deterring poaching activities or illegal activities by foreign fishing vessels.

The foundation installed a 3 kW solar PV system to power the shelter, which hosts military communication devices as well as a cold storage area which fishermen could use to temporarily store their catch while on the island. In the future, the AFP may upgrade the system to power a lighthouse in order for them to provide navigational aid to marine vessels passing by.
CORPORATE GOVERNANCE

The road towards sustainability is paved by the commitment of an organization’s leadership. Meralco’s corporate governance dictates the Company’s sustainable management practices, its ethical culture-building, and its ability to continue to do good business, in service of its stakeholders such as employees, customers, and business partners.

Responsible Corporate Governance
The Company continues to strengthen its corporate governance policies and to develop programs that reinforce corporate performance, foster operational growth, instill accountability, and uphold stakeholder rights. Governance codes and policies such as the Manual of Corporate Governance and Code of Ethics sets the definitive standard of professional conduct governing decisions and behaviors of the management and employees in the Company.

The Manual of Corporate Governance provides the framework for the responsible business practices that the Company’s directors, officers, and employees are expected to observe and adhere to, when dealing with various stakeholders. The Code of Ethics, on the other hand, anchors the Company’s internal programs and policies that address misconduct and impropriety committed by its internal stakeholders. These include the Anti-Bribery and Corruption Policy which formalizes the Company’s stand against corrupt practices and emphasizes the prohibition against corporate gift-giving to public and private individuals or entities that constitutes bribery or corruption.

To raise awareness on the Company’s governance policies, promote transparency and enhance its adoption and practice Company-wide, the Corporate Governance and Compliance Office (CGCO) regularly conducts orientation programs and briefings for directors, officers, and employees to acquaint themselves with the Company’s businesses, stakeholders, regulatory environment, and governance practices. Site visits and roadshows are also conducted to re-orient and empower all employees to continuously apply the core corporate governance principles in the workplace. In 2019, there were 712 employees who attended these orientation programs.

The Company has an “e-Report Mo” Whistleblowing Program that encourages the reporting of any violation of corporate governance rules or policies, questionable accounting or auditing matters, and other malfeasance committed in the Company. There was no reported incident of corruption in 2019.

To know more about Meralco’s Corporate Governance Programs, please follow this link. Meralco’s Code of Business Conduct and Ethics can be found here; the Revised Manual of Corporate Governance here; and other pertinent policies here.

Sustainability Governance
Meralco recognizes sustainable development as the foundation for a high-performing, successful, and forward-looking business. It seeks to promote a sustainability mindset – a
proactive consciousness and understanding of environmental, economic, social, and governance interdependencies, to create long-term shared value for the Company’s stakeholders. In 2019, the Company established a Sustainability Office (SO) to identify relevant sustainability issues and to formulate and institutionalize One Meralco’s sustainability agenda in alignment with business strategies against the backdrop of its 4 focus areas (Power, Planet, People, and Prosperity). The SO captures, integrates, drives, and monitors the Company’s sustainability efforts, while ensuring congruence with and the promotion of the UN SDGs:

**Strategy and Policy**
This Group is in charge of developing and integrating the Company’s sustainability agenda, ensuring alignment with One Meralco’s corporate strategies and objectives. It also works closely with representatives from all business units to ideate, prioritize, and monitor the Company’s sustainability initiatives. It also serves as a thought partner and adviser to line leaders on key business decisions, making sure sustainability goals are met and not prejudiced.

**Planning and Program Management**
This Group is responsible for the effective and efficient execution of sustainability programs. While Planning and Program Management is in charge of driving and integrating certain key cross-functional programs, by and large, it will serve as an enabler to line organizations in implementing sustainability initiatives. The enablement will be carried out through the targeted support of identified workstreams, the provision of sustainability frameworks and tools, or through the sharing of subject-matter expertise.
**Reporting and Compliance**
This Group is tasked with tracking and measuring the results of sustainability efforts, ensuring accountability and transparency. It will thus collaborate with Strategy and Policy to determine the metrics to assess One Meralco’s sustainability performance, identifying appropriate baselines and targets. It will also be primarily in charge of reporting the results of the Company’s efforts through the Sustainability Report and other materials.
The first step towards building a sustainable business is transparency and accountability. This first Sustainability Report translates One Meralco’s current efforts—policies, initiatives, and investments—into a strong baseline from which its sustainability agenda can further progress and develop, to help attain the United Nations Sustainable Development Goals.

With this first Report, the Company has had an opportunity to look deeply into what sustainability means for One Meralco. It has given the Company better insight and understanding on what it does well, and what it can do even better.

What has been achieved thus far is very encouraging, but much is left to be done to create a better planet and a better life for all.

For One Meralco, this is only the beginning. In 2020, the Company will move further ahead to create a heightened awareness and a greater understanding of sustainability. It will also launch highly-impactful initiatives across the 4 Ps (Planet, Power, People, and Prosperity), while continuing to influence and inspire as many as possible to join the Company on this important effort to build the nation, to build the future, and to power the good life, for all.