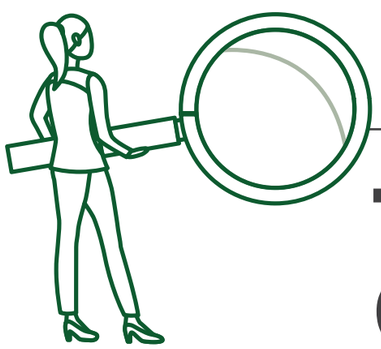
CIREBON POWER
SUSTAINABILITY REPORT
2018

www.cirebonpower.co.id

Cirebon Power
Sustainability Report 2018

Powering the Life of Indonesia



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Greetings

From Our President Director

[GRI 102-16]

Dear Stakeholders,

It is with great pleasure to present our 2nd sustainability report that demonstrates our ongoing commitment to sustainability.

Electricity is a fundamental infrastructure for everyone, especially in emerging countries. In Indonesia, the main source for electricity generation is coal, as the supply is abundant and most affordable. However, it is a challenge to provide a green, clean, and stable supply using the available resources. We believe that it is important to use natural resources efficiently and responsibly. Thus, we apply advanced environmental-friendly technology through our clean-coal use technology of supercritical and ultra-supercritical. We eager and continuously challenge ourselves to maintain the efficiency of our operation, innovate and adopt new technologies while preserving the environment.

As one of the companies that provide energy in Indonesia, we realized our role in developing the nation not only from generating the energy, but we also have the opportunity of making a real difference for our communities. We are sharing the world with other people, and for us, it is important to be a good partner, especially with our neighbours in Cirebon where we operate. Our partnership is developed through community development programs provided for the local community to enhance skills, create job opportunities, and improve their livelihood.

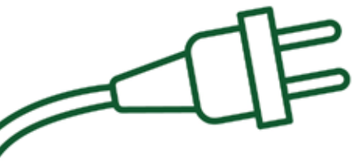
We believe that sustainability is an integral part of our overall operation which can not be separated from our daily operation. The occupational health and safety is the area of critical importance in our power plant operation. It is ingrained in our DNA to promote the wellness and wellbeing of our employees.

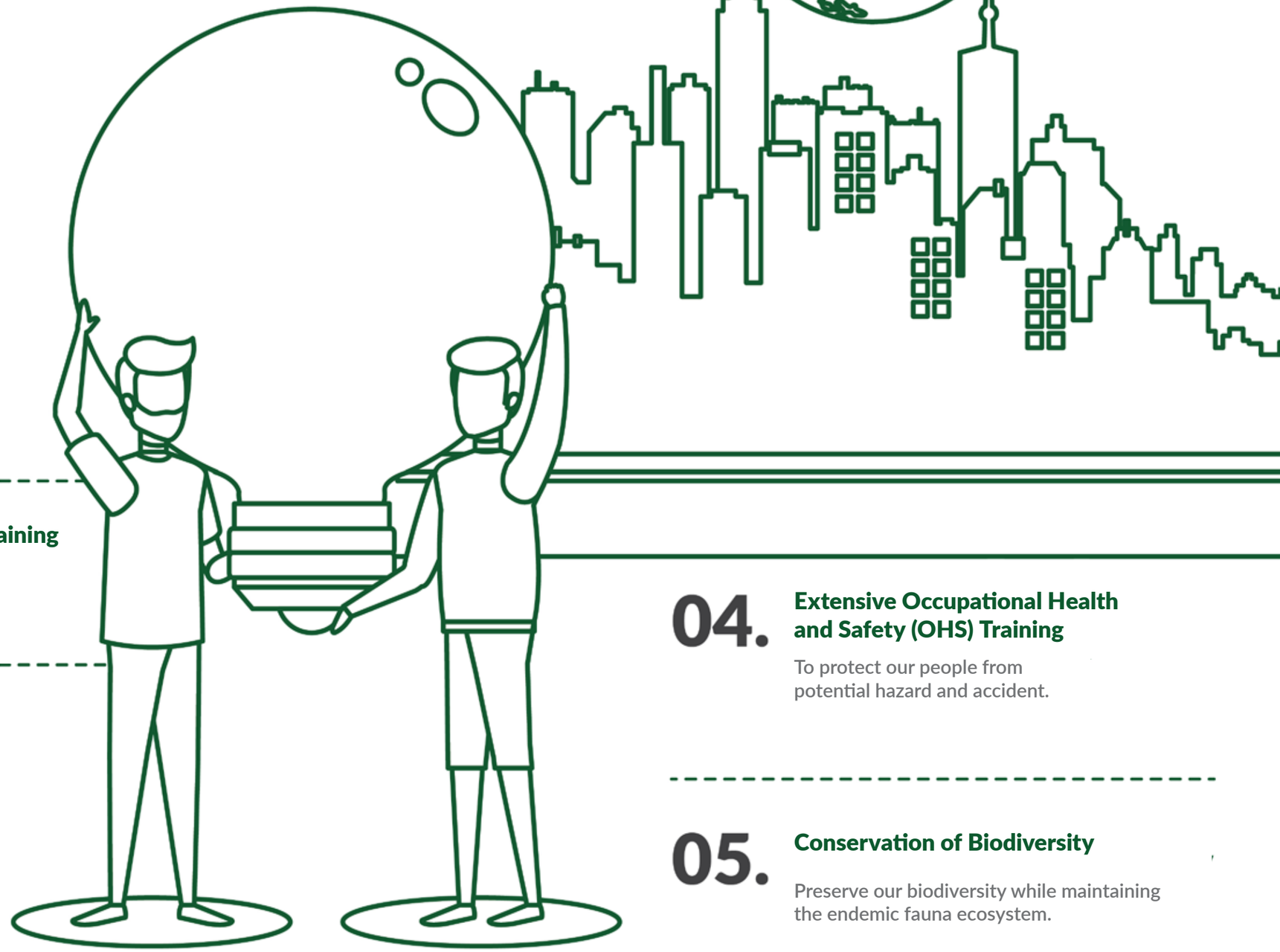
Throughout our company we believe in the same vision of providing green, clean and stable supply of electricity while contributing to the community in Indonesia.

Takeuchi Hisahiro

President Director
Cirebon Electric Power
Cirebon Energi Prasarana

CIREBON POWER HIGHLIGHTS





01. Significant Increase of Investment to Enhance the Operation and Maintenance

We strengthen our commitment further to achieve power plant's efficiency by increasing our investment in plant operation and maintenance up to 4 times.

02. Local Development through Vocational Training

Our Vocational Training offers an alternative educational path for youths and adults to provide opportunity on good jobs and economic growth.

03. Plant Modification Tool

A platform to accommodate aggregated requests across units for continuous improvement.

04. Extensive Occupational Health and Safety (OHS) Training

To protect our people from potential hazard and accident.

05. Conservation of Biodiversity

Preserve our biodiversity while maintaining the endemic fauna ecosystem.

1 POWERING THE LIFE OF INDONESIA

Is more than just a slogan. For us, it is a guiding principle that allows us to give meaning to our existence. Cirebon Power is envisioned to pioneer cleaner energy solutions using technological advances to preserve the environment and to ensure a better life for all by the power we produce.

Overview

[GRI 102-1] [GRI 102-2] [GRI 102-3] [GRI 102-4] {GRI 102-5} {GRI 102-6} {GRI 102-7}

Since its establishment, Cirebon Power is envisioned to pioneer cleaner energy solutions using technological advances to preserve the environment and to ensure a better life for all by the power we produce.

Headquartered in Jakarta, Cirebon Power has a 1x660 MW Supercritical coal-fired power plant located in Kanci Kulon Village. In 2017, we began to construct a new unit of Ultra-Supercritical coal-fired power plant with the capacity of 1x1,000MW in Kanci Kulon and Waruduwur Villages. Both are located in the Cirebon District coastal area in West Java Province, Indonesia. Our Ultra-Supercritical plant contributes to the Indonesian Government 35,000 MW Power Plant Program for better Indonesia.

Cirebon Power is built by two companies, PT Cirebon Energi Prasarana (CEPR) and PT Cirebon Electric Power (CEP), and operated by PT Cirebon Power Services (CPS).

PT Cirebon Energi Prasarana (CEPR)

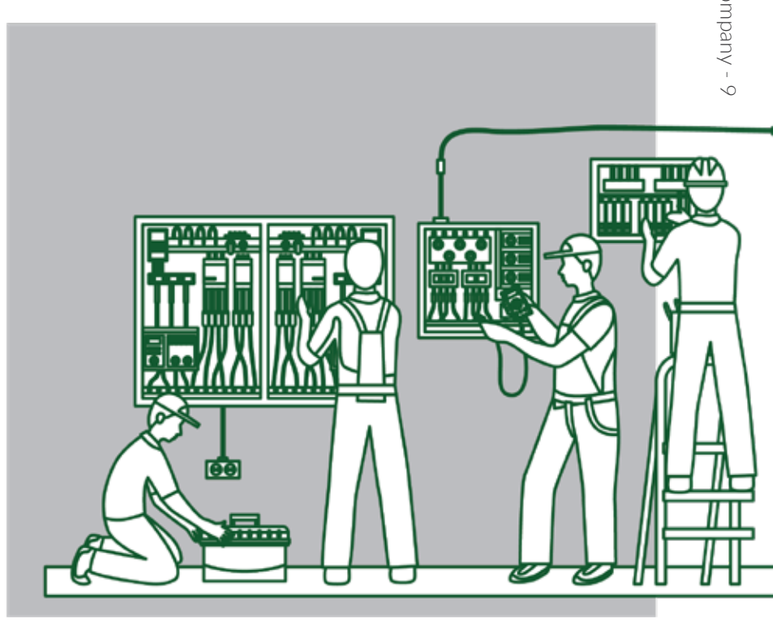
The multi-national consortium behind the success of our first unit, began a new journey by adding Japan's JERA (10%) to develop the 1x1,000MW expansion project. Not only bigger and stronger than the previous unit, this new unit utilizes advanced Ultra-Supercritical technology that enables us to produce more energy in a more efficient way. The expansion unit is expected to operate in 2021.

In line with the Indonesian government development program to develop Indonesia by strengthening villages and the regions, Cirebon Power continuously contributes to the national electricity company (PLN), as our customer, by providing and ensuring electricity availability, especially in Java-Bali region. Through the provision of electricity, we have indirectly contributed to the national economic development. We supply 80% from our installed capacity (1x660 MWh) of the electricity to PLN based on Power Purchase Agreement (PPA) with PLN.

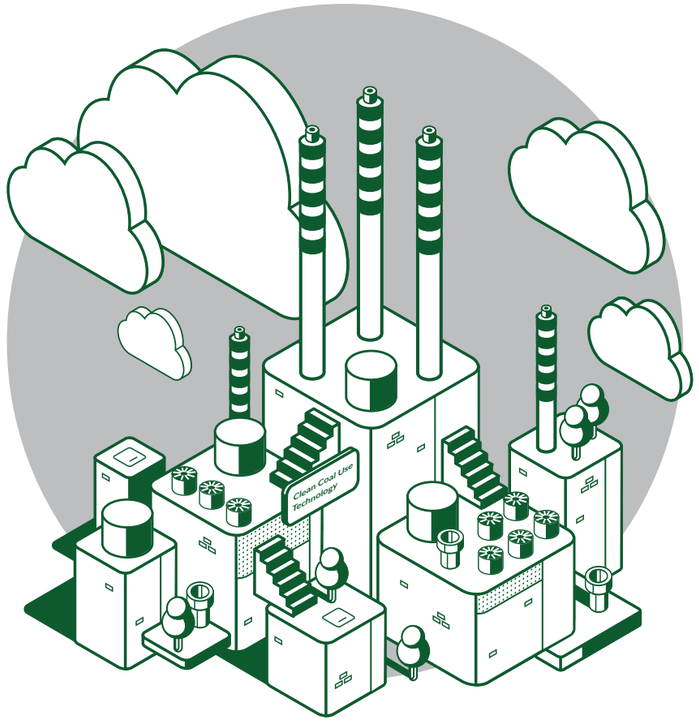
In 2018, we provided MWh of electricity to PLN based on data electricity sold. This electricity production is contributed by 849 employees running our entire operations, which enable us to provide a stable economic development for our people.

PT Cirebon Electric Power (CEP)

Established in 2007, CEP is a multi-national consortium company consisting of several companies such as Marubeni Corporation from Japan (32.5%), Indika Energy from Indonesia (20%), Korea Midland Power from South Korea (27.5%), and Samtan from South Korea (20%). The group of energy powerhouse join forces and built our first unit of 1x660 MW in Kanci Kulon village, West Java. Starting on July 2012, the power plant began its operation and has been producing 5 TWh of electricity per year to the PLN Java-Madura-Bali (JAMALI) grid.



Corporate Vision and Mission



Our Vision

We dream of a growing nation fueled by the power of energy. We produce energy to make things brighter and lives better.

Our Mission

We want to power not only a nation, but each and every life in it. We want to light not only cities, but each and every home in it. We strive to deliver a smarter, cleaner, more reliable energy for everyone. That is our part in building a brighter Indonesia.

