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www.ewp.co.kr
395, Jongga-ro, Jung-gu, Ulsan (44543)
Tel. 070-5000-1549 | Fax. 070-5000-1599

ENRICH THE WORLD WITH CLEAN ENERGY

EWP Sustainability Report 2020



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About This Report

Korea East-West Power (EWP) issued the 14th sustainability report in 2020 to share with the company’s stakeholders its activities and achievements of sustainable management. This report mainly presents the efforts of EWP in 2019 for realizing social values based on its brand identity as ‘A Vibrant Energy Power Plant’ of symbiosis, cooperation, and sympathy.

Reporting Standards

This report applied the methods for meeting with the core options of the Global Reporting Initiative (GRI) Standards and reflects the contents of ISO 26000 and the UN Sustainable Development Goals.

Reporting Boundaries

Domestic and overseas (partial) offices of EWP

Reporting Period

January 1, 2019 – December 31, 2019
(Achievements of the first half of 2020 partially included)

Reporting Cycle

Yearly (Publication of the previous report: October 2019)

Report Verification

Independent third-party verification

For Inquiries

395, Jongga-ro, Jung-gu, Ulsan (44543)
Environment Management Department, Climate Change & Environment Division,
Safety & Engineering Group

E newroad@ewp.co.kr

T 070-5000-1549

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CEO Message



Dear Distinguished Stakeholders,

Thank you for your continued support and interest in the sustainable development of Korea East-West Power (EWP), the energy company that grows together with the people of Korea.

Recently, the government has declared the New Deal vision to become a leading country by overcoming the COVID-19 crisis and the changes in economic and social structures. EWP also strives to fulfill its responsibility of overcoming the national economic crisis as a public enterprise by establishing its “EWP New Deal” promotion strategy focusing on the Green New Deal, Digital New Deal, reinforcement of safety and environment, and realization of social values.

Green New Deal

With a focus on the transition in energy generation shifting from low cost to eco-friendly, the carbon-dependent economy is also shifting towards a low-carbon economy. Along with the 3020 policies for renewable energy, EWP is shifting towards eco-friendly power plants by supplying sustainable energy. We have set our goal to generate at least 25% from new and renewable energy compared to that of the government by 2030 with our distinct “RE3025 Initiatives,” and we were 100% successful in conducting renewable portfolio standards (RPS) and generating 1,835GWh of new and renewable energy by converting solar power, wind power, fuel cells, and waste resources into fuel. Likewise, by investing in R&D for new and renewable energy, we are leading in localizing the four core technologies of hydrogen energy.

Digital New Deal

COVID-19 brought a transition in terms of styles and content of working. It introduced a work-from-home arrangement, remote gatherings, and online sports activities, creating “digitact-based” working environments. EWP is operating a dedicated organization for realizing the Industry 4.0 ecosystem, managing 180 tasks related to energy operations, safety, environment, and business management. We discover companies with outstanding 4th Industry technology, provide test beds and promote a joint research.

Reinforcement of Safety and Environment

Regarding safety as its top priority, EWP executes field-centered safety management to guarantee the safety of all workers. With the technologies of the Fourth Industrial Revolution, we are realizing intelligent operation of power plants and a safer workplace by unmanned high-risk duties. We also achieved the top score in the assessment for construction work of public organizations and maintained our record of zero casualties for three consecutive years. Furthermore, by strengthening the performance of coal-fired power plants and expanding the use of low-sulfur coal, we reduced PM 2.5 by 1,369 tons compared to that of 2018 (reduction rate of 26%). We plan to improve the performance of all coal-fired power plants and complete an indoor coal storage by 2026. Meanwhile, to replace imported wood pellets, we will become the first in the nation to make mushroom medium into fuel and implement the use of them in 2021.

Creation of Social Values

EWP endeavors to create social values by establishing a dedicated platform for creating an economic ‘symbiotic’ ecosystem, resolving social issues through ‘cooperation’, and strengthening ‘sympathetic’ exchanges. We recorded the lowest forced outage rate of power plants and received the highest grade in the mutual growth assessment of public organizations for nine consecutive years. We systematically engage in corporate social responsibility programs for the youth, local communities, and social minorities. We also created fuels with burnt trees from the forest fire in Gangwon Province, engaging in creating shared value (CSV) activities to help boost the local economy.

This Sustainability Report, marking its 14th edition this year, categorized the initiatives of 2019 on the platform of social value creation. The next report in 2021 will touch on the EWP New Deal in greater detail.

EWP will continue to fulfill its role in supplying eco-friendly energy and achieving tangible social values for the people.

Thank you.

대표이사
박 일 준

October 2020

EWP President & CEO Park Il-Jun

EWP Introduction

Business Overview

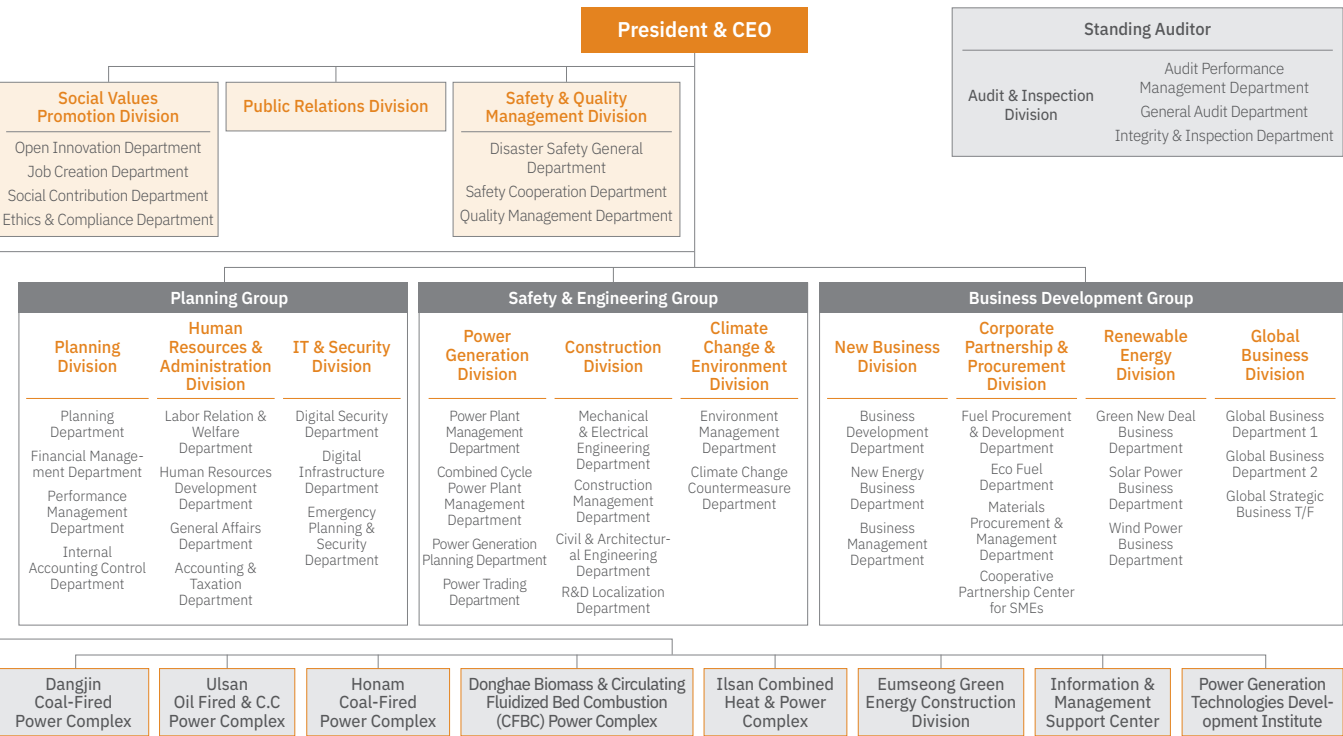
Korea East-West Power is one of the six power subsidiaries that spun off from Korea Electric Power Corporation in 2001, in accordance with the Korean Government’s Act on the Promotion of Electric Power Industry Restructuring. Through the development and enhancement of electric power resources, we aim to lead the growth of the electric power industry with the vision of being an “Eco-friendly energy company that enriches the world”.