Our Values

Trustworthy

- Do the Right Thing
- Be Ethical
- Be Professional
- Show Responsibility
- Respect Others
- Get Better Everyday
- Strive for the Best

Impactful

- Do Things with a Purpose
- Bring a Positive Impact

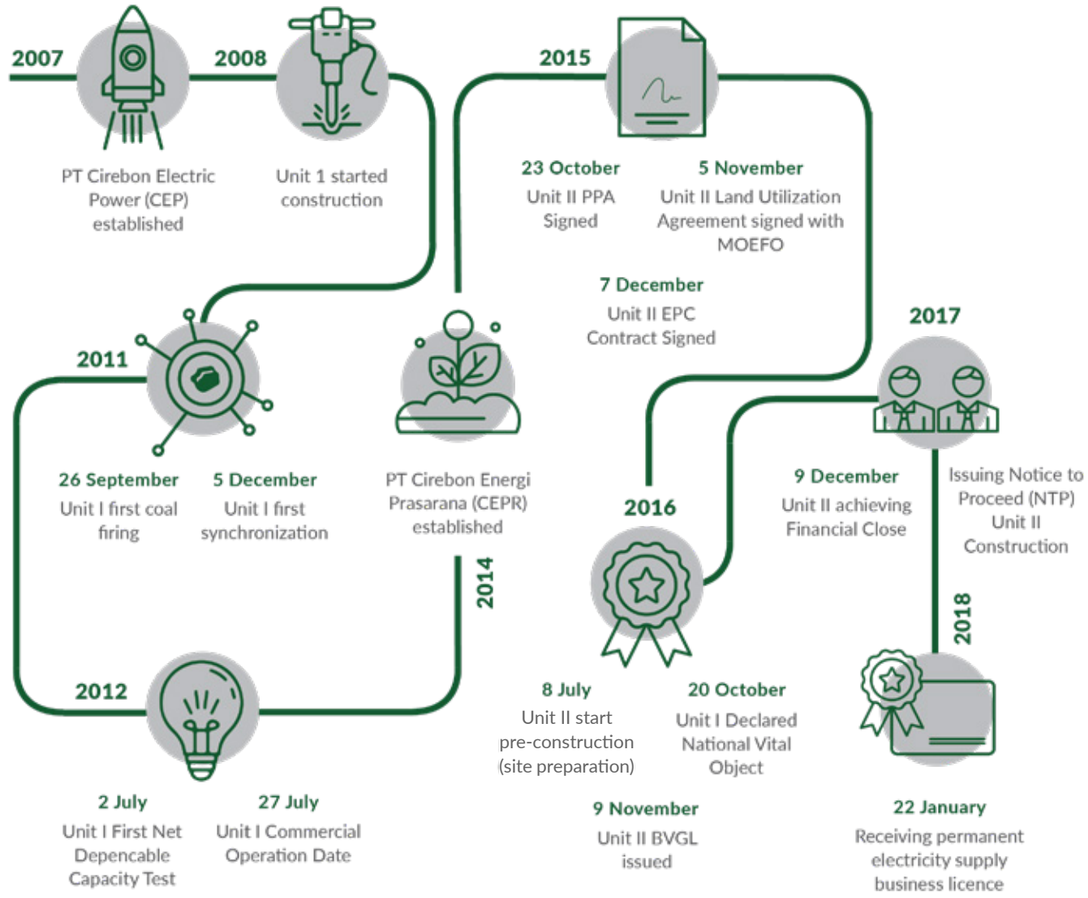
Friendly

- Be Warm
- Be Open and Approachable
- Be a Friend
- Show Kindness

Pioneer

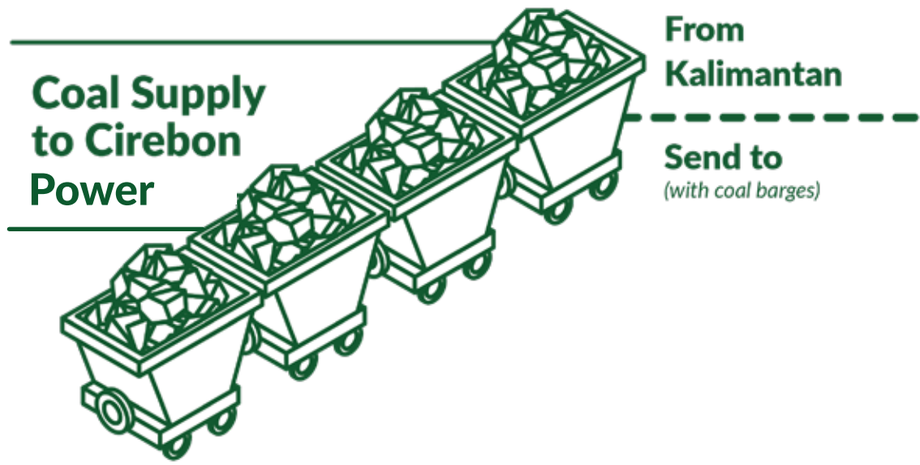
- To be at the forefront technology in bringing clean energy and changing the lives of people in Indonesia through innovations.

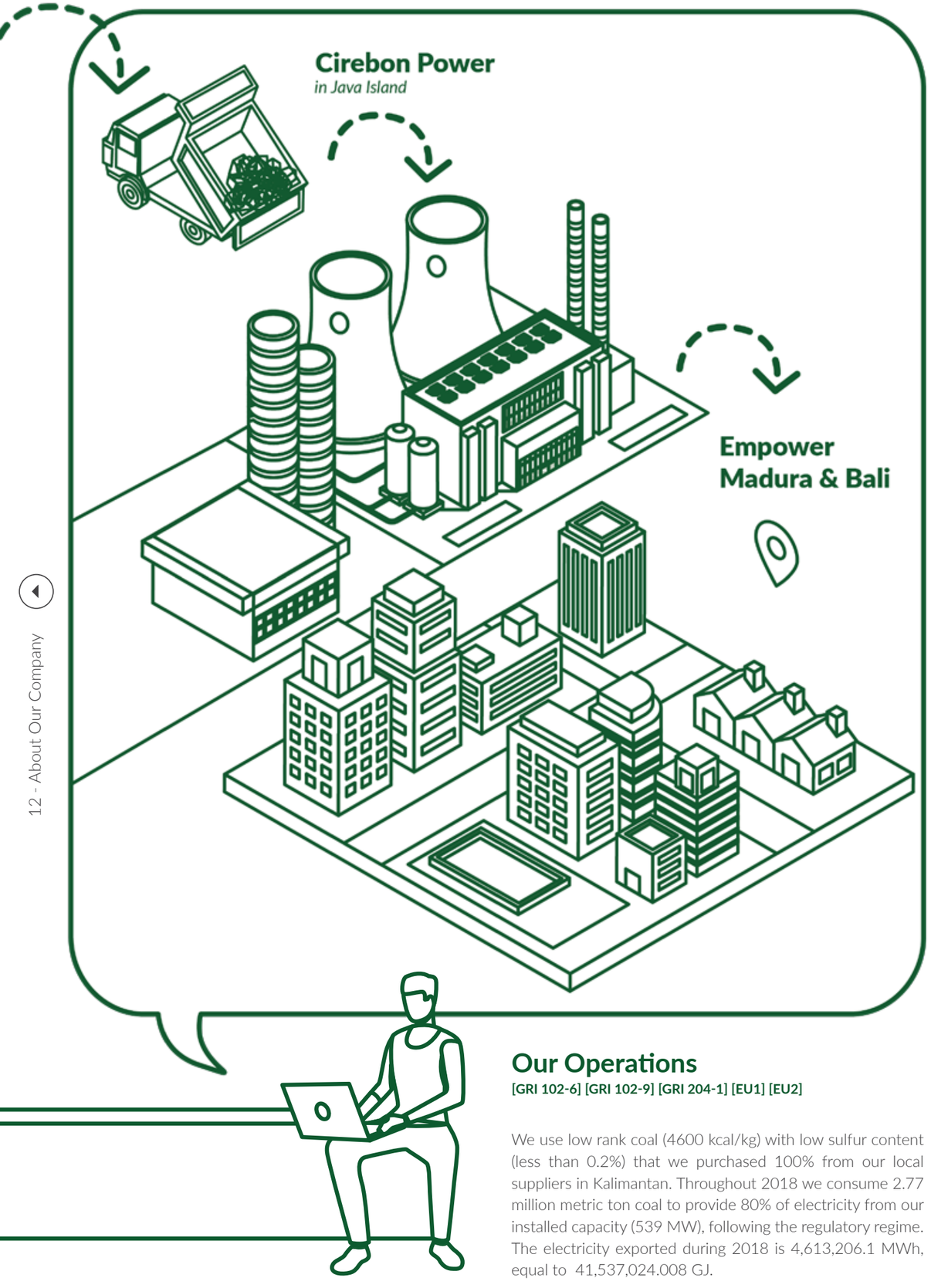
Our Journey



Our Operations

[GRI 102-6] [GRI 102-9] [GRI 204-1] [EU1] [EU2]





Our Operations

[GRI 102-6] [GRI 102-9] [GRI 204-1] [EU1] [EU2]

We use low rank coal (4600 kcal/kg) with low sulfur content (less than 0.2%) that we purchased 100% from our local suppliers in Kalimantan. Throughout 2018 we consume 2.77 million metric ton coal to provide 80% of electricity from our installed capacity (539 MW), following the regulatory regime. The electricity exported during 2018 is 4,613,206.1 MWh, equal to 41,537,024.008 GJ.

Material and Supplier

[GRI 204-1] [GRI 301-1] [GRI 308-1]

Our materials are procured 100% locally from industries in Kalimantan. During 2018 and 2017, we consumed approximately 2,77 million and 2,19 million metric ton of Indonesian 0.1% low sulfur / and maximum 3% low ash environmentally friendly Indonesian lignite coal as approved by the third party certification. These low sulfur coals (less than 0.2%) enable Cirebon Power to meet sulfur oxides (SOx) emission regulated standards obviating the need for engineering solutions such as flue gas desulphurization (FGD) and reducing the cost of plant operation. The low ash content also contributes to extending the life of the power plant ash disposal facility and reduces the cost associated with ash disposal treatment and area.

Apart from material suppliers, our supplier boundaries also cover independent contractors who helps us in performing operation and maintenance activities for Cirebon #1 and construction activities for Cirebon #2. To ensure the environmental impact and quality performance of our entire plant operation, we have also considered all of our main contractors in our measurement process and ensured they have conformed with several standards throughout their daily operations including ISO 14001, ISO 9001, and ISO 50001.

Our Shareholder

[GRI 102-5]

Marubeni

Marubeni is involved in the handling of products and provision of services in a broad range of sectors. These areas encompass importing and exporting, as well as transactions in the Japanese market, related to food materials, food products, textiles, materials, pulp and paper, chemicals, energy, metals and mineral resources, transportation machinery, and includes offshore trading.

Indika

Indika provides integrated energy solutions for its customers through its diversified investments in the areas of energy resources, energy services and energy infrastructure i.e., through its strategic investments in the areas of coal production (PT Kideco Jaya Agung); engineering, procurement and construction services (Tripatra); engineering, mining and construction contractor & services (PT Petrosea Tbk); and a power generation project (PT Cirebon Electric Power).

Jera

JERA Co., Inc. ("JERA") was established on April 30, 2015 based on the comprehensive alliance entered into between Tokyo Electric Power Company (since renamed and referred to herein as "TEPCO") and Chubu Electric Power Company ("Chubu") encompassing the entire energy supply chain from upstream fuel investment and fuel procurement through power generation. In July 2016, JERA succeeded its parent companies' fuel business and the overseas power generation business, and aims to become one of the world's leading energy firms.

Komipo

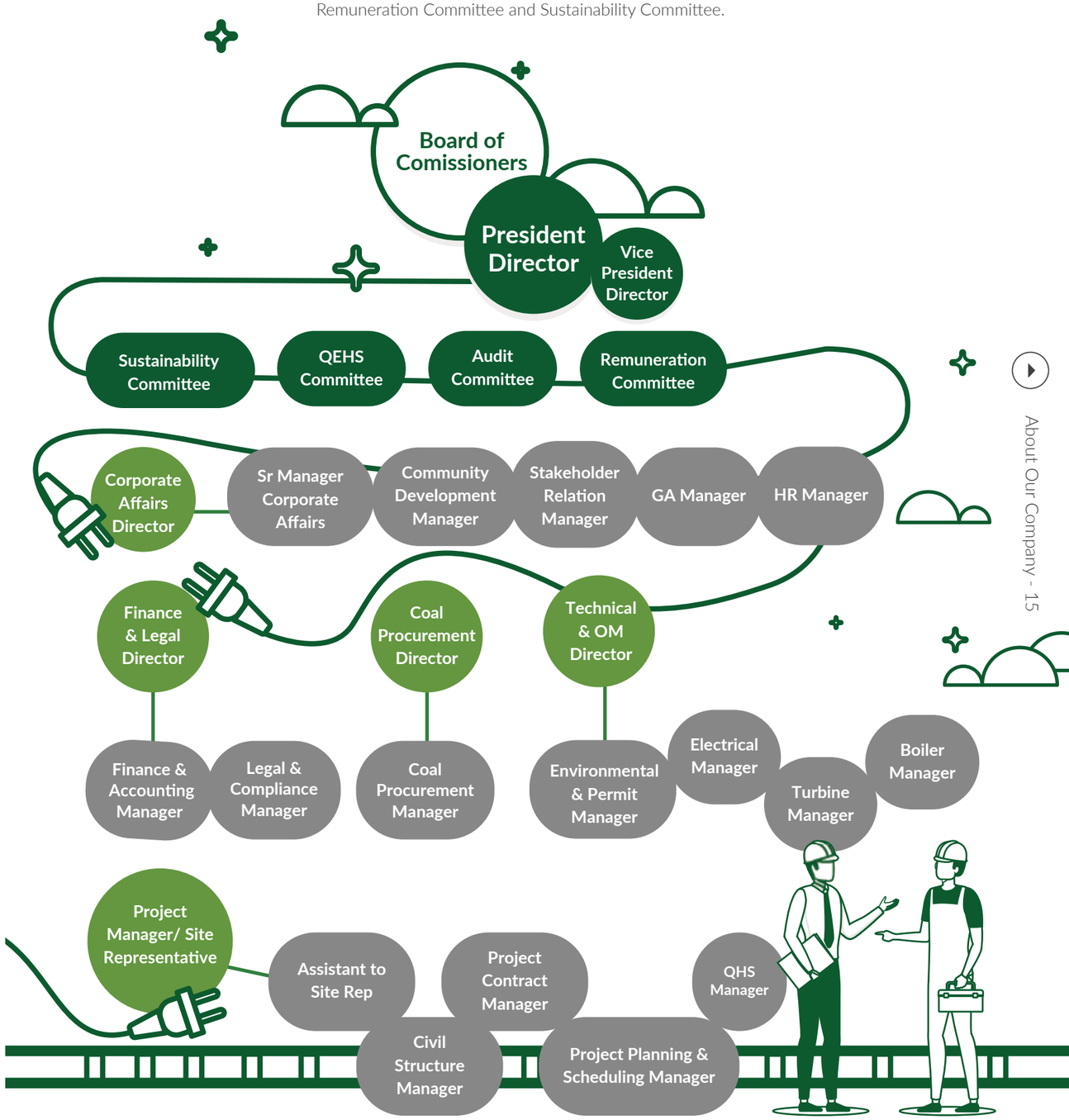
Komipo is a power generation company spun off from Korea Electric Power Corporation on April 2, 2001, following the enactment of Electric Power Industry Restructuring. Komipo operates six power generation facilities, which supply 13% of all domestic electric power in South Korea and takes lead in developing and utilizing renewable energy as exemplified with Yang Yang pumped storage power plant and wind power plant, which are much esteemed for applying environment-friendly energy.

Samtan

Samtan is one of the leading energy specialized companies in South Korea. Samtan has devoted to energy related industry. In 1982, Samtan involved in a proactive resources development business from the beginning of unfolding the overseas energy development. Samtan has succeeded in developing their businesses in Indonesia through their own original capital and technology.

Governance Structure

Cirebon Power is built by two companies, PT Cirebon Energi Prasarana and PT Cirebon Electric Power, and operated by PT Cirebon Power Services. The governance structure for the companies are similar, with Board of Commissioners and Board of Directors defining procedures, values and long-term planning to meet the mission of Cirebon Power. In addition, the board is also supported by Quality, Environment, Health and Safety Committee (QEHS), Audit Committee, Remuneration Committee and Sustainability Committee.



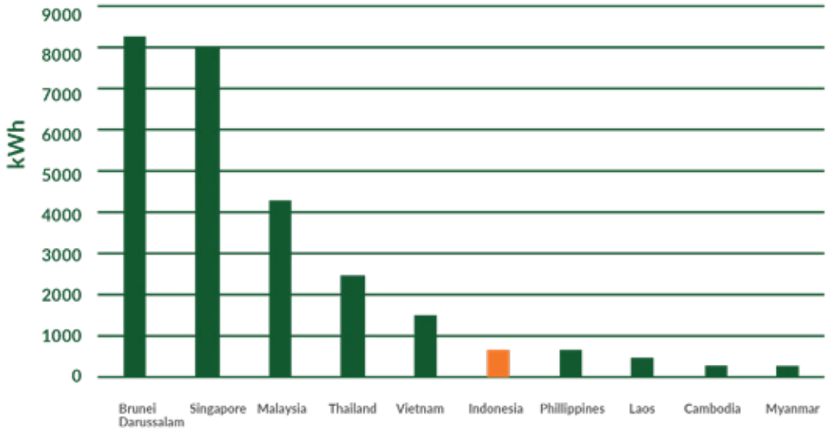
2 CLEAN COAL USE TECHNOLOGY

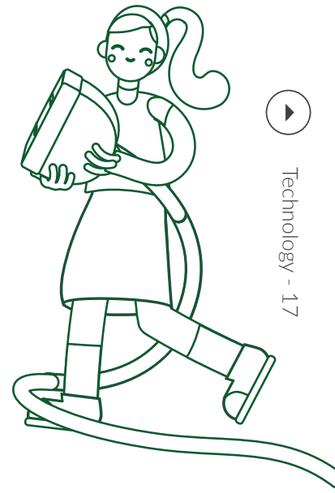
Our Clean Coal Use Technology improves cycle efficiency, resulting in lower coal consumption and reduce emissions to the atmosphere.

Why It Matters?

Indonesia consists of thousands of beautiful islands. However, 4,000 islands are still suffering from electricity crisis and remains in the dark. Around 6 million unfortunate families living in remote areas are yet to have electricity access. 42,000 villages and 17,000 schools do not have electricity for daily operations.

Electricity Consumption Per Capita





Efforts have been made by the government to increase and ensure the availability of electricity across Indonesia. Each year, the government has consistently published an updated version of the electricity supply business plan (RUPTL). It reflects ten-year forecast of electricity growth followed with the development of power project plan to meet those demands.

In 2018, the projection of total demand for 2026 has been revised to be lowered by 15.7% compared to forecast of 2017. Thus, a lower generating capacity power plant of 56 GW is now expected to be built by 2027, instead of 78 GW as previously proposed.

In 2015, a 35,000 megawatt (MW) electricity program was set up and targeted for completion by 2019. Based on 2018 RUPTL, less than 3,000 MW were in operation by end of 2018, causing the completion date to be postpone to 2024 as stated in PLN RUPTL (2018-2027).

1. *https://www.thejakartapost.com/news/2019/01/11/only-8-percent-of-35-gw-electricity-program-in-operation.html*

Achieving 56 GW of installed capacity is an ambitious plan. And a more significant challenge will be to ensure the fulfillment of energy supply in the future as prioritized by Minister of Energy and Mineral Resources (MoEMR) and PLN (PWC, 2018).

As an independent power producer (IPP), Cirebon Power has played a significant role to support government plans through the establishment of coal-fired power plants.

Based on PLN RUPTL (2018-2027), coal usage will remain dominant in Indonesia's primary energy mix with projected share up to 50.4% in 2025. With its abundant local supply from Sumatra and Kalimantan, coal is the most affordable option in meeting electricity demand due to its lower price compared to other energy sources. Using coal as an energy source becomes a preferred alternative to fulfill government's challenge in reducing electricity price.

Coal remains perceived as harmful to environment due to the emissions released from its combustion process. Nevertheless, based on RUKN (2015-2034), coal-fired power plants will still be required to fulfill the electricity demand in Indonesia. To reduce emissions or to achieve near-zero emissions from coal, Cirebon Power has adopted and applied advanced technology, such as high-efficiency low emission coal-fired power plant.

Our Approach
[G4-DMA]

- The application of clean coal technology to fully optimize coal capabilities.
- The development of Plant Modification Request (PMR) procedure to continuously improve efficiency and maintain reliability of our power generation.

The Application of Clean Coal Technology
[GRI 102-16]

Our High-Efficient Low-Emissions (HELE) coal power plant utilises supercritical and ultra-supercritical technology.

HELE coal power plants operate at increasingly higher temperatures and pressures and therefore achieve higher efficiencies than conventional Pulverised Coal Combustion units and significant CO2 reductions. These advanced technologies allow us to generate electricity using low calorific coal. It is cheaper than high calorific coal, thus helping the government to realise its plan of providing low cost electricity.

SUPERCRITICAL TECHNOLOGY
This technology is applied to enhance the efficient use of coal. Unlike subcritical power plants. Where more heat is required to evaporate the water in the boiling phase, the plant operates above the critical pressure (22.064 MPa) which removes the boiling phase from the cycle and improves the cycle efficiency.

TANGENTIAL FIRING SYSTEM AND LO-NOx BURNERS
NOx emissions are normally generated by excessively high temperature. Staging the air to some extent will slightly reduce the furnace temperature and therefore reduce the production of NOx. Our tangential firing system and LO-NOx burners are operated by directing the fuel and air streams from the wind box nozzles towards concentric firing circles. This tangential firing system provides more effective mixing of fuel and air through turbulence and diffusion, allowing enough time and composition for complete combustion of fuel.

ULTRA SUPERCRITICAL TECHNOLOGY (USC)
According to research, coal still dominates as the most used energy source. Environmentally friendly and economical power plant become crucial to meet increasing demand of energy throughout the world. Higher CO2 emissions increase the need for more efficient coal-based power generation. Ultra Super Coal Used Technology remarkably meets the requirements for high efficiencies in reducing both fuel costs and emissions. It also serves as a reliable supply of electrical energy at low cost. This technology will be as environmentally friendly as renewable power project of similar investment. Compared to an older coal-based power plant, this power plant can bring significant reduction of fuel needed over the life of the power plant and reduce emissions of around 20-30%.

Continuous Improvement Through Plant Modification Request (PMR)

To further reduce our environmental and social impact of existing technologies, continuous improvement of key performance metrics remain our priority to ensure plant efficiency and reliability. Our progression is documented through Plant Modification Request (PMR).

The sequence of modifications are determined based on predefined prioritization.

The scopes of PMR include:

"

We have invested up to 4 times incremental compared to 2017. This investment is made to improve the efficiency of operation and maintenance to achieve power plant which are operated efficiently, eco-friendly, and sustainable financially.

Electricity Generation Efficiency

[EU 11]

Since Cirebon Power started operation, plant rate efficiency have always been at 37-38%. Throughout 2018, we have formulated vital steps to improve our plant efficiency rate and identified the importance of accuracy in our measurement process. Thus, our commitment in 2019 is to have a valid efficiency performance test performed semi-annually by specialized third party. In 2018, modification on the plant start-up process have improved efficiency rate. It results to a time reduction per production up to three hours and eliminate inefficient boiler feed pump motor's operation. These modifications have reduced our electricity consumption for the process.

As part of our commitment to further improve our plant efficiency, several programs developed for year 2019 are as follows:

PROGRAM	Replacement of fluorescent into LED lamp	Additonal timer on lighting system	Additional timer on cooling system	Installation of baby cooling pump on force cooling
	220	68	1,181	316
Optimization of cooling water pump	Optimization of cooling tower	Optimization of electrostatic precipitator	Conversion of all volatile treatment (AVT) into oxygenated treatment (OT)	Modification of vibration screen for coal handling
180,000	12,000	27,000	200	8,000

Planned energy reduction (in GJ)

Furthermore, we continuously innovate to improve our efficiency by reducing technical losses from pressure, temperature lost, condenser pressure lost, and increasing cooling tower efficiency. In 2018, our technical losses were coming from turbine loss of 2.86% and boiler loss of 0.95%.

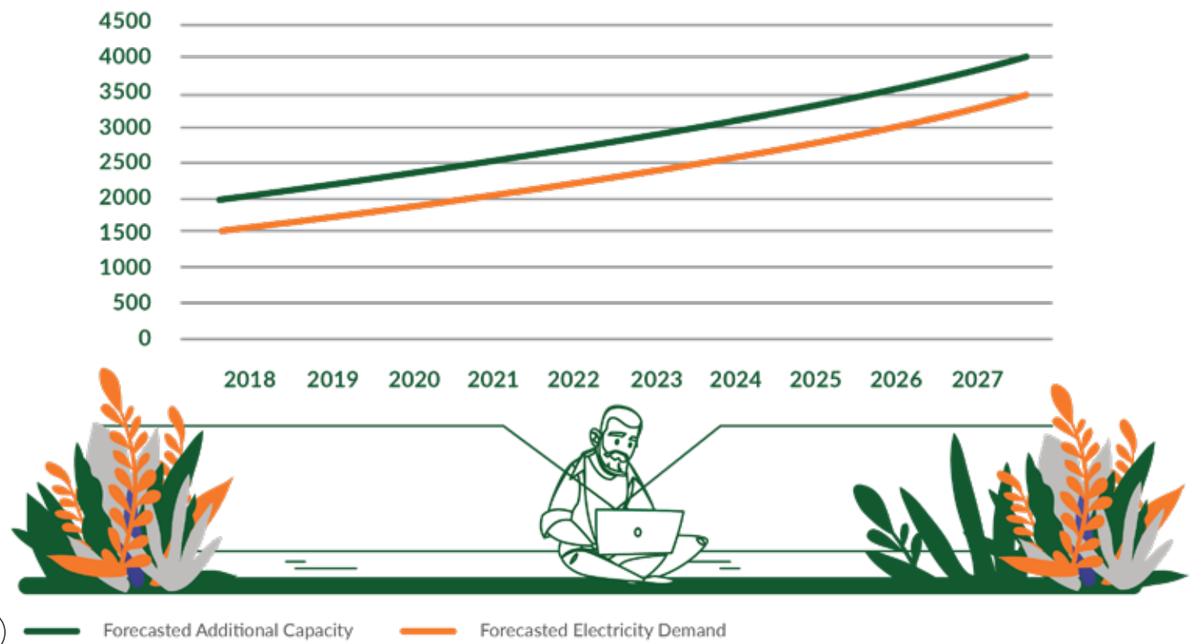
While in 2017, our technical losses were coming from pressure lost at rate of 0.22%, main steam temperature lost at rate of 0.18%, hot reheat steam temperature lost of 0.14% and also condenser pressure lost at rate of 1.5%.

Reliable Energy Generation

[EU1] [EU10] [G4-DMA (FORMER EU6)]

Based on PLN RUPTL 2018-2027, Indonesia's electricity demand is projected to grow at 6.86 annually. It will reach up to 443 Twh by the end of 2027 while the total electricity capacity is targeted to be at 106 GW with 56 GW of additional capacity needed to be installed. This projection is also driven by government plans to increase current electrification ratio from 98.05% into 99% by the end of 2019. To cope with this rapid increase of electricity demand, Indonesia's government has developed 35,000 MW Power Plant Program. And as independent power producer (IPP), we contributed through the construction of a 1x1000 MW coal-fired Ultra Supercritical power plant.

Graph of Comparison between Additional Capacity and Forecasred Demand for Period 2018-2027



Maintaining the stability and improving the reliability of existing plants is critical to meet the electricity demand based on government regulation and energy outlook.

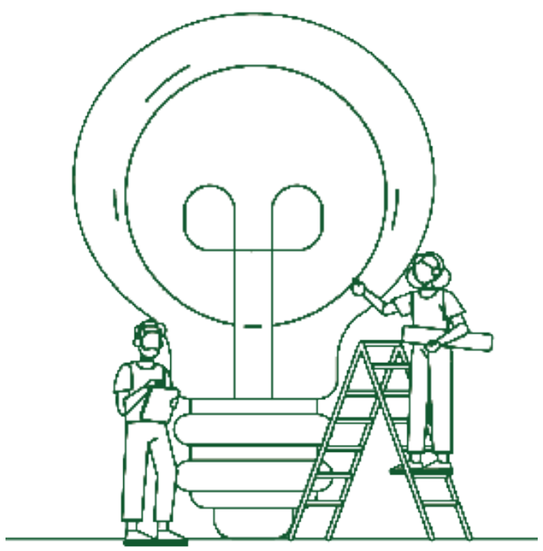
In 2018, PMR procedure implemented two main strategies. The objective are preventing failures on critical components of power plant that could threaten our plant business operation and power supply security.