Major business indicators (As of December 2019)

Date of Founding	April 2, 2001	Composition of Stakeholders	100% by Korea Electric Power Corporation
Basis of Founding	Article 1 of the Electric Power Industry Restructuring Act (Article 530-2 of the Commercial Act, December 23, 2000)	Power Generation	50,891GWh
Key Industry	Power Resource Generation/Development Business	Electricity Sales Volume	4.8204GWh
Headquarters	395, Jongga-ro, Jung-gu, Ulsan, Korea	Electricity Sales Revenue	KRW 4.6576 trillion
Competent Authority	Ministry of Trade, Industry and Energy	Capital	KRW 4.7014 trillion
President	Park Il-joon	Total Assets	KRW 9.7243 trillion
No. of Employees	2,470 people	Operating Profits/Net Profits	KRW 125.7 billion / KRW 56.7 billion

Organizational Structure

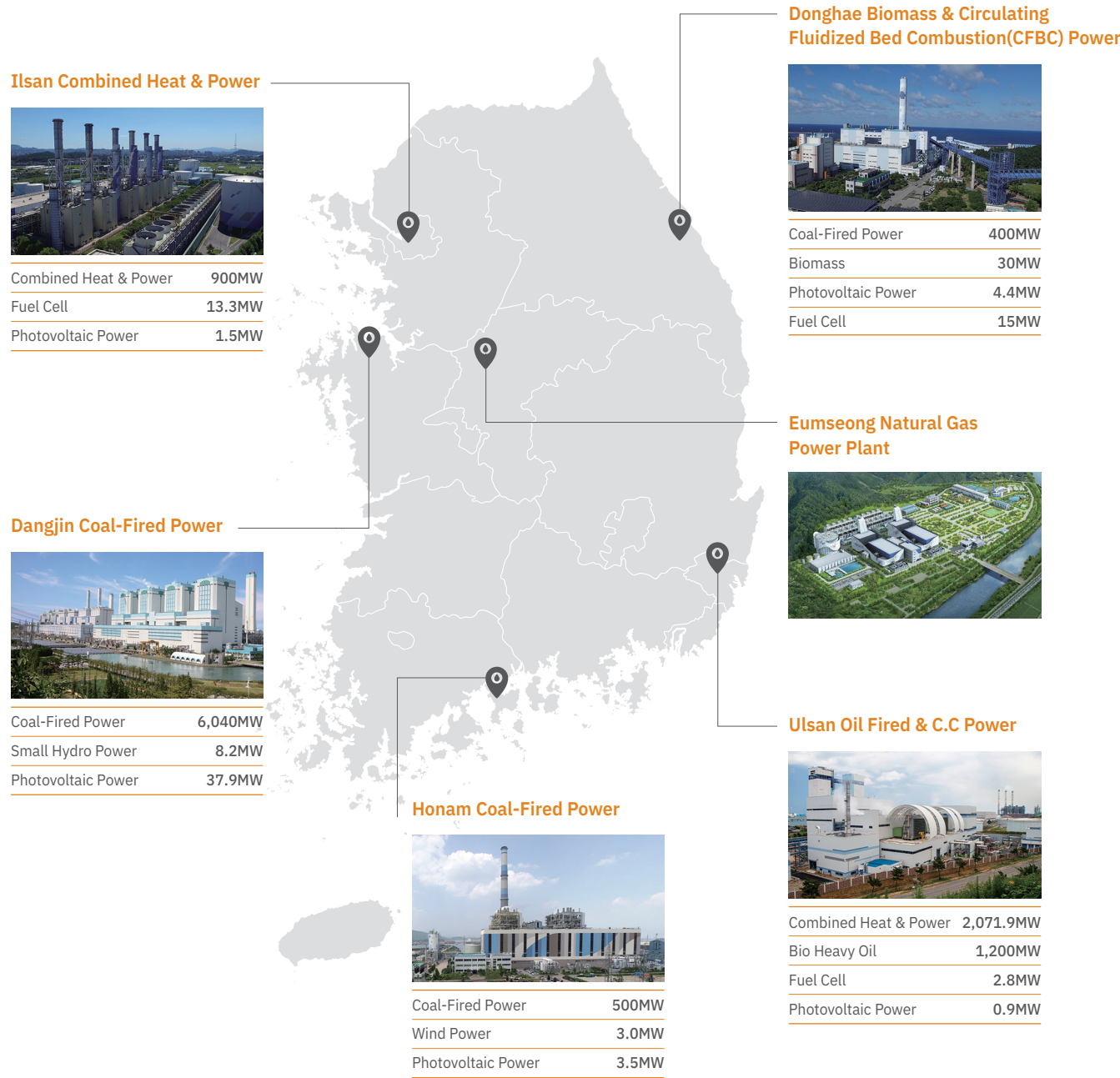
EWP maintains a three-group system, consisted of the Planning Group, Safety & Engineering Group, and the Business Development Group. The Climate Change & Environment Division under the Safety & Engineering Group is operated as a separate organization to precisely manage the environmental impact that is caused from our projects. The Social Values Promotion Division manages the overall achievements of EWP on social values, such as creation of jobs, contribution to society and ethics.



Business Portfolio

Domestic Business

Korea East-West Power operates five power plants in Korea, each power complex located in Dangjin, Ulsan, Honam, East Sea, Ilsan for the development and enhancement of power resources and stable electric power, and operates Eumseong Green Energy Construction Division for the construction of new power plants. The total installed capacity of EWP's power generation facilities is about 11,193MW, which accounts for 9 percent of the domestic power generation facilities.



Overseas Business

Korea East-West Power proves its competitiveness in the overseas power market based on its accumulated experience and technology. We operate about 890 MW-sized power plants in the US, Jamaica, Chile, and Indonesia. This capacity includes eco-friendly power that utilizes biomass and LNG. We are also actively planning on new projects in seven other countries, including Mexico and Colombia.



In Operation

Project Name	Capacity	Project Period
Jamaican Electric Power Corporation (JPS) Operation Project	498MW	2011~Continued
US EWPRC Operation Project	58MW (Biomass) / 94MW (Natural gas)	2010~Continued
Indonesia Kalsel-1 Coal-fired Power Project	200MW	2019~2044
Chilean Distributed Photovoltaic Power Generation Project	40MW	2020~2045


Under Construction

Project Name	Capacity	Project Period
Jamaican Gas Combined Heat & Power Project	190MW	20 years after completion of construction
Guam Gas Combined Heat & Power Project	198MW	25 years after completion of construction

Under Development

Project Name	Capacity	Project Period
Trumbull Gas Combined Heat & Power Project, US	953MW	30 years after completion of construction
Mexico Solar Photovoltaic Project	200MW	TBD
Australia Solar Photovoltaic Project	202MW	35 years after completion of construction
Myanmar Gas Combined Heat & Power Project	1,740MW	TBD
Columbia Photovoltaic Project	75MW	TBD
Vietnam Gas Combined Heat & Power Project	1,200MW	TBD
Vietnam Photovoltaic Project	6MW	TBD

New & Renewable Energy Business




Photovoltaic Power

Operation **78.2MW**
Project Development **1,812.4MW**

EWP is developing and operating various projects for the growth of solar power projects, including construction of an eco-friendly solar power generation system, floating solar power, and solar roof shingles.