Our strategies includes:

- Installation of more advanced boiler tube leak detection's system.
- Minimization of outage period through management control.

Boiler is one of the most critical equipment in a power plant. Around 60% of boiler outages are caused by failure on the boiler tube. Our advanced boiler tube leak detection's system allowed us to monitor operation and detect boiler tube leakages at the earliest stage. So that proper corrective actions can be taken in advance, reducing further damage on our boiler that could lead to productivity losses due to unscheduled shutdowns. The modification which enables early fault detection has contributed to extending the life and improving reliability of our power plant.

As we rely on coal in our power generation, keeping enough supply of coal is paramount to ensure the availability and reliability of power supply. Thus, we have to forecast demand and prices of raw material correctly. To achieve an economically viable plant operation, while keeping in mind that demand from customers fluctuates on a daily basis depending on the coal price. On top of that, we have set up coal price strategy to ensure proper supply of coal. We also have preventive maintenance strategy and minimum requirement of coal stockpile level.



Transmission and Distribution

[EU3] [EU4] [EU12]

The electricity that we produce from our power plants are purchased by Indonesian government (Perusahaan Listrik Negara / PLN), as the national electricity service provider. In 2018 and 2017, the power produced by Cirebon #1 plant is distributed to the Java Bali Power Grid via PLN Brebes (185 MW) and PLN Sunyaragi (475 MW). Cirebon #1 power plant provides approximately 1.5 km transmission line while Cirebon #2 power plant is designed with 18.2 km lines with a voltage level of 150 kV.

Energy and Emission

[GRI 302-3] [GRI 305-1]

In 2018 and 2017, we consumed 2,513,957 and 2,186,885 ton of coal respectively and 1,432 and 1,244 KL fuel oil to initiate plant start up after maintenance or outage.

In 2018, our energy intensity based on energy consumed within the organization is 12.70 MJ/kwh of electricity produced, which is equivalent to 0.98 kg CO_2 emitted per kwh. Whereas in 2017, our energy intensity was 25.5 MJ/kwh of electricity produced, which is also equivalent to 0.98 kg CO_2 emitted per kwh. There is no change in emission intensity between 2018 and 2017. The reduction of our energy intensity this year is the result of efficiency improvement in power plant operation. The amount of electricity sold is based on some aspect such as Planned Outage (PO) for Major Overhaul (MOH), Forced Outager (FO), Reserve Shutdown (RS), Outside plant Management Control (OMC), Forced Derating and Maintenance Derating.

Our emissions mainly depends on the technology and materials used in our plant operation. Our advanced clean coal technology has helped us maintain the low level of NOx, which is significantly below the threshold set out by the government of Indonesia. Furthermore, using low sulfur content also ensures low level of sulfurous oxides (SOx) emissions being released into the atmosphere. Until now, we are yet to participate in any carbon trading initiative.

In 2018, we managed to implement energy audit conducted by a certified third party and vehicle emission testing program to enhance our operation efficiency further.

3 SOCIOECONOMIC

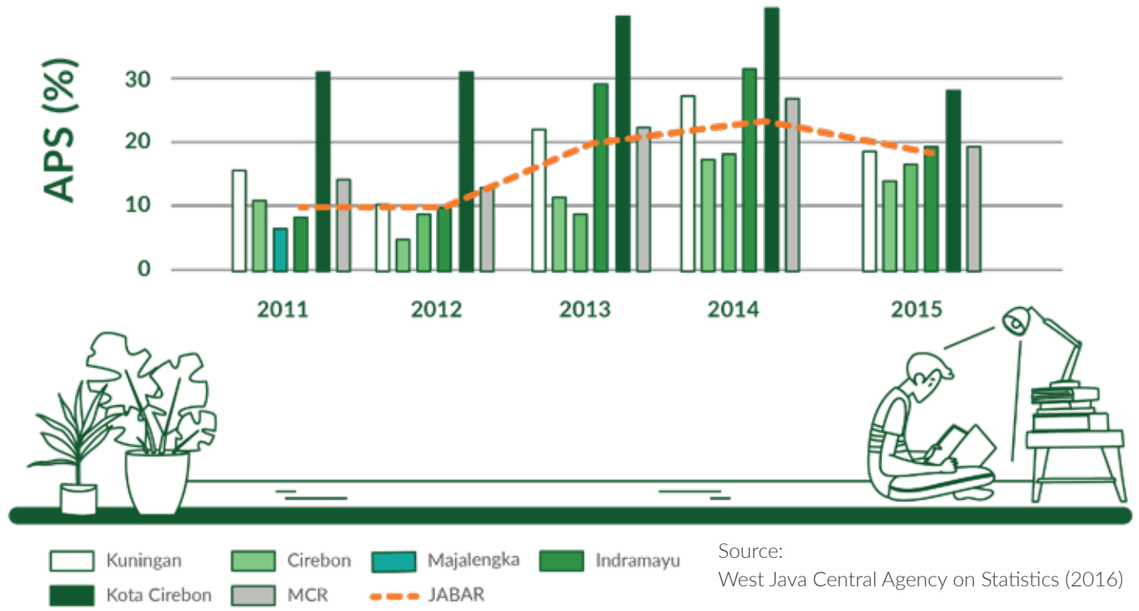
Success of our business is driven by the well-being of the communities we serve.

Why It Matters?

Statistics Indonesia (BPS) (2017), reported that Cirebon City's population, where we operate, has an annual growth rate of 1% since 2014. Currently, It has become one of the biggest cities in West Java with total population over 313,000 people. Cirebon is known for its trading & services industry. Which has reach spread to district of Cirebon, Indramayu, Majalengka, and Kuningan districts, thus forming an area called Greater Metropolitan Cirebon (Metropolitan Cirebon Raya/MCR).

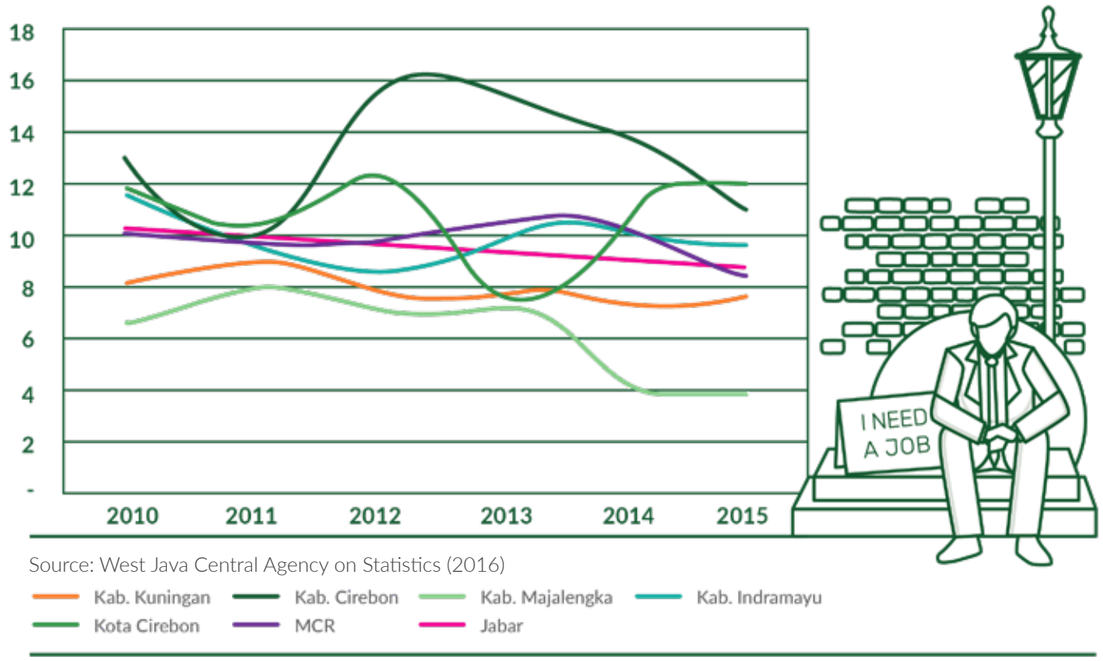
Despite its growing population, lower economic and social conditions still exist at Greater Cirebon (MCR) compared to the average of West Java. It is caused mainly by unemployment and uneven net enrollment rate of tertiary education among districts.

Net Enrollment Rate of Tertiary Education



Source:
West Java Central Agency on Statistics (2016)

Unemployment Rate



Source: West Java Central Agency on Statistics (2016)

Looking at the above condition, we realize our responsibilities as a private sector towards the society. We are responsible not only to the communities who live around our plant sites but also on a much broader area. Which is the key to boost an inclusive economic growth in the Greater Cirebon area.

This growth is in line with global agenda of Sustainable Development Goals (SDGs) as established by the United Nations (UN). Especially for point number 1, 2, and 8 (No Poverty, Zero Hunger, Decent work and Economic Growth).

Ever since Cirebon power established, we realize that we have a moral obligation to improve the livelihood and wellbeing of our surroundings through community development programs. We believe that our success is driven by the well-being of the communities we serve. Therefore, the welfare of the society is one of the keys to the success of our stakeholders.

Our Approach

Our approach in contributing to the socioeconomic development of Greater Cirebon consists of five pillars:

Providing Skills to Empower the Community

Support Livelihood Optimization and Income Improvement

Restoration Program for Community Livelihood

Getting Better Quality of Life

Strengthening Our Community Relations

As a continuous effort to achieve sustainable and inclusive economic growth throughout Greater Metropolitan Cirebon, we implemented our approaches towards communities surrounding our power plants and to the broader communities in Ring 1 and Ring 2. For example, students of our vocational centers are residents of the villages that are located in Ring 1 and Ring 2.

Specifically, in 2018, our most notable contributions towards public benefits are in form of "House of Terasi" and vocational center, which were awarded in Indonesian Sustainable Development Award 2018 for its successes in generating positive impacts for local society. We hope that these programs will accommodate people of MCR who have low access to tertiary education to boost their employability skills and lower the unemployment rate of MCR.

Again, in line with SDGs and the Cirebon Power vision and mission, our community development becomes the goal of social and economic contributions around the power plant location.

Community Empowerment Through Skill Development

Shrimp Paste Makers Group – "House of Terasi" of Kanci

Throughout 2018, several products from Rumah Terasi Kanci have entered 18 leading souvenir shops in Cirebon City and sold online.

Cirebon Batik Artisans Group

Cirebon is also well-known for its Batik. Therefore, since 2014, Cirebon Power has started conducting training to surrounding community who has zero knowledge about batik.

Rejeki Mundu Fish and Crab Cracker Makers Group

Cirebon Power forms a group of fish cracker and crab makers in Mundu Pesisir Village (an area inhabited by fishermen). We expect that they can sell their product around their village as an additional income.

Ratu Cirebon Makeup Artist Group

In 2014, Cirebon Power with the District Manpower Service (Disnakertrans) Training Center (BLK) had formed a makeup artist group. In mid-2018, this group has expanded into two groups, and each of them already have hairdressing salon equipment.

Sewing Group-Klambi Cirebon

In 2015, sewing training was given to several communities. At that time, Cirebon Power provided sewing equipment placed at Taman Cirebon. Klambi began accepting orders from Cirebon Power and local community.

Pawon Mimi Cooking Group

Cirebon Power also helps empowering house wives in Kanci Village through cooking programs. This group serves catering orders from local residents. Cirebon Power helps them by providing cooking and catering utensils.

Support Livelihood Optimization and Income Improvement

Jelombang Selar Fishermen Group

Cirebon Power provides nets and fishing gear packages for fishermen group that consists of 50 persons. Cirebon Power also participates in mangrove planting activities.

Berkah Mandiri Cricket Farmers Group

Cirebon Power forms a cricket farmers group and keeps providing assistance and guidance by partnering with Cirebon Regency Agricultural and Livestock Office to increase productivity.

P3A Farmers Group (Group of Water User Farmers)

Cirebon Power provides a 23 PK/8 inch water pump that can irrigate 115 hectares rice fields from Kanci river. Farmer groups were formed so they could finance the operations and maintenance of the pump independently.

Mundu Fisherman Forum

Cirebon Power contributes 4 machine boats to the fisherman forum to make them more productive.

"Mas Pele" Catfish Breeders Group

In August 2018, we started to spread 40,000 catfish seeds in several ponds in Kanci Kulon.

Restoration Program for Community Livelihood

Micro Financing

In 2018, the amount invested for this program is more than 1,184,000,000 Rupiahs distributed to 413 people who involve in 16 small home-based businesses.

Since early 2018, Cirebon Power has continuously strengthened its cooperation with related stakeholders to improve the training quality and varieties of its subjects. Based on type of services required by CP 1 and 2, such as operation and maintenance, welding, fitterm scaffolding, and other workforces.

Maintaining Life's Quality

Health Program

Fishermen Insurance
In 2018, insurances are given to 3,000 fishermen living in 10 nearby villages around Cirebon Power.

Free Medical Treatment
In 2018, 2,163 beneficiaries from 5 villages had received free check-up and medical treatment.

Integrated Health Service Center
Cirebon Power has contributed to its 44 guided Health Centers by supplying baby scales in 2018.

Ambulance Car
In 2018, Cirebon Power supplied ambulance cars to Bandengan and Mundu Pesisir village.

Educational Program

Rewards for Outstanding Students
In 2018, we gave donation and school stationeries for 1,200 outstanding students from 20 nearby schools. Cirebon Power also contributed by improving paving blocks, toilets, and fences to several elementary schools to ensure better teaching process.

Study Tour
Since 2012, every month, Cirebon Power invites 40 students ranges from high school to universities to join study tour program. In 2018, approximately 600 students participated in this study tour program.

Reading Club and Literacy in Coastal Village
In 2018, Cirebon Power cooperated with Fishermen Community, Regional Police of West Java and Gelemaca Teachers Community to create Reading Club program. They also built Children's library in Citemu Village.