Dangjin Photovoltaic Power	1.0 MW
Honam Photovoltaic Power	0.1 MW
Ulsan Photovoltaic Power	0.5 MW
Dangjin Waste Landfill Photovoltaic Power	1.3 MW
Gwangyang Port Photovoltaic Power	2.3 MW
Busan Shinho Photovoltaic Power	20.0 MW
Dangjin Material Warehouse Photovoltaic Power	0.7 MW
Dangjin Floating Photovoltaic Power	1.0 MW
Suwon Sewage Treatment Plant Photovoltaic Power	1.5 MW
Gwangyang Port Golden Logistics Photovoltaic Power	1.1 MW
Dangjin Coal Yard Photovoltaic Power	3.4 MW
Donghae Sewage Treatment Plant Photovoltaic Power	2.4 MW
Ulsan 4 Combined Rooftop Photovoltaic Power	0.4 MW
Dangjin 2 Ash Pond Floating Photovoltaic Power	3.5 MW
Miryang Hope Light Photovoltaic Power	0.2 MW
Dangjin Rear Gate Parking Lot Photovoltaic Power	1.0 MW
Donghae Repowering Photovoltaic Power	2.0 MW
Dangjin Eco Photovoltaic Power	9.8 MW
Dangjin On-site Parking Lot Photovoltaic Power	0.9 MW
Dangjin Single Treatment Plant Photovoltaic Power	25.0 MW
Ansan Hospital Medical Welfare Photovoltaic Power	0.1 MW
Total Photovoltaic Power Generation Volume	78.2 MW

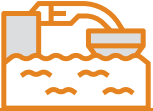


Wind Power

Operation **187.6MW**
Project Development **3,492.6MW**

We are conducting large-capacity offshore wind power development in regions with excellent wind conditions, such as WindFarm in the west coast and WindBelt in the east coast. We also contribute to the wind power industry by developing the ESS convergence technology.

Younggwang Jisan Wind Power	3.0 MW
Gyeongju Wind Power (I)	16.8 MW
Gyeongju Wind Power (II)	20.7 MW
Honam Wind Power	20.0 MW
Younggwang Baeksu Wind Power	40.0 MW
Younggwang Wind Power	79.6 MW
Southwest Offshore Wind Power	7.5 MW
Total Wind Power Generation Volume	187.6 MW




Small Hydro Power

Operation **8.2MW**
Project Development **430.0MW**

We operate small hydro plants utilizing sea water from Dangjin Coal Fired Power Complex. We also promote marine power projects utilizing tidal power.

Dangjin Small Hydro Power (I)	5.0 MW
Dangjin Small Hydro Power (II)	3.2 MW
Total Marine Power Generation Volume	8.2 MW

Korea East-West Power is engaged in developing new and renewable energy to actively respond to the changes in the future energy industry, such as instability in procuring energy due to depletion of fossil fuel and the execution of renewable portfolio standard and UN Framework Convention on Climate Change. By 2030, we plan to set the share of renewable energy generation to 25%, which is higher than the government goal, striving to become a total energy company leading low-carbon and green management.




Bioenergy

Operation **268.9MW**
Project Development **40.0MW**

We are constructing and operating the country's largest wood chip biomass power plant utilizing forest by-products and waste wood as fuel and developing new biomass projects.

Donghae Wood Chip Biomass	30.0 MW
Seokmun Biomass	38.9 MW
Donghae Mixed Fuel Fining	60.0 MW
Sewage Sludge I	10.0 MW
Sewage Sludge II	20.0 MW
Dangjin Wood Pellet/Unused Pellet	70.0 MW
Ulsan Bio Heavy Oil	40.0 MW
Total Biomass Power Generation Volume	268.9 MW




Fuel Cell

Operation **89.4MW**
Project Development **1,025.9MW**

We are focused on expanding domestic fuel cell business through fuel cell business using by-product hydrogen generated by industries and securing technology.

Ilsan Fuel Cell I	2.4 MW
Ilsan Fuel Cell II	2.8 MW
Ilsan Fuel Cell III	2.8 MW
Ulsan Fuel Cell	2.8 MW
Ilsan Fuel Cell IV	5.3 MW
Daesan Fuel Cell	50.2 MW
Paju Fuel Cell	8.1 MW
Donghae Fuel Cell	15.0 MW
Total Fuel Cell Power Generation Volume	89.4 MW




ESS Connected Renewable Energy

Operation **71.7MWh**

We conduct a project for ESS, an energy storage system connected with renewable energy, to contribute to stabilizing the power system of the nation and improving electricity quality.

Donghae Sewage Treatment Plant ESS	6.2 MWh
Donghae Repowering ESS	5.0 MWh
Gyeongju Wind Power ESS	9.0 MWh
Honam Wind Power ESS	9.0 MWh
Baeksu Wind Power ESS	18.0 MWh
Dangjin Eco ESS	24.5 MWh
Total ESS Battery Volume	71.7 MWh



Operation

609.2MW + 71.7MWh



Construction

195.2MW

Sustainable Value Creation Process

Korea East-West Power is fully devoted to supplying safe and clean energy for the people throughout the entire process of all projects, from the initial stages of R&D and strategy planning to plant operation. We are fulfilling our responsibilities and roles as a public enterprise for the power generation to create environmental and social values that are important to our stakeholders through activities and performances in each phase of business.

STEP 1.

R&D and Strategy Planning



STEP 5.

Contribution to Local Communities



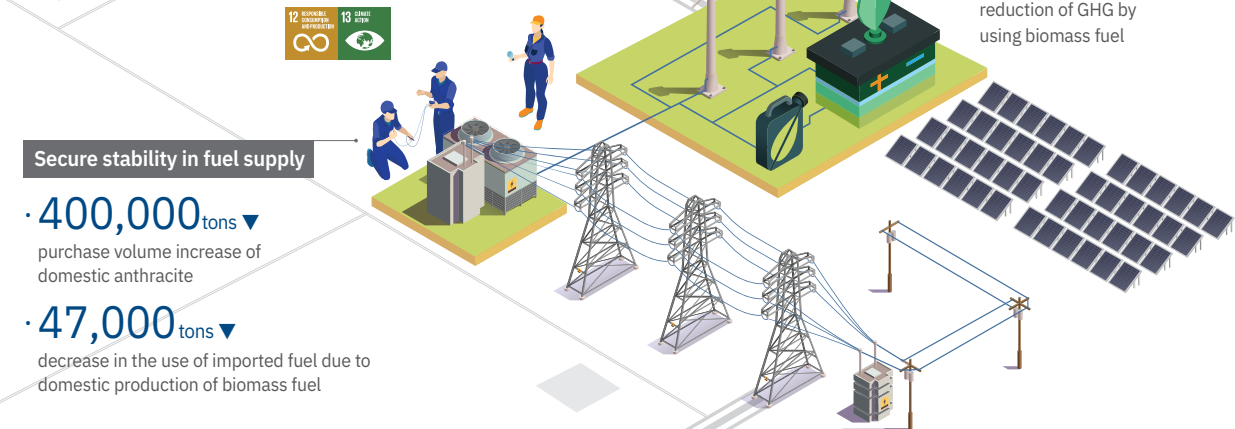
STEP 2.