"Saba Sekolah"
The activity started in 2018 by visiting Cirebon 1 SMKN, Cirebon Muhammadiyah University, and Gunung Jati Cirebon Swadaya University.

Internship
Cirebon Power provides internship opportunities for students allowing them to get adequate working experiences. In 2018, there are approximately 30 students participated in these programs.

Infrastructure & Enviromental Program

Cirebon Power Park

In order to provide more public spaces to the communities, our company has introduced Cirebon Power Park built over 5 hectares of land in 2018. During Cirebon Power Park construction, together with the Technical Faculty of Gunung Jati University, we provide opportunities to empower village-owned business entities (BUMDES). In 2019, a library will be set up inside the park as an educational place for the local communities.

Strengthening Our Community Relations

Culture and Sport

Nadran Festival and Earth Alms Activity

As part of our commitment to the preservation of the culture of fishers and farmers, Cirebon Power supports cultural activities in 6 coastal villages and four cultural agri villages.

National Santri Day

NU's Cirebon branch initiated Santri as the future generation of Muslim students. These activities include pilgrimage to tombs, carnival and mass prayer.

Buntet Football Club Support

As part of establishing relationships with young people. Cirebon Power provides football equipment along with other contributions such as the development of young talents from Buntet to be a professional soccer players.

Volleyball Tournament

At the commemoration of the 73rd Indonesian Independence Day, Cirebon Power held a volleyball tournament between villages with monetary prizes.

Spiritual

Iftar

In May 2018, there was an iftar with communities around Cirebon Power. Located in the vocational building, hundreds of community members attended the event.

Sharing "Qurban" during Eid al-Adha

In August 2018, coinciding with the Eid al-Adha feast, Cirebon Power participated in Eid al-Adha by sharing sacrificed animal (Qurban) such as cattle and goats to the public.

We always ensure that operations conform to certain performance parameters to be able to expand our operations, thus until now we do not have any fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area. [GRI 419-1]

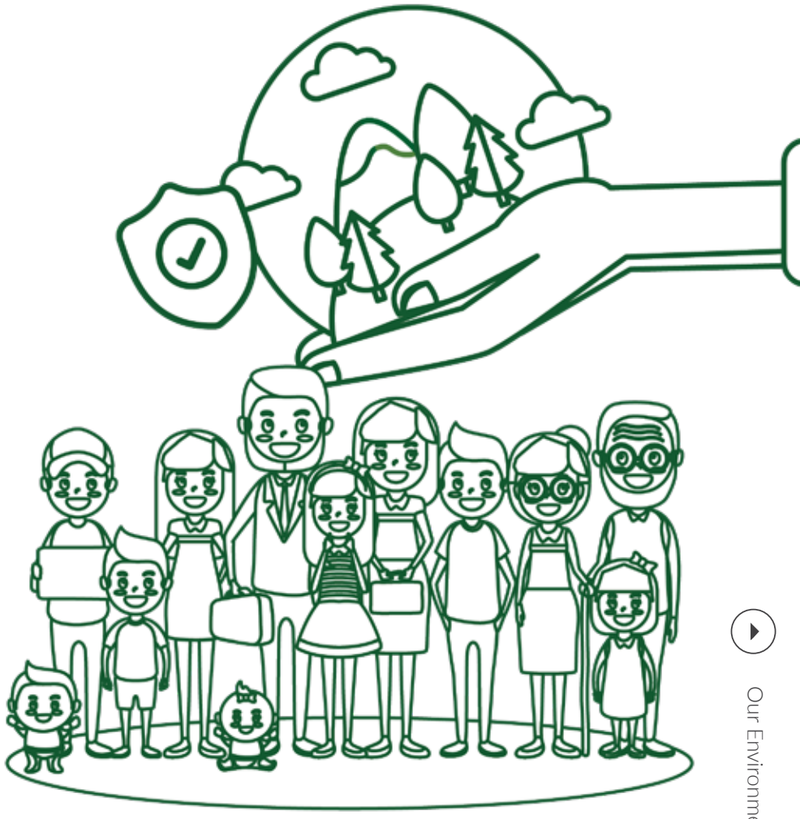
4 OUR ENVIRONMENT

Effective environmental management across our operations and value chain is the key to support our compliance with applicable laws and regulations. As a responsible business, we are committed to protecting the environment.

Why It Matters?

We realized that all industries have their responsibility and role in protecting the environment. We believe that this is a vital component not only for the sustainability of our business in this generation but also for many generations ahead. Our commitment and efforts are already proven since the beginning, as we become one of the pioneers in the implementation of clean and efficient coal technology.

We apply precautionary principles as preventive action to ensure effective monitoring and protection of the environment. We conduct professional, measurable, and accountable water, waste, and air emission management as well as local endemics preservation. Working collaboratively with suppliers, customers, NGOs, and governments is key to the success of our environmental programs. These efforts demonstrate how we are embedding the SDGs into our sustainability strategy.



Our Approach


Conservation of Biodiversity


Air Emission Management


Water Quality Management


Wastewater Management


Hazardous and Non Hazardous Material Management


Environmental Compliance

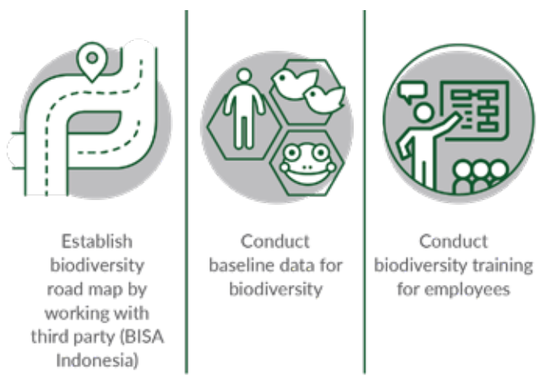
Conservation of Biodiversity

[GRI 304-3]

Biodiversity is the key indicator of the health of the ecosystem. A wide variety of species will be affected by pollution, climate change, or human activities. The disappearing fraction of a species may have unforeseen impacts, but sometimes can snowballed into a destruction of an entire ecosystem.

Following our eagerness urge to preserve endemic species, we created several goals and programs to tackle issues around ecosystems and biodiversity.

This year, we decided to establish our 2019 goals related to biodiversity:



Whereas, our ongoing programs include:

Green Belt

Green belt is carried out by planting mangium (Acacia mangium), mahogany (Swietenia macrophyila), glodogan (Polyalthia longifolia) and mangrove. In coastal ecosystems, there are mangrove plants with a thickness reaching up to 400 m from the shoreline and dominated by wide leaf api-api (Avicennia officinalis L.). On top of that, there are black mangrove species (Rhizopora mucronata Lmk.). Both types of mangroves grow on muddy soil and tolerant to sandy substrates.

In 2018, all of the mangroves in 42.7 Ha had flourished.

The existence of bird species is one indicator of terrestrial fauna life. More and more species of birds and their population indicate that existing habitats support the survival of these species. We monitor the bird species in our green belt which are listed in IUCN Red List and protected by Environment and Forestry Regulation No. 92 2018.

The bird species and their status as follows

No	Name	Species	Status
1	Javan Kingfisher	*Halycon cyanoventris*	Least Concern (IUCN Redlist)
2	Collared Kingfisher	*Todirhamphus chloris*	Least Concern (IUCN Redlist)
3	Javan Plover	*Charadrius javanicus*	Near Threatened (IUCN Redlist); Protected (PermeLHK 98/2018)
4	Red Knot	*Calidris Canutus*	Least Concern (IUCN Redlist)
5	Green-backed Heron	*Butorides striata*	Least Concern (IUCN Redlist)
6	Chinese Egret	*Egretta eulophotes*	Vulnerable (IUCN Redlist), Protected (PermenLHK 98/2018)
7	Sooty-headed Bulbul	*Pycnonotus aurigaster*	Least Concern (IUCN Redlist)
8	Yellow-bellied Prinia	*Prinia flaviventris*	Least Concern (IUCN Redlist)
9	Little Pied Flycatcher	*Cyornis rifugastra/Ficedula westermanni*	Least Concern (IUCN Redlist)
10	Green Sandpiper	*Tringa ochropus*	Least Concern (IUCN Redlist); Protected (PermeLHK 98/2018)
11	Common Sandpiper	*Tringa hypoleucos*	Least Concern (IUCN Redlist)
12	Cave Swiftlet	*Collocalia linchi*	Least Concern (IUCN Redlist)

Mangrove Cultivation and Restoration

This initiative has become our annual agenda. We plant numerous trees with the surrounding communities to preserve the presence of endemic plant diversity. Starting from the construction process in 2009, we have continued to plant and conduct mangrove and tree pruning processes.

In 2018, together with local environmental NGOs and 15 Pokmaswas fishermen, we had cultivated 5,000 mangrove trees in Waruduwur and along its riverbank. For example, in Kanci Kulon, we have planted 50,000 mangrove seedlings on the river mouth. This initiative has been carried out by cooperating with Jelombang Selar fisherman group.

In some locations where the mangroves are dead or damaged, replanting was carried out. This coastal conservation activity started several years ago. As a result, the mangroves in the coastal area around Cirebon coal-fired power plant grown well and become a new ecosystem for coastal animals in the area. So far, we have planted more than 30,000 trees and 80,000 mangroves.

Each village had as many as 5,000 trees allocated for mangrove seedlings

Community Environmental Forum

Since 2015, the Community Environmental Forum has been partnering with Cirebon Power, and has remained active in 2018. This forum comprises of 17 cross-professional and cross-region members who are committed to the environment. Their activities range from planting and restoring mangroves in the surrounding area of CP1/CP2 to providing mangrove seedlings. In 2018, we provided mangrove seedlings to three villages, namely Kanci Kulon, Waruduwur and Mundu Pesisir village. Each provided had as many as 5,000 trees allocated for mangrove seedlings.

Other activities include planting of 20,000 trees such as soursop, longan, mango, Terminalia catappa, mahogany and other varieties of trees on the entire surrounding areas of Cirebon Power. With the help of Karang Taruna and other like-minded community forums, we prioritize unoccupied land on the roadside in distributing our plants.

Aquatic Biota Regular Monitoring

Every three months, an external certified laboratory conducts regular water monitoring in our surrounding coastal areas and rivers. Aquatic biota monitoring has been carried out by conducting water sampling and marine water sediments. We collect samples of plankton as biological indicator for aquatic ecosystem. It represents floating living organisms and bentos represent organisms that live at the base of waters. This year's results indicate that we have complied with the environmental regulations.

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Conservation Biodiversity

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Green Belt

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Mangrove Cultivation and Restoration

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Aquatic Bioata Regular Monitoring

Pg.42
Air Emission Management

Pg.44
Water Management

Air Emission Management

[GRI 305-7]

Coal-fired electricity generation will still be the main generator to fulfill Indonesia's energy demand in the future. To help improve air quality for the people, we have maintained a high performance of pollution control equipment for our coal-fired units. It helps to monitor the emission of sulphur dioxide, nitrogen oxides, and particulates.

Even though we already used clean coal technology, our company still carefully conducts monitoring of emissions produced during the production process. This monitoring system is used as guidelines to observe to what extent burning ash resulted from plant activities affect the environment and to assist us in reducing air pollution. In the process of generating energy, coal-fired power plants produce burning ash, in the form of fly ash and bottom ash.

We have created solutions to control emissions which are:

01.

Coal Storage Wind Breaker

Our coal shelters are equipped with a 13-meter windbreaker that holds the wind around the shelter and prevents coal dust from flying into the surrounding environment. We also planted more than seven layers of Acacia mangium trees to reduce the potential pollution from the coal dust.

02.

Electrostatic Precipitator

The Electrostatic Precipitator function can be monitored from emission generated. Total particulate emissions produced range from 25mg / Nm3, well below the government threshold of 100mg / Nm3, with a thickness of 10%, or only half of the maximum limit set.

03.

Coal Yard Dust Suppression

The plant's coal yard is also equipped with a dust suppression system where water is sprayed onto the coal during loading and unloading activities in dry seasons.

04.

Continuous Emission Management System and Ambient Air Monitoring System

We use Continuous Emission Monitoring System installed in Emission Chimney that operates continuously (24 hours a day, 7 days per week). The monitoring of chimney emission-quality is manually done every 3 months by a certified laboratory. Cirebon Power has also installed an Ambient Air Monitoring System (AAMS) approximately 4.5 km west of the chimney. This location is indicated to potentially have the highest concentration of NOx caused by the Plant's operation. It will allow us to monitor and record NOx, SOx, CO, CO2, and particulates. Throughout 2018 our Continuous Emission Monitoring System (CEMS) test result has complied with government regulation.

Water Management

[GRI 303]

The availability of clean water sources is a critical issue in Indonesia and worldwide . As we used water, we realized our responsibility to manage these limited resources sustainably following the best practices in our industry.

To support our power generation, we gain permission from the government of Indonesia to take in nearby seawater from Java Sea and uses it as our primary source of water. We source water from seawater and convert it into potable water to fulfill our operational needs. Over 701 and 749 million m3 of water is required to run the whole operation in 2018 and 2017 respectively, which is mainly used for the boiler, cooling tower, and office. During the year 2018 and 2017, we withdrawn over 1,102,147 m3 and 1,099,445 m3 water from the sea to make up the loss from evaporation and daily operation.

As an effort to reduce water usage from the sea. We are reusing water from cooling tower facility which has been recycled and help to reduce water usage. In 2018 and 2017, we have recycled over 635 and 598 million m3 or equal to 80-90% of the whole water consumption.

We continuously measure our potential impacts on water quality by monitoring and implementing technologies to address water contamination and high temperature of discharged cooling water. Our management strategies are:

Groundwater Monitoring Wells

It is located around storage areas of fly ash, bottom ash, and coal storage. This groundwater monitoring wells are built to monitor groundwater quality through continuous water discharge monitoring. The wells located between temporary shelters of bottom ash will be used as a comparison of groundwater quality before and after the operation of the power plant.

Located around storage areas of fly ash and bottom ash and coal storage areas, this groundwater monitoring wells are built to monitor groundwater quality through continuous water debt monitoring. The wells between the temporary shelters of bottom ash compare the groundwater quality before and after the operation of the power plant.