Plant Construction



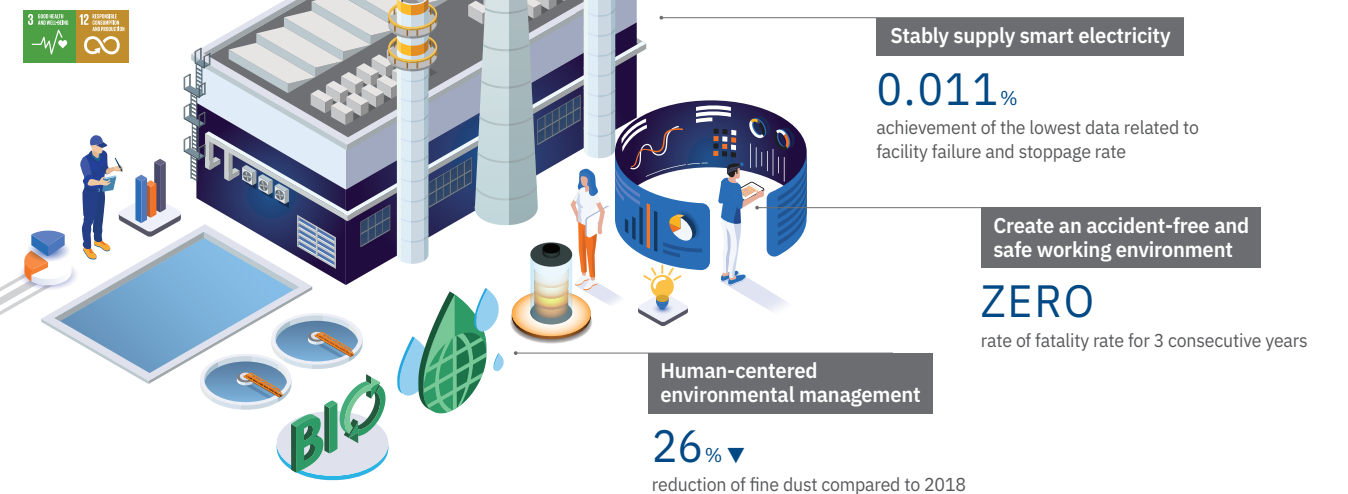
STEP 3.

Fuel Procurement



STEP 4.

Plant Operation and Facility Management



The background image shows a pair of hands holding a glowing, stylized Earth. The Earth is depicted with green landmasses and blue oceans, emitting a warm, golden light. A horizontal line passes through the center of the Earth, with five icons placed along it: a lightbulb, a wind turbine, a factory, a leaf, and a house with a lightning bolt. The overall scene is set against a dark, starry background with a soft, warm glow emanating from the right side.

The Journey of . a Vibrant Energy Power Plant

Social Value Platform of Korea East-West Power Company — 16

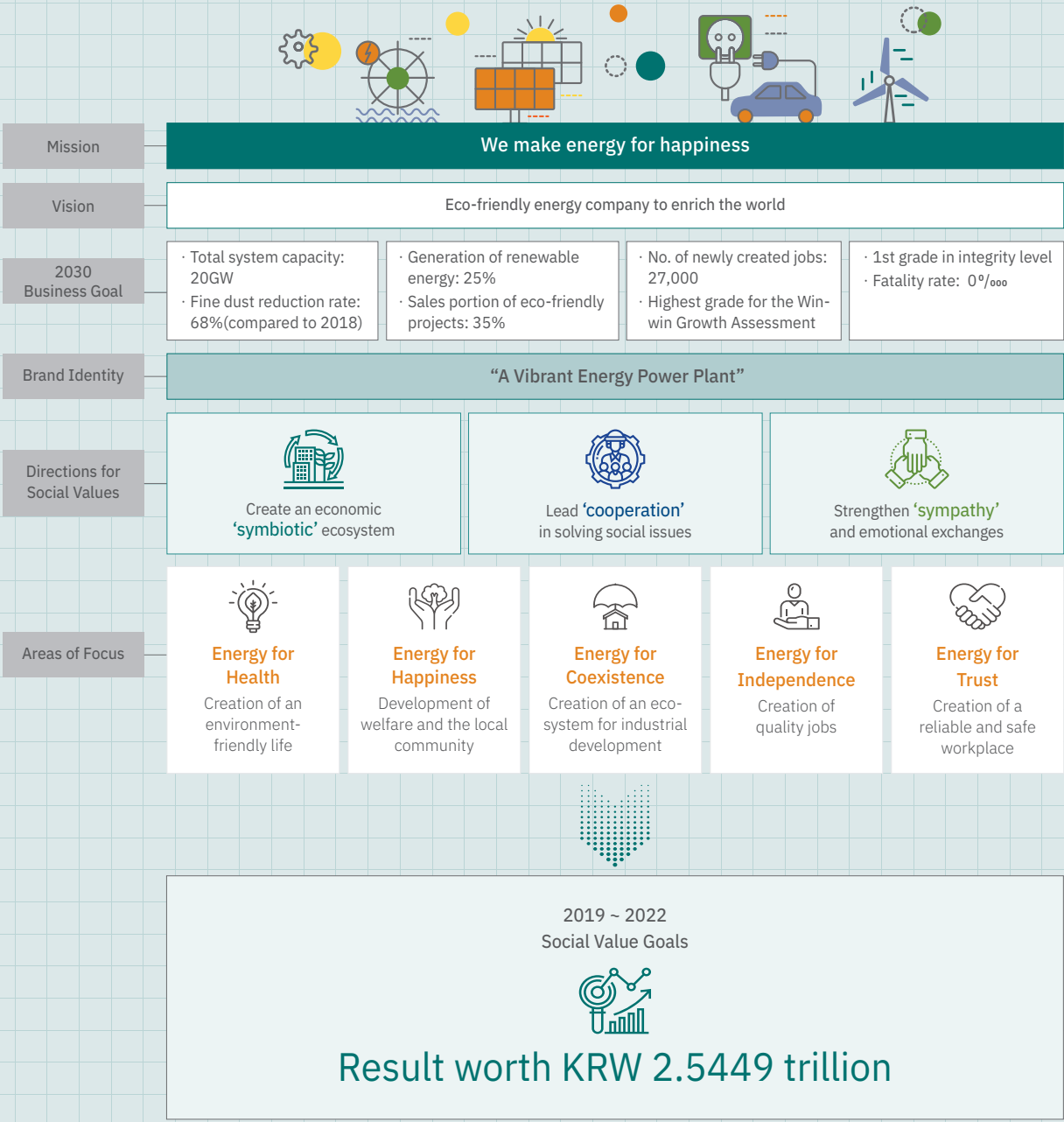
Highlight 1. Create an Economic Symbiotic Ecosystem — 18















Highlight 2. Lead Cooperation in Solving Social Issues — 20

Highlight 3. Strengthen Sensitive Sympathy Exchanges — 22

Social Value Platform of Korea East-West Power Company

Korea East-West Power established its brand identity of an “A Vibrant Energy Power Plant” with “symbiosis, cooperation, and sympathy” as the directions for social values. We are systematically engaged in creating social values by establishing 12 performance indicators and goals converted to monetary value under 4 major areas. In particular, the Social Values Promotion Division, collect opinions from various stakeholders to establish plans and check their performance. By 2022, we hope to achieve KRW 2.5449 trillion worth of social values and contribute to solving social issues that people can actually realize.



4 Major Areas of Social Values	Social Value Goals	Social Value Indicators (Unit)	Performance (Monetary Value)		2022 Goal	UN SDGs
			2018	2019		
Advancement of Power Generation  KRW 845.4 bil.	Contribute to power stability	Failure rate (%)	0.027 (KRW 79.6 bil.)	0.011 (KRW 53.5 bil.)	0.003	 
	Reduce energy use in power plants	Main fuel unit usage (ton/GWh)	367 (KRW 14.7 bil.)	350 (KRW 20.9 bil.)	330	
	Reduce costs for recovering the environment	Reduction of pollutants (% Compared to 2015)	36 (KRW 51.2 bil.)	49 (KRW 129.3 bil.)	53	
New Growth Engine  KRW 1.986 tri.	Prohibit impediments to public interest	Facility capacity for distributed resources (GW)	0.5 (KRW 68.1 bil.)	0.54 (KRW 76.3 bil.)	14	 
	Produce renewable energy	Generation volume of new and renewable energy (GWh)	1,635 (KRW 65.9 bil.)	1,834 (KRW 73.2 bil.)	3,300	
	Secure overseas emission credit	Obtained overseas carbon credit (ton)	0 (KRW 0)	0 (KRW 0)	1 mil.	
Job Creation and Revitalization of the Local Economy  KRW 454.9 bil.	Contribution to national income	Create direct jobs (people)	977 (KRW 26.1 bil.)	956 (KRW 65.1 bil.)	1,887	  
	Strengthen value chain competitiveness	Investment for win-win growth (KRW 100 million)	95 (KRW 9.5 bil.)	78 (KRW 7.8 bil.)	171	
	Revitalization of the local economy	Investment for social contribution (KRW 100 million)	458 (KRW 45.8 bil.)	819 (KRW 81.9 bil.)	2,081	
Internal Capacity  KRW 146 bil.	Contribute to the economy by investing on the 4th industrial revolution technology	Business achievements of the 4th industrial technology (KRW 100 million)	35 (KRW 3.5 bil.)	153 (KRW 15.3 bil.)	509	  
	Minimize sales loss from corruption	No. of Corruption cases (case)	0* (KRW 0)	0 (KRW 0)	0	
	Minimize deaths from accidents	No. of death from accident (case)	0** (KRW 0)	0 (KRW 0)	0	

* Refers to the social cost (negative) incurred by corruption of employees, which our achievement goal is KRW 0.

** Refers to the social cost (negative) incurred by death cases in workplaces, which our achievement goal is KRW 0.

Highlight Events in Numbers

Create an Economic ‘**Symbiotic**’ Ecosystem,
win-win through Cooperation.

Gas Turbine Domestic Manufacture Technology Development



Yearly equipment cost savings

KRW **11 bil.**

See p.41 for more information

Market Pioneering Support for SMEs

Purchase amount of technological product

KRW **57.5 bil.**

See p.42 for more information

Testbed Support for SMEs

148 Cases
(accumulated)

See p.41 for more information

Global Startup Support Program



SNL Enterprise Received the

**One-Million-Dollar
Export Monument Award**

See p.42 for more information

Support Environmental Weakness

Environmental risk mentoring at

19 Companies

See p.30 for more information

Strengthen CEO's Communication with Partners



visited **16** Companies

See p.41 for more information

Create an Innovative Entrepreneurship Ecosystem



Ideas from an in-house startup competition

69 Discoveries

See p.45 for more information

Reduce Partners' Expenditures

Down payment increased by

432%
compared to the
previous year

See p.43 for more information

Highlights Events in Interviews

Lead ‘Cooperation’ in Solving Social Issues, through Eco-friendly Innovations

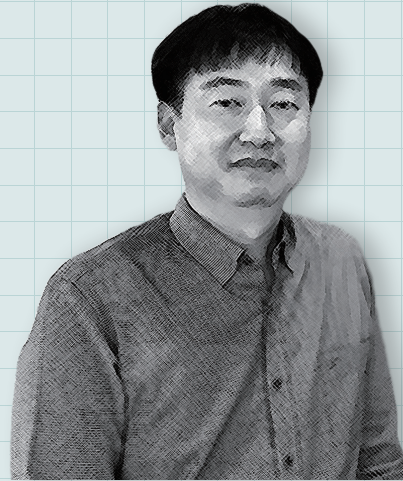
With the aim of converting all biofuels used by EWP plants to those that are produced domestically, we are promoting environmental conservation as well as revitalizing domestic industries through private-public partnerships in cooperation with the agricultural and industrial fields. We listened to the stories of internal and external stakeholders involved in this project and about what EWP did for the development of eco-friendly fuels.

Q1.

What is the largest environmental issue that is being raised in the power industry recently?

Manager Bae Jong-hong | The demand for resolving environmental issues of power companies has continued to soar together with the demand for the conversion to eco-friendly energy due to the recent Green New Deal policy. Also, power companies with 500MW or more are now mandated to supply more than a certain percentage of their total power generation as new and renewable energy in accordance with the renewable portfolio standard (RPS) system. In this regard, power companies have been implementing biomass to cover the quota for the use of new and renewable energy. Wood pellets, which account for a significant portion of biomass, are highly dependent on imported raw materials. This has made the need for domestic production of biomass fuels more important than ever.

Manager Yang Seung-jae | With the recent revision of the renewable portfolio standard (RPS), the weight of the renewable energy certificate (REC) of biomass co-fired facilities in coal power plants has been lowered from 1.0 to 0.5, but when unused forest biomass is mixed in, the weight remains at 1.5. Consequently, the business of converting biomass into fuel utilizing unused forests in abandoned and neglected mountains is drawing attention.



Manager **Bae Jong-hong**,
Environmental Management Department, EWP

Q2.

You mentioned that the advancement of the business of converting biomass into fuel is a critical task. What business of converting biomass into fuel is EWP especially focused on?

Manager Bae Jong-hong | EWP signed a “private-agriculture-public cooperative mushroom medium pellet biofuel development agreement” for the replacement of imported wood pellet fuel in May 2019. The Environment Management Department, to which I belong, is overseeing the general project, including the contribution of domestic mushroom farmers’ participation and the supply of the medium. In December 2019, we became the first in the country to successfully accomplish a mushroom medium pellet biofuel combustion test, securing its potential as a biofuel.

Manager Yang Seung-jae | After the large forest fire that engulfed the Gangwon Province in April 2019, EWP signed an MOU with Gangwon Province to help the affected regions with the objective to proactively engage in helping to resolve social issues as a public enterprise. Recently, as trees harmed from forest fires were included in unused forest biomass, our Fuel Procurement & Development Department has been focused on developing the technology for utilizing harmed trees as biomass resources. Initially, there were difficulties in making the harmed trees meet fuel standards because there was no technology to convert them into fuel. However, fueling was successfully completed through three tests.



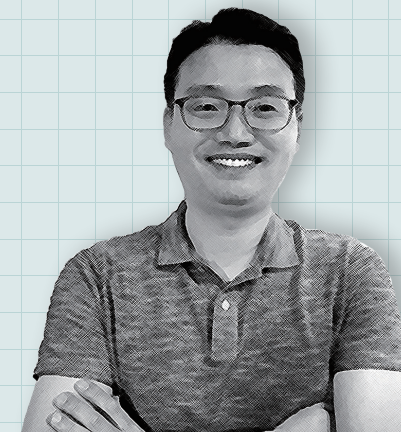
Manager **Yang Seung-jae**, Fuel Resource Department, EWP

Q3.