Our certified third party has reported that our power generation process does not alter groundwater quality around the site. Good level of indicators throughout 2018 shows it.

Water Quality Monitoring

We periodically conduct monitoring on water quality once every six months around our plant site, which includes seawater, groundwater, and river.

We consistently monitor seawater quality by taking several sampling points around power plants to be analyzed by certified third-party laboratories every 6 months. In 2018, all parameters were shown at normal level and within the Decree of Minister of the Environment's standards on water quality.

For groundwater, it is vital that the water complies with health standards regulated by the Ministry of Health. We are also happy to announce that results shows that groundwater quality surrounding the area meets the required standard set.

We also aim to increase the quality of river surrounding the factory. We initiate a water management system that would includes regulating the quality of water in the streams surrounding the factory site.

Impermeable Membrane

Layers of membrane sheets are used to coat coal storage, coal run-off setting pond, and temporary ash storage. It is made of High-Density Polyethylene (HDPE) to ensure that no bit of coal and ash waste seeped into the soil, preventing water and soil contamination around the plant site. Throughout 2018, we still use and continue to monitor the membranes.

Interceptor Pit

This pit is where the last drop of rainwater runs. Water flowing through this pit is filtered out and precipitated, resulting in water that is clear of any remaining coal particles. This clean water then stream into the sea through our sewers.

Flood Early Warning System

Our flood early warning system is important to mitigate climate change risk during extreme seasons, such as avoiding flood during high rainfall and drought during low rainfall. Cooperating with the government institution, we developed a flood early warning system in the upstream and downstream of the Kanci River. Equipped with detection and siren sensors, this system will provide early warning to residents if water levels have exceeded normal limits. All the systems we build are our commitment to generate energy in a smarter, more efficient and environmentally friendly way. In 2018, we still maintain this system to ensure the safety not only for the employees of the company but also for the surrounding community.

Wastewater Management

[GRI 306-1, GRI 306-5]

We are responsible to ensure that the wastewater disposed to the sea and rivers complies with the quality standards set by the Government of Indonesia. Until today, all water disposal locations have met the quality standards as approved through the Decree of the Regent of Cirebon and the Decree of West Java Governor.

In 2018, we managed to treat and discharge around 31,563,211.8 m3 of water with discharge quality within the permissible limit defined by standard.

Strategies that aid us in managing our wastewater includes:

1. Main Wastewater Treatment Plant

This conventional water treatment plant treats all wastewater from the boiler so that the output water meets the required standard.

2. Cooling Tower

Our cooling tower technology plays a vital role in treating our wastewater before it can be safely released into the sea. The minister of the environment set standards that require water discharged to the sea should not exceed 2°C from the initial temperature to avoid any harmful impact on the marine ecosystem.

Our cooling tower system continuously contributes to managing the temperature of water output at a safe level, which is below 2°C difference from the sea water intake. No decrease of sea water quality has been recorded until today, as proven by our good level of wastewater quality parameters.

3. Wastewater Treatment Plant Ash Pond

This water treatment is specifically installed to handle all of the wastewater from ash pond.

4. Run-Off Settling Pond

It is used to treat the leachate water from coal stockpile to ensure that coal and other pollutants in rainwater can be deposited or sent to the wastewater treatment plant in the case of black/brackish water which signifies further treatment of water needed.

To measure the effectiveness of our strategies, we monitor our wastewater quality regularly by collecting samples and conduct analysis in cooperation with certified third-party laboratories. Throughout 2018, results showed that our water discharge complied to the standards permitted by the Ministry of Environment and Forestry. The results indicate that our operations are safe for the environment and complied with the regulations.

Hazardous and Non Hazardous Material Management

[GRI 306-2, GRI 306-4]

As a coal-fired power plant company, our major solid wastes, namely fly ash and bottom ash, are sourced from the coal combustion process. To minimize the negative environmental impact of these hazardous wastes, Cirebon Power consistently applies Good Mining Practice and environmentally-safe mechanism. Preventive efforts and routine monitoring throughout our operational activities are being done regularly.

End-to-end mining process is planned and conducted as part of our responsibilities to minimize negative environmental impacts. All of our efforts have been incorporated through an integrated management system as a foundation of our company in moving towards environmental sustainability. Our environmental management system relating to hazardous and non-hazardous waste consists of targets and programs as follows:

1. Fly Ash Silo

Currently, Cirebon Power has 2 units of fly ash silos with a total capacity of 1,350 tons. These shelters serve as a temporary storage of fly ash before being transported by trucks into the cement factory, who will then re-use the ash as prime material in their cement production.

Additional/auxiliary fly ash silo with more than three (3) times the capacity of the original silo has been installed. It is used to store fly ash during major public holidays, especially during the Eid Mubarak. Because ash trucks are not allowed to pass public road.

2. Temporary Ash Pond

Temporary Ash Pond are built separate from Fly Ash Silo. It is used only during an emergency when the silos are full. Such as the long holiday season.

3. Hazardous Waste Temporary Storage Building

Not only fly ash, Cirebon Power also manage other wastes with hazardous and toxic labels, such as oil, lights, cartridges, resins, plastic membranes, batteries, and chemicals. These types of wastes will be stored in the warehouse before being shipped and processed by certified contractors.

4. Chemical Secondary Containment

To avoid any potential risks caused by our chemical wastes, we prepare reserve reservoirs that can accommodate up to 110% of chemicals.

During the whole year of 2018, more than 99% of our hazardous wastes is handed over to the cement industry and thus, preventing hazardous wastes from contaminating the surrounding area.

We also made sure any waste that will be disposed would be handled by professional waste disposal company. We audited the waste disposal company every six months.

Environmental Compliance

[GRI 307-1, GRI 102-12]

Cirebon Power is located at an area of 315 Hectare in Cirebon Regency. Unit II Cirebon Power is built on government-owned land through a land use cooperation agreement with the Ministry of Environment and Forestry of Republic Indonesia (MoEF). This was accomplished with the aid of a recent major government policy which boosts the acceleration of infrastructure development and minimize land acquisition barriers by using the state owned land. We are the first company to undertake development with the scheme. The area of Unit II is the land owned by MoEF previously utilized by State Forest Company (Perhutani).

We believe that data validity is an important aspect and act as a guideline in monitoring environmental performance which becomes our priority. Every target and program is documented in Objective, Target, Program (OTP) in accordance with ERA (Environment Risk Assessment), environmental management standard, internal monitoring, and external audit. In the process, OTP is integrated with International Environmental Management System (EMS) ISO 14001. We consistently conduct sampling of water quality, air quality, waste, and other environmental parameters in laboratories. These laboratories have been accredited ISO 17025 by National Accreditation Body of Indonesia (KAN) and registered in the Ministry of Environment.

In 2018, we managed to keep our standards up by sustaining our environmental compliance as we are awarded Blue PROPER from MoEF. We also stepped up our commitment towards environmental impact further by setting target to achieve green PROPER by 2020. Until today, no administrative sanction and fine related to violation of quality standards or ecological management has been recorded.

5 EMPLOYEE EMPOWERMENT

In 2018, we had improved policies and requirements that refer to the OHSE program to our permanent/ new employees, contractors, and visitors.

Why It Matters?

The environment has always been linked to sustainability. However, the real aspect of sustainability is about maintaining the existence of human beings in this world. A similar thing also goes with the company's sustainability. A company can only be sustainable if it can focus not only on preserving the environment, but also to ensure the health, safety, and well-being of its workers. We believe that human resources are the main assets that are crucial in the achievement of the Company's sustainable plan. Our primary focus in the human resource's strategy is to ensure the health and well-being of our employees, contractors, and units. Hence they can contribute to business growth optimally. We applied the same principles to our contractors and subcontractors to ensure the comfort and safety of our work environment.

A company can only be sustainable if it can focus not only on preserving the environment, but also ensure the health, safety, and well-being of its workers.

We protect the welfare, safety, and health of our employees in line with Law no.13 of 2003, articles 86 & 87, which stated that employee has the right to get protection from their workplace. In 2018, we had improved policies and requirements referring to the OHSE program to our permanent, new employees, and visitors. The aim will be to provide the latest information regarding the project areas that change frequently.

We respect the voices of our employees. Cirebon Power facilitated discussions and feedback from our employees in formulating the company rules and work agreement. [GRI 102-41]

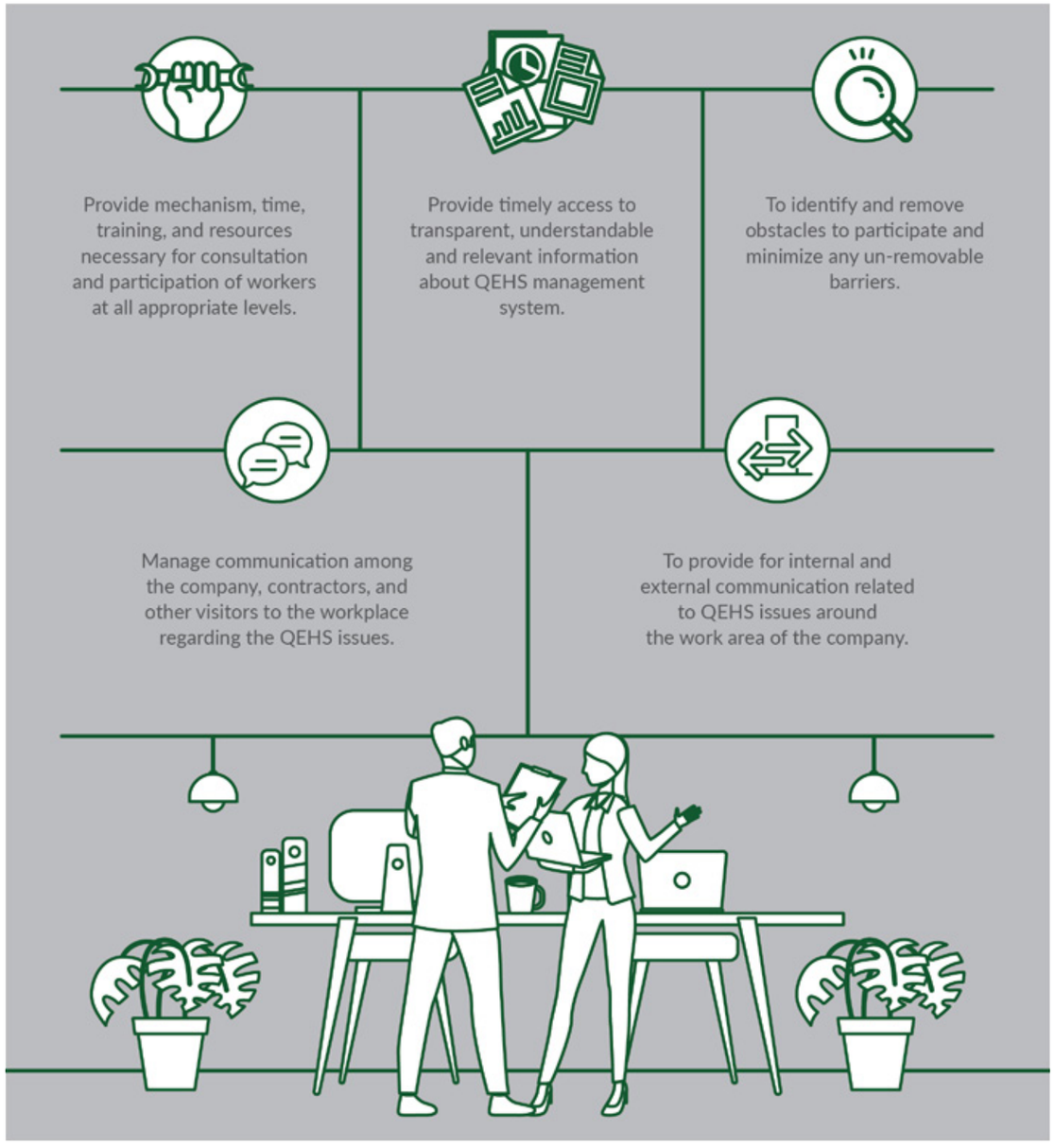
Our Approach

Quality, Environment, Occupational Health & Safety Committee

[GRI 403-1] [GRI 403-2] [GRI 403-3]

As a manifestation of the Company's commitment to OHSE management implementation, Cirebon Power has established a committee of Quality, Environment, Occupational Health & Safety (QEHS) in every unit. The primary objective will be to support the OHSE implementation in all aspects and activities of the Company as regulated by The Minister of Manpower Regulation No. Per 4 / MEN / 1987.

The objectives of this procedure are:



Local Government Regulation which supports the implementation of the procedure:

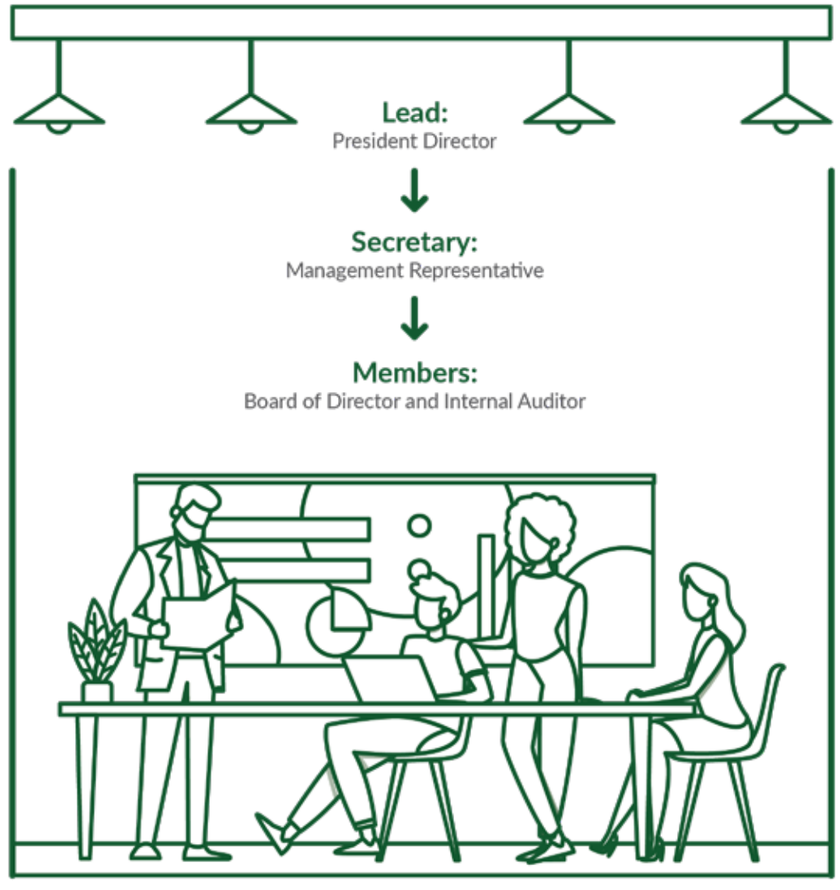
Act No. 1 Year 1970 about Occupational Safety and Health.