Can you tell us exactly what kind cooperation you are participating in with external organizations for conducting fuel projects?

Manager Bae Jong-hong | Korea East-West Power has signed an MOU with farming cooperatives and environmental engineering service companies to understand the domestic mushroom production trends and the status of medium treatment while sharing the situation to ensure a stable supply of mushroom medium pellet biofuels.

Head Manager Dong Gwan-woo | The Korean Mushroom Producers Association, approved by the Ministry of Agriculture, Food and Rural Affairs, is promoting projects to protect the rights and interests of mushroom farmers nationwide. We are taking the lead in securing professional and stable cultivation technology, the advancement of distribution, and the stable development of mushroom farmers. We use mushroom medium, which is an agricultural by-product created after harvesting mushrooms, as a key material for producing feed, fertilizer, and fuel. According to this MOU, our association acts as a bridge between mushroom farmers and participating companies while striving to ensure that mushroom medium is stably supplied to participating companies.



Head Manager **Dong Gwan-woo**, The Korean Mushroom Producers Association

Q4.

What are the expected effects of carrying out this biomass fueling business? Please tell us how eco-friendly fuel development can affect EWP and local communities.

Head Manager Dong Gwan-woo | After dumping food waste in the ocean was completely banned in December 2015, food waste came to be used as a compost resource, reducing the demand for waste mushroom medium that had always played this role. Accordingly, through the MOU with EWP, mushroom farmers who seek a stable method for treating waste mushroom medium during the off-season of mushroom cultivation are also looking forward to securing additional profits, thereby improving farm income.

Manager Yang Seung-jae | The use of unused forest biomass as fuel for power generation not only contributes to the resource circular economy, but it also reduces the use of imported wood pellets by expanding the use of domestically produced biofuels while preventing domestic wealth from leaking abroad. It is also expected to contribute to job creation and revitalization of the local economy by carrying out projects related to fuel conversion, such as crushing and transporting damaged trees in provincial areas.

Q5.

What are your future plans for the biomass fueling business, and what needs to be improved to promote the sustainable growth of EWP?

Manager Yang Seung-jae | Additional profits generated from the project for converting forest fire-damaged trees into fuel will be returned to local communities through customized local support projects such as creating a corporate forest in the forest fire-damaged area. Furthermore, we plan to create social values by actively supporting other forest fire-affected areas based on the experience and know-how accumulated from handling the forest fire-damaged areas in Gangwon Province.

Manager Bae Jong-hong | Since the mushroom medium pellets are not yet commercialized, we are pursuing to use them in power plants until the first half of next year through the continuous discovery and development of suppliers. The government’s interest and policy support is critical for implementing sustainable biomass fueling projects in the future.

Head Manager Dong Gwan-woo | I hope that EWP’s Mushroom Medium Pellet Fueling Project will not just be a temporary activity, and instead will be developed steadily and continue to coexist with mushroom farmers. In addition, we hope to create concrete, win-win plans to grow together by supporting sales channels for mushroom farmers through the purchasing of mushrooms.

Highlight Events in Timeline

Strengthen Emotional ‘Sympathy’ Exchange, Bringing Happiness for Employees

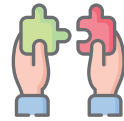
2019. 2.



Safety Resolution Contest and Special Safety Training

EWP Ilsan Combined Heat & Power Complex conducted a Safety Resolution Contest and a Special Safety Training to practice “Cross-check ‘258 365’” in our daily lives. We strive to cross-check thoroughly to remove risk factors in advance. 258 is the number of days for the period of planned preventive maintenance and special construction and 365 represents the number of days for current maintenance and repair work.

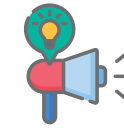
2019. 5.



Realization of Social Values Labor-Management Joint Statement

EWP signed the ‘Labor-Management Joint Statement for the Realization of Social Values and 2019 Collective Agreement’ for a futuristic and healthy labor-management culture. In particular, we newly established 5 provisions and modified 33 of our company policies, such as implementing the ‘advanced use of paid leave of absence’ for work and life balance and expanding exemption time of working hours.

2019. 9.



Expanding channels for and access to reporting grievance of field workers

We established a Grievance Review Committee to systematically manage the distress of field workers in our domestic plants. We have counselors per plant and an online channel to increase accessibility to all employees.

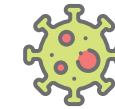
2019. 12.



Methods for Protecting the Rights of Partner/Subsidiary Employees

To spread the practice of human rights management for the partners and subsidiaries of EWP, we held the 2nd Human Rights Management Committee in 2019 to implement methods for protecting human rights. EWP is operating a complimentary lawyer consultation program and guidance on the remedy procedures for human rights violations of a parent company, and more.

2020. 1.



COVID-19 Prevention Campaign

In response to the spread of COVID-19, EWP conducted preventive campaigns and inspected our plants on the measures for handling emergency patients. We disseminated a to-do guidance and face masks to employees and ensured emergency patients can be safely transferred to the designated hospital of each plant.

2020. 6.



Digitalization of Work Process - ‘Let’s Smile Solution’

‘Let’s Smile Solution’, a work process improvement project of EWP aims to digitalize manual and standardized duties to create a workplace with happy employees. By simplifying routine work and improving inefficient processes, we expect maximized convenience and efficiency of employees.

2019. 8.



Training of Future Female Leaders

EWP established a training system tailored for female employees to realize a gender equal company culture by cultivating female leaders of the future generation. We conduct a survey on all female employees to gather opinions and systematically create programs for providing extensive work experience.

2019. 8.



High-five Campaign for Changing Corporate Cultures

The ‘High-five Campaign’ has both meanings of the ‘5 Innovation Activities’ and the gesture of two people slapping against the palm of each other. This is to encourage all members of the company to participate in our innovation activities, which include ‘Family Wednesdays’, ‘PC-off system’, complying with concentrated working hours, paid leaves of absence, and flexible working arrangement.

2020. 4.



Strengthen Communication Among Departments

For the innovation of the company culture of EWP, we opened a discussion session where all employees can partake. 87 employees attended the first online discussion, suggesting ideas, such as job assignments, work improvement, and request for work. Through the outcomes of this session, we intend to strengthen a cooperative culture by finding means to make better communication within and among departments.

The 5 Values . Realized with Energy



Energy for Health	26
Energy for Happiness	34
Energy for Coexistence	40
Energy for Independence	44
Energy for Trust	48

Energy for Health



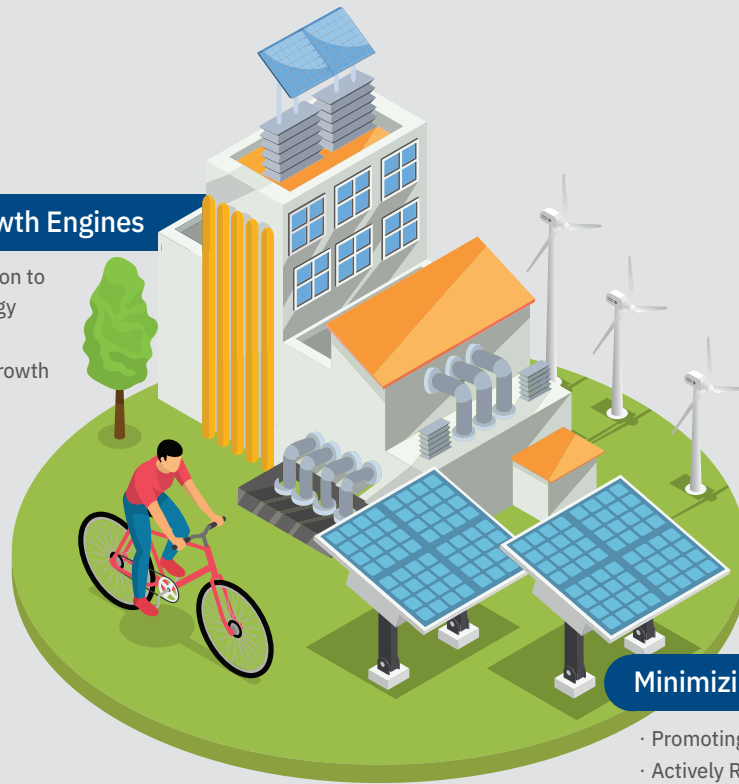
Sustainability Context

The Korean government unveiled the Korean New Deal to overcome the COVID-19 crisis and lead the post-COVID-19 era. For sustainable development of the country, the policy is made of two main pillars: the Green New Deal to respond to environmental policies and the Digital New Deal to strengthen digital capacities in all industries. In a time when the active participation of private and public enterprises is needed more than ever, EWP is operating new and renewable energy-based power plants and digitalizing our business processes to actively engage in establishing the New Deal ecosystem.

EWP Approach

Securing Future Growth Engines

- Strengthening the Transition to New and Renewable Energy
- Development of New Technologies for Future Growth



Minimizing Environmental Impact

- Promoting Environmental Management
- Actively Responding to Climate Change
- Managing Wastewater and Waste Disposal
- Reducing Air Pollutants

2019 EWP Performance

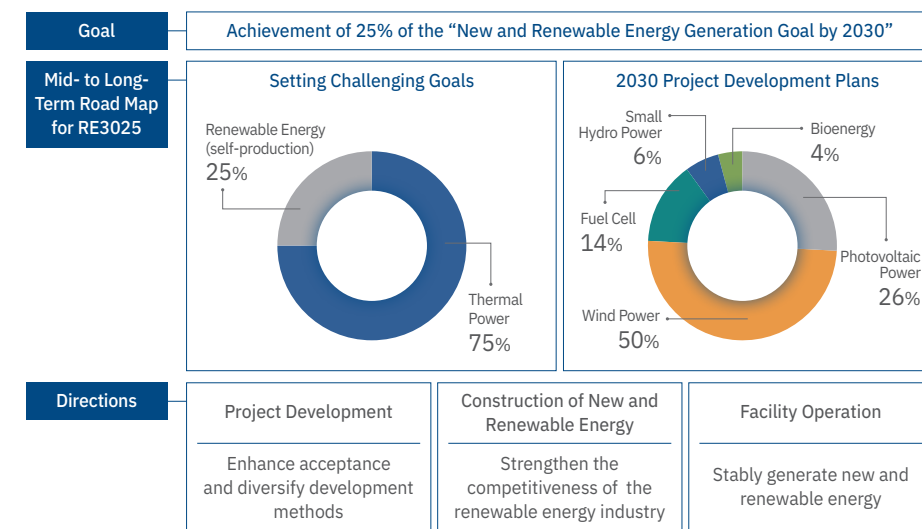
<p>New and renewable energy facility capacity goal</p> <p>Achieved 100% for the 3rd consecutive year</p>	<p>2019 4th Industrial Revolution Power Korea</p> <p>Smart Factory Award</p>	<p>Investment for new and renewable energy R&D</p> <p>KRW 41.5 billion</p>
<p>Environmental management achievement of 2019</p> <p>KRW 370.1 billion</p>	<p>Overseas sales in 2019</p> <p>KRW 475.1 billion</p>	<p>Reduction of GHG emission compared to the previous year</p> <p>1.423 million tons CO₂-eq</p>

Securing Future Growth Engines

Strengthening the Transition to New and Renewable Energy

“RE 3025,” the New and Renewable Energy Strategy

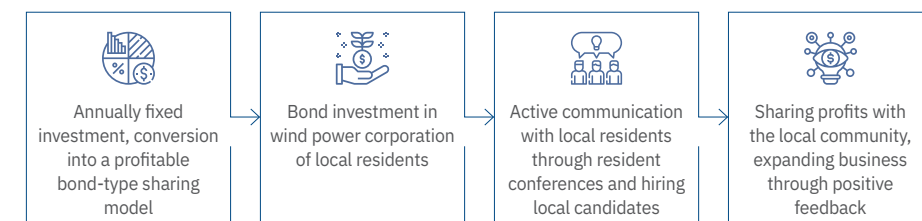
Korea East-West Power is striving for a transition from coal-fired power, which was our main business in the past, to new and renewable energy in compliance with the government’s call to action. We established the “RE 3025 Strategy” in an effort to increase our business proportion of new and renewable energy to 25%, which is higher than the government’s goal of 20%, by 2030. We are creating the foundation for becoming an eco-friendly company, following our 3 directions for new and renewable energy development, energy construction, and facility operation.



Expanding the Supply of Wind Power Generators

To strengthen the competitiveness of the domestic wind power industry, EWP is initiating the “Korea-Wind 200 Project” to expand the number of domestically made wind turbines to 200 units in the country by 2030. In January 2019, we built the largest wind farm of 140MW on the west coast of Korea using domestic equipments and materials in Yeonggwang-gun, Jeollanam Province. We also plan to use domestic equipments and materials for other large projects such as the East Coast Wind Belt of 750MW. Moreover, we plan to establish a wind farm of 110MW by 2023 for the country’s first resident-participatory wind power project in Gadeoksan Mountain in Taebaek. We will share the profits from power generation with the local community to contribute to their income.

[Directions of the Gadeoksan Mountain Wind Power Profit-Sharing Project in Taebaek]



[New and Renewable Energy System Capacity]
(Unit: MW, GWh,%)

	2017	2018	2019
Capacity of New and Renewable Energy System	424.7	514.7	533.0
Generation of New and Renewable Energy	1,475	1,636	1,835
RPS* Performance	100	100	100

* RPS: A system that mandates power generation companies with power generation facilities of 500MW or more to supply more than a certain percentage of the total power generation using renewable energy



Daesan Hydrogen Fuel Cell Power Plant

Opening of the World’s Largest By-product Hydrogen Fuel Cell Power Plant

EWP is expanding its hydrogen energy business in line with the government’s “Hydrogen Economy Revitalization Roadmap” established to strengthen the competitiveness of the local hydrogen industry. In July 2020, we completed the construction of the world’s first and largest 50 MW-class Daesan Hydrogen Fuel Cell Power Plant, producing 400,000MWh of electricity annually. Furthermore, by recycling by-product hydrogen¹⁾ generated in the petrochemical process as a raw material, it is expected to reduce air pollutants. And we expect it to be an important opportunity to revitalize the hydrogen industry in the future.

1) By-product hydrogen: By-product generated from producing petrochemical processes, steel, etc.

Solar Power Plant Construction in Landfill for Coal Ash

EWP constructed a 25MW-class solar power plant in the landfill for Coal Ash²⁾ of Dangjin Coal Fired Power Complex in June 2020. The landfill is the perfect site as it offers a large, flat surface with a significant amount of sunlight, has no environmental damages, and is located inside a power plant for convenient grid connection. This solar power plant generates electricity that can be used by 11,720 households of Dangjin-si, which has an effect of saving about 213 pine trees. EWP will transform the Dangjin Coal Fired Power Complex into an eco-friendly power compound by combining it with existing thermal power generation and renewable energy.

2) Landfill for coal ash: Landfill for disposing coal ash that was made from combusting coal which cannot be recycled

Formation of the Dongseo Haetbit Dream Fund to Lead the Green New Deal

In connection with the government’s Green New Deal³⁾ policy, EWP created the Dongseo Haetbit Dream Fund⁴⁾ after signing an agreement for an investment in solar power development of KRW 500 billion. In this matter, we intend to invest in projects designed and constructed by small- and medium-sized enterprises utilizing domestic equipments and materials only for solar power generation, such as modules, inverters, and transformers. In May 2020, we conducted the first business contest for investment, selecting 102 businesses in the end. We will take the lead in building the Green New Deal ecosystem by supporting plant operation management solutions for the relevant businesses.

3) Green New Deal: Responding to climate change and creating new markets and jobs by investing in the green industry

4) Dongseo Haetbit Dream Fund: Created by receiving funds of KRW 20 billion from EWP and Hyundai Energy Solutions and KRW 500 billion from major insurance companies of Korea

Development of the Eco-friendly LNG Power Project

EWP has commenced the construction of the LNG plant worth KRW 1.2 trillion in Ilwon, Pyeonggok-ri, Eumseong-gun. Since signing the design technology service contract in 2019, we have submitted the evaluation form of the environmental impact assessment, and plan to complete the construction of 561MW power plant in December 2024, and 561MW(total of 1,122MW) in December 2026. The construction of eco-friendly LNG power plants with less environmental damage around the power plant is expected to create new jobs and contribute to vitalizing the local economy.



Agreement Ceremony for Dongseo Haetbit Dream Fund

Development of New Technologies for Future Growth

Development of the 4 Core Technologies for Hydrogen Energy

EWP is focusing on the development of the 4 core technologies for hydrogen energy and intend to contribute to boosting the local economy by increasing the use of domestic fuel cell from 50% to 99% by new technology development.

[4 Core Technologies for Hydrogen Energy]

Core Technology	1. Hydrogen Production and Power Generation Using CO ₂	2. Recovery of Carbon Resources	3. P2G ¹⁾	4. Hydrogen Fuel Cell
Goal	Development of hydrogen and electricity producing technology using CO ₂	Development of technology that converts CO ₂ to hydrogen with plasma	Development of technology for hydrogen generation by water electrolysis with renewable energy	Development of a localized technology for a hydrogen fuel cell system with hydrogen car engine
Activities	- R&D agreement with UNIST (June 2019) - Establishment of the 10kW Dangjin Coal Fired Power Complex	- R&D agreement with the gov’t, SMEs, and local gov’ts (Aug. 2019) - Establishment of 0.1-MW facilities for Dangjin Coal Fired Power Complex	- R&D agreement with the gov’t, KEPCO, and SMEs (May 2019) - Establishment of a demonstration complex in Donghae Coal Fired Power Plant	- R&D agreement with Hyundai Motor Company and SMEs (Oct. 2019) - Establishment of the 1-MW Ulsan Oil Fired & C.C. Power Complex

1) Power to Gas (P2G): Production of green hydrogen by water electrolysis with surplus renewable energy

Development of Eco-friendly Roadblock-type Solar Modules

EWP is developing a roadblock-type solar module that can function as roadblocks and generate solar energy at the same time. This R&D project focuses on developing technology for generating power by installing solar modules on the roads used by pedestrians and bikers. It will have non-slip features considering the safety of the people as well as stain-free and waterproof technologies to increase the R&D achievement.

Development of High-calorie Green Pellet Production Technology

For the expansion of the domestic biomass²⁾ fuelization project, EWP is focusing on developing the technology for producing high-calorie green pellets³⁾, which are higher in caloric value than wood pellet. This project focuses on the high-pressure heating of waste wood and the use of catalysts to develop pellets similar to those of coal fuel. In addition, we plan to verify the possibilities of high-calorie fuel conversion by applying the technology to recyclable raw materials such as waste wood and sewage sludge.

2) Biomass: Living things as energy sources and resources, including trees, grains, plants, livestock excrement, and crops

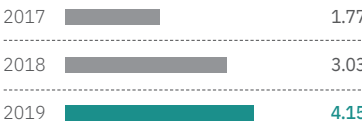
3) Green pellets: Eco-friendly fuel made by compressing organic materials into pellets

Realization of the Industry 4.0 Ecosystem

EWP is creating the Industry 4.0 Ecosystem by developing operation technology and processes for power facilities and establishing digital power plants. Our Power Generation Technologies Development Institute dedicated to the 4th Industrial Revolution of EWP manages 180 tasks, including power plant operation, safety, new and renewable energy, environment, and business management. We also discover domestic companies with outstanding technologies of the 4th Industrial Revolution and provide them test-beds and conduct joint research. Moreover, we disclose the data of plant operation and host artificial intelligence competitions for the public to take the lead in invigorating the data industry. EWP will continue to expand digital infrastructure based on artificial intelligence and big data and develop the predictive diagnostic system to realize the Digital New Deal sooner.

[R&D of Renewable Energy investment costs]

(Unit: KRW 1 billion)



Project Commencement Meeting for the Development of Green Pellet Production Technology



Received the
Smart City Big Data Award
at the 2019 Smart City SOC-ICT Best Practice Competition




Minimizing Environmental Impact

Promoting Environmental Management

EWP Environmental Management System

To realize human-centered environmental management, EWP operates an EWP environmental management system based on three major strategies and nine strategic tasks. The operating power plants have acquired the ISO 14001 certification, the international standard for environmental management systems. In 2019, we invested a total of KRW 264.5 billion to improve the operation of environmental facilities, which resulted in a reduction of fine dust and achieved KRW 370.1 billion in social value.

[Environmental Management System of EWP]

Vision	Energy Company Beloved by People for its Human-Centered Environmental Management		
Strategies	Generating clean energy	Accompanying local communities	Establishing a sustainable system
			
Tasks	- Making a clean atmosphere - Strategically approach climate change - Improve water quality and expand resource circulation	- Voluntary monitor the environment - Communicate with stakeholders - Pursue social values	- Establish a total prevention management system - Lead technology development for the environment - Strengthen human-centered environmental management

Energy Efficiency Management

EWP is striving to reduce the use of energy having acquired the ISO 50001, the international standard for energy management, in March 2019. After implementing new energy technologies and high-efficiency equipment, we reduced about KRW 2.75 billion in energy costs. In December 2019, we hosted a “Best Practice Competition for Enhancement of Energy Efficiency” to share this achievement.

[Energy Use]

Category	2017	2018	2019
Energy Consumption	463,403	484,063	469,057
Energy Unit Usage	9.12	9.05	9.22

Mentoring Environmental Risk for SMEs

EWP conducts a mentoring project to support environmental technologies for SMEs based in Ulsan. We visit their business sites to inspect for compliance with environmental regulations and offer guidance on the types of measures or actions to take, in order to properly respond to the regulations that are continuously tightened. As a result, in 2019, 19 SMEs were engaged in metoring projects, and we achieved 92 improvements in environmental risks.

Actively Responding to Climate Change

Expansion of the GHG Reduction Project through Win-Win Cooperation with SMEs

EWP contributes to solving the issue of climate change by conducting greenhouse gas reduction projects through win-win cooperation with SMEs. In 2019, we supported the establishment of facility efficiency monitoring systems for 66 SMEs and expect to reduce