Act No. 32 Year 2009 about Environmental Protection and Management.

Government Regulation No. 50 Year 2012 about Implementation of Occupational Safety and Health Management System, Article 13.

Several methods are used to conduct QEHS communications such as meetings, bulletin, website, leaflet, banners, e-mail, letters, etc.

QEHS Committee Organizational Structure



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Quality, Environment, Occupational, Health and Safety Comittee

Pg.53
QEHS Committee Organizational Structure

Pg.55
OHSE Training Programs

Pg.56
Employee Training, Benefits, and Diversity

One of the indicators of our safety performance is the number of accidents. As a guide, we define 4 (four) types of injuries:

Near Missed, an incident that almost caused an accident.

Minor Injuries, an injury that does not require special care and can be handled by a doctor at the Company.

Lost Time Injuries (LTI), an injury that requires medical action/referral to the hospital. This injury can cause loss time for work.

Fatality, an incident that may cause death.

Below table shows total incident rate and the type that occurred during 2018.

Contractor Data

Type of Injury of independent contractors	Total Number of Injury (2018)		
Independent contractor (Unit C1)	Male	Female	Total
Light	0	0	0
Moderate	0	0	0
Severe	0	0	0
Fatal	0	0	0
Total	**0**	**0**	**0**
Type of Injury of independent contractors	**Total Number of Injury (2018)**		
Independent contractor (Unit C2)	Male	Female	Total
Light	4	0	4
Moderate	3	0	3
Severe	4	0	4
Fatal	0	0	0
Total	**11**	**0**	**11**

Throughout 2018, we recorded several light[1] injuries that occurred to our male contractors at the construction site of Cirebon #2. To prevent this, we intensify our training programs. We are aware that our contractors have a higher probability of having a work accident injury compared to our employees who work at the head office. Meanwhile, in Cirebon Unit #1, we are glad to report that no accident occurred during the reporting period.

Throughout 2018, there are no records of work accidents from our male and female independent contractors in Cirebon#1 and #2.

We also do not have any occupational diseases, lost workdays, or absenteeism, it means that we comply with all applicable laws and regulations related to human resources.

To continuously measure and improve the health and safety of our worker, 5% of the workers are represented by the Health and Safety Committee. The committee comprises of representatives from various departments to ensure the implementation of our health and safety rules, standards, and procedures. **[GRI 403-1]**

Contractor Data

Injury Rate of Independent Contractor	2018		
	Male	Female	Total
C1	0	0	0
C2	2.05	0	2.05

Currently, Cirebon Power has formulated and improved the policy and requirement for occupational health and safety for workers.

As a result, we conducted safety induction to all employees, and all elements who come to the worksite. The safety induction has been signed by Cirebon Power management, Hyundai project director, and related representatives. Policies that have been improved include:

Every employee/visitor who visits the project area should be given induction, and required to use safety equipment such as safety glasses, helmets, uniforms, and shoes.

Every employee/visitor should be given brief information about workplace safety regulations on-site.

Explanation of the restriction in the operation area.

We also have a medical room with doctors and paramedics on-site. It will act as our first emergency response facilities. Hence any incident that happened to our employee or contractors' workers on worksite can be treated quickly.

OHSE Training Programs

[EU17] [EU18]

In 2018, we prioritized training for our contractors to minimize work-accident in the future. The list below is the training programs held by Cirebon Power during 2018:

- First Aid Training
- K3L Awareness Enhancement Training
- Basic Lifting
- Inspector Scaffolder
- Refresh First Aid Training
- SMK3 Awareness Training and ISO 45001: 2018
- Refresh CP/NS (Competent Person / Nominated Supervisor) Training
- Defensive Driving Safety Training

QHS Quarterly contractor audit and external audit are conducted to ensure workers comply with the health and safety procedures.

Our contractors' scope of work for C#1 is operation and maintenance while in C#2, our contractors are responsible for engineering, procurement, and construction of the plant comprising of:

- Civil work
- Steel fabrication and erection
- Soil disposal and dewatering
- Reading and recording compression test (36 hours)
- Pile cutting
- Piling work
- Concrete work
  Soil work
- Tower construction

The total man-days worked by contractors were 259,650 of which 102,762 man-days were contributed to engineering, procurement, and construction activities and 156,888 man-days contributed to operation and maintenance activities.

All of contract employees in Cirebon #1 working at our work sites have undergone relevant health and safety training while in Cirebon #2, 416 contract employees have attended training related to health and safety.

Employee Training

[GRI 404-2]

Cirebon Power is committed to developing some of the training programs not only for our community but also for our employee/contractor. We are also committed to develop a training recording system so that the program will run efficiently. To improve our employee's quality, Cirebon Power has held several exclusive training to enhance their skills. The training is carried out to complement their needs, which are as follows:

New Government of Indonesia Regulation on Mining Area & Business Activities

ISO Integrated Management System Awareness (IMS) Training

IMS Internal Audit Training

Incident Investigation Training

Employee Benefits

[GRI 401-2]

We provide a salary to employees which consist of remuneration and allowance as a form of appreciation for their role in developing our business. The amount of employee remuneration is determined by several parameters, including employee category, assessment, and level of position. We also provide other benefits to our permanent and contract employees in the form of Religious Holiday Allowance, health insurance, medical benefits and the right for vacation time in accordance with existing regulations.

Employee Diversity

[GRI 405-1]

In supporting the Company's need to grow, we continuously strive to improve the quality of our human resources. Cirebon Power also committed for gender equality and equal job opportunities. Since field work will be more suitable for male, Cirebon Power allocate more position in the office for female workers as part of the company's management.

Cirebon Power promotes equal job opportunities to any candidate with the right talent to join as employees. Regardless of ethnicity, religion, race, and inter-group relationship and gender in accordance with the job requirements.

[GRI 102-8]

Cirebon Power	<30		30-50		>50		TOTAL	
C1	Total	%	Total	%	Total	%	Total	%
Male	0	0.0%	8	50.0%	2	100.0%	10	52.6%
Female	1	100.0%	8	50.0%	0	0.0%	9	47.4%
TOTAL	**1**	**100.0%**	**16**	**100.0%**	**2**	**100.0%**	**19**	**100.0%**
%	**5.3%**		**84.2%**		**10.5%**		**100.0%**	

Cirebon Power	<30		30-50		>50		TOTAL	
C2	Total	%	Total	%	Total	%	Total	%
Male	0	0.0%	26	83.9%	4	100.0%	30	78.9%
Female	3	100.0%	5	16.1%	0	0.0%	8	21.1%
TOTAL	**3**	**100.0%**	**31**	**100.0%**	**4**	**100.0%**	**38**	**100.0%**
%	**7.9%**		**81.6%**		**10.5%**		**100.0%**	

Total number of employees by employment contract and gender	Male	Female	Total
Permanent employees	26	17	43
Temporary/contract employees	14	0	14
Total	**40**	**17**	**57**

Total number of employees by employment contract (permanent and temporary), by region	C1	C2	Total
Permanent employees	14	29	43
Temporary/contract employees	5	9	14
Total	**19**	**38**	**57**

Total number of employees by employment type (full-time and part-time), by gender	Male	Female	Total
Full time C1	5	9	14
Full time C2	21	8	29
Part time C1	5	N/A	5
Part time C2	9	N/A	9
Total	**40**	**17**	**57**

6 ABOUT THE REPORT

Cirebon Power Sustainability Report 2018 aims to provide transparent, reliable, and balanced information on the economic, social, and environmental matters identified as the most important and relevant for the businesses as well as its stakeholders.

Reporting Approach

[GRI 102-10] [GRI 102-48] [GRI 102-49] [GRI 102- 50] [GRI 102-51] [GRI 102-52] [GRI 102-54]

Spanning business performance from January 1 to December 31, 2018, this is our second report. This report is being prepared following the GRI Standards: Core option, supplemented with the GRI G4 Electric Utilities Sector Disclosure. We plan to issue a sustainability report annually.

Cirebon Power published the first sustainability report on 10 September 2018, which covered 2017. There is a restatement for the 2017 Sustainability Report regarding the currency of investment value. The currency was reported as Rupiah. It is restated to US dollars. In this report, there are no significant changes in material topics and topic boundary from the previous release.

To improve readability, we include the GRI disclosure number at relevant sections of this report. A GRI Content Index is presented at the end of this report listing all disclosures contained in the report. This year, we have not done external assurance.

There is a restatement for the Sustainability Report 2018 about the data of water due to the data gasp. These data have been corrected or adjusted for this 2018 Sustainability Report. Furthermore, during the year 2018 and 2017, we withdrawn over 1,102,147 m3 and 1,099,445 m3 water from the sea to make up the loss from evaporation and daily operation.

This bilingual report is published in Bahasa-English and can be downloaded at Cirebon Power's website. We welcome feedback from our stakeholders, and questions should be addressed to:

Cirebon Power
Pondok Indah Office Tower 3 23rd & 25th Floor Jl. Sultan Iskandar Muda Kav. V/TA Pondok Indah South Jakarta 12310 DKI Jakarta - Indonesia Phone: (021) 29327990

Our Social Media:
cirebonpowerofficial/ cirebonpower
cirebonpower_official

Defining Report Content

[GRI 102-46]

The process for defining the report's content was based on the GRI Standards as well as GRI G4 Electric Utilities Sector Disclosures. The principles of inclusiveness, materiality, sustainability, and completeness were implemented. Also, to achieve high quality sustainability reporting, we apply six reporting principles of accuracy, balance, clarity, comparability, reliability, and timeliness.

Stakeholder Engagement

[GRI 102-40] [GRI 102-42] [GRI 102-43]

As a company that supplies energy, we understand that our decisions and activities affect all individuals from society directly. We have our own procedure for firming commitment and resounding each stakeholder's desires. Throughout 2018, we used various channels to communicate with stakeholders. The frequency of communication with each stakeholder group is diverse, relying upon our work plan and our comprehension of stakeholders' needs and concerns. Our stakeholder engagement practices can be defined as follows:

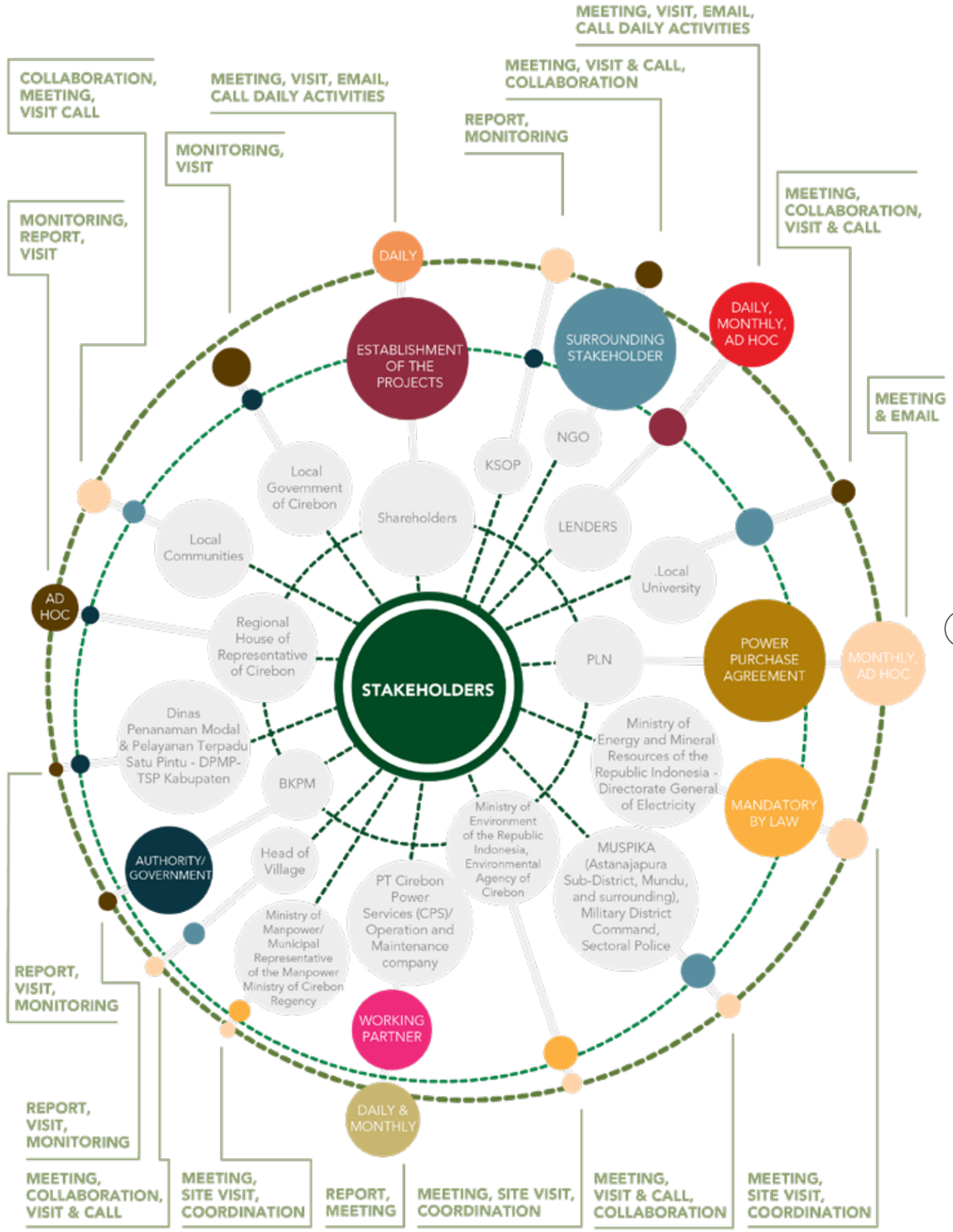
Topic Discussed

[GRI 102-44]

01	Target Profit, operations plan, CSR, project development, finance, HR and regulation
02	CSR, project development, finance, HR and regulation
03	Electricity supply and availability factor performance, operation
04	Technical spec., environment, regulation, certification, corporate social responsibility report, report of national vital object
05	Report, seminar, workshop, regulation, consultation
06	Labor regulation, annual report health & safety , compliance and vocation, vocational training collaboration
07	Operation performance
08	Permit, compliance
09	Permit, compliance, land acquisition
10	CSR & community development, permit, compliance, land acquisition
11	CSR & community development, permit, compliance
12	Jetty coal operation
13	CSR & community development
14	CSR, training and community development
15	CSR, training and community development
16	CSR, training and community development, land acquisition
17	CSR, training and community development, land acquisition, job opportunity and local business opportunity

Legend

- STAKEHOLDER [GRI 102-40]
- BASIS FOR DETERMINING STAKEHOLDER
- FREQUENCY OF ENGAGEMENT [GRI 102-43]
- METHOD [GRI 102-43]
- TOPIC DISCUSSED [GRI 102-44]



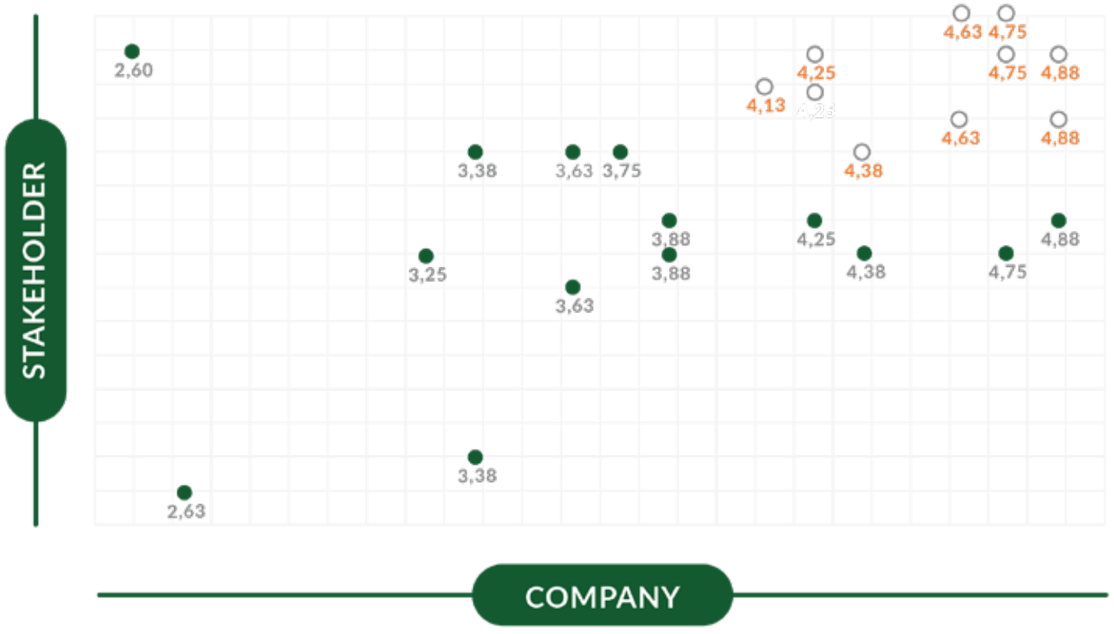
Defining Materiality

[GRI 102-47]

Materiality is the principle that determines which relevant topics are sufficiently important that it is essential to report on sustainability report. To address the specific concerns of our stakeholders, we have sought their views before compiling this report.

In defining our materiality, we started with an internal management meeting and continued with focus group discussions with representatives from various departments. We surveyed customers (PLN), suppliers, local community, government, NGOs, and conduct local community interviews as the voices of external stakeholders. As a result, for our Cirebon Sustainability Report 2018, we focus on eight materiality topics. Based on our quantitative analysis, we constructed our materiality matrix and defined our topics for this year's report. They are reported as below:

Energy consumption & reduction	(4,88)
Generation efficiency & service to customers (Stability in electricity supply)	(4,88)
Air Quality	(4,75)
Waste and hazardous material management, water and wastewater managament, & environmental compliance	(4,75)
Social contribution	(4,63)
Habitat protection and biodiversity	(4,63)
Material sourcing (local procurement)	(4,38)
Public health and safety	(4,25)
Greenhouse gas (GHG) emissions	(4,25)
Occupational health and safety	(4,13)



Topic Boundary

[GRI 102-46] [GRI 102-47]

As a second step, we linked each topic on materiality with the GRI Standards. Every topic has its boundaries within our supply chain. The topics boundaries describe where the impacts occur for a material topic and Cirebon Power's involvement.

Cirebon Power might be involved either through their activities or as a result of its business relationships with other entities. The impacts that we reported can be caused by, contributed by, or linked to our activities through a business relationship.

The impact will affect not only Cirebon Power itself, but also the supply chain, either upstream or downstream. This topic boundary can provide insights on the risk assessment and precautionary approach for the whole business.

CAUSED
LINKED

	Supplier	Cirebon Power	Customer
Delivering innovative products and services		●	●
Material sourcing	●	●	
Generation efficiency		●	●
Reliable energy generation		●	●
Energy consumption and reduction		●	
Greenhouse gas (GHG) emissions	●	●	
Habitat protection and biodiversity		●	
Environmental compliance		●	●
Water		●	
Wastewater management		●	
Air quality		●	
Waste and hazardous material management		●	
Social contribution / Indirect economic impact		●	
Community development		●	
Socioeconomic compliance		●	●
Public health and safety		●	●
Occupational health and safety		●	

Our External Initiatives

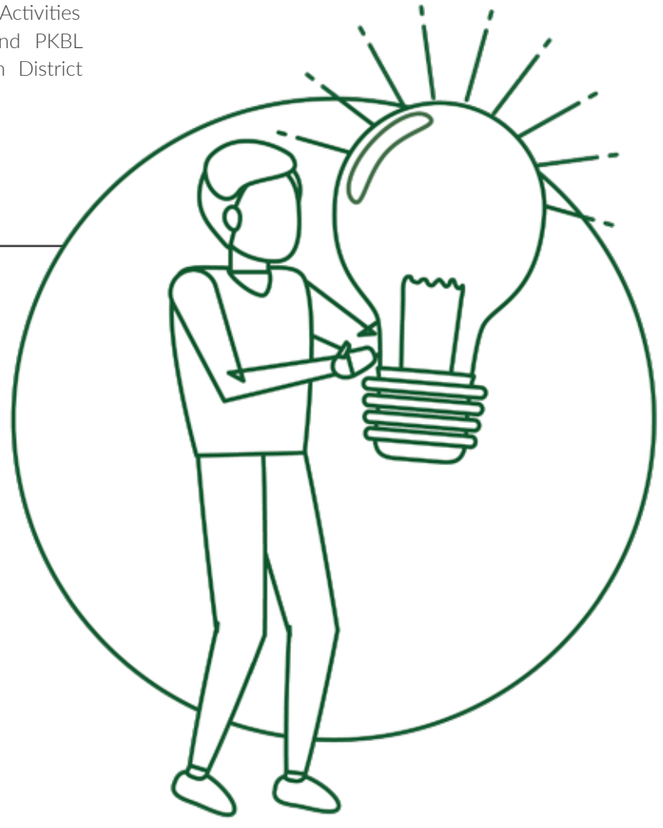
[GRI 102-12]

Award:

- TOP Leader on CSR Commitment 2018
- TOP CSR 2018 - Program Peningkatan Pendapatan
- Indonesian Sustainable Development Goal Award (ISDA) 2018 Corporate Social Responsibility Based on SNI ISO 26000:2013 for SDGs - Gold Category on SDGs 15
- Indonesian Sustainable Development Goal Award (ISDA) 2018 Corporate Social Responsibility Based on SNI ISO 26000:2013 for SDGs - Platinum Category on SDGs 1
- Indonesian Sustainable Development Goal Award (ISDA) 2018 Corporate Social Responsibility Based on SNI ISO 26000:2013 for SDGs - Gold Category on SDGs 8
- Regent Awards 002/845/DPMPTSP of Company Compliance in Submitting Reports on Online Investment Activities
- CSR Award through TJSL and PKBL activities 2018 from Cirebon District Government
- Persatuan Wartawan Indonesia (PWI) Award 2018
- Indonesia Platinum and Best Corporate Award 2018 as The Most Trusted Company of the Year

Certification:

- ISO 9001 : 2015 Certification



Membership of Associations

[GRI 102-13]

- APLSI
  (Asosiasi Pengusaha Listrik Swasta Indonesia)
- APLBI
  (Asosiasi Pembangkit Listrik batu bara Indonesia)
- MKI
  (Masyarakat Ketenagalistrikan Indonesia)

Sustainable Development Goals (SDG) Compass

[GRI 102-47]

United Nations established 17 Sustainable Development Goals for 2030. As a pioneer of cleaner energy solutions, we believe that our operations give positive contributions to several SDG Goals. Below we reference the Sustainable Development Goals to the relevant sections of this sustainability report.

GRI Content Index

GRI STANDARD		DISCLOSURE	PAGE NUMBER(S) AND/OR URL(S)
GENERAL DISCLOSURES			
GRI 102: General Disclosures	102-1	Name of the organization	9
	102-2	Activities, brands, products, and services	9
	102-3	Location of headquarters	9
	102-4	Location of operations	9
	102-5	Ownership and legal form	9
	102-6	Markets served	9, 11-12
	102-7	Scale of the organization	9
	102-8	Information on employees and other workers	57
	102-9	Supply chain	11-12
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	102-11	Precautionary principle or approach	36-49
	102-12	External initiatives	49,64
	102-13	Membership of associations	64
	102-14	Statement from senior decision-maker	
	102-16	Values, principles, standards, and norms of behavior	5,18
	102-18	Governance structure	15
	102-40	List of stakeholder groups	60
	102-41	Collective bargaining agreements	51
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	102-44	Key topics and concerns raised	60
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	102-46	Defining report content and topic boundaries	59, 63
	102-47	List of material topics	62,63,65
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GRI Content Index

GRI STANDARD		DISCLOSURE	PAGE NUMBER(S) AND/OR URL(S)
ECONOMIC			
Economic Indirect Impact			
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	103-2	The management approach and its components	29,34
	103-3	Evaluation of the management approach	29,34
GRI 203: Indirect economic impact	203-1	Infrastructure investments and services supported	29,34
	203-2	Significant indirect economic impacts	29,34
Procurement Practices			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	13
	103-2	The management approach and its components	13
	103-3	Evaluation of the management approach	13
GRI 204: Procurement Practices	204-1	Proportion of spending on local suppliers	11-13
ENVIRONMENT			
Material			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	13
	103-2	The management approach and its components	13
	103-3	Evaluation of the management approach	13
GRI 301: Material	301-1	Materials used by weight or volume	13
Energy			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	23
	103-2	The management approach and its components	23
	103-3	Evaluation of the management approach	23
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Water			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	44-46
	103-2	The management approach and its components	44-46
	103-3	Evaluation of the management approach	44-46
GRI 302: Water	303-1	Water withdrawal by source	44
	303-2	Water sources significantly affected by withdrawal of water	44
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GRI Content Index

GRI STANDARD		DISCLOSURE	PAGE NUMBER(S) AND/OR URL(S)
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	103-2	The management approach and its components	38-39
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GRI 304: Biodiversity	304-3	Habitats protected or restored	38
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	103-2	The management approach and its components	25
	103-3	Evaluation of the management approach	25
GRI 305: Emission	305-1	Direct (Scope 1) GHG emissions	23
	305-4	GHG emissions intensity	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	42
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GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	47-48
	103-2	The management approach and its components	47-48
	103-3	Evaluation of the management approach	47-48
GRI 306: Effluents and Waste	306-1	Water discharge by quality and destination	47
	306-2	Waste by type and disposal method	48
	306-4	Transport of hazardous waste	48
SOCIAL			
Employment			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	56
	103-2	The management approach and its components	56
	103-3	Evaluation of the management approach	56
GRI 401: Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	56

GRI Content Index

		DISCLOSURE	PAGE NUMBER(S) AND/OR URL(S)
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GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	52-54
	103-2	The management approach and its components	52-54
	103-3	Evaluation of the management approach	52-54
GRI 403: Occupational Health and Safety	403-1	Workers representation in formal joint management–worker health and safety committees	54
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	54
Training and Education			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	55-56
	103-2	The management approach and its components	55-56
	103-3	Evaluation of the management approach	55-56
GRI 404: Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	55-56
Diversity and Equal Opportunity			
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	56-57
	103-2	The management approach and its components	56-57
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GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	57
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GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	29-35
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GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	29-35
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	103-3	Evaluation of the management approach	29-35
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	35

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	EU3	Number of residential, industrial, institutional and commercial customer accounts	24
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	EU5	Allocation of CO2e emissions allowances or equivalent, broke down by carbon trading framework	25
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Availability and Reliability	EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	23
System Efficiency	EU11	Average generation efficiency of thermal plants by energy source and regulatory regime	22
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Labor Practices and decent work disclosures for the Electric Utility Sector			
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	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	56
Employment	Former EU14	EU-Employment [G4-DMA] Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	-
	EU17	Days worked by contractor and subcontractor employees involved in construction, operation, and maintenance activities	56

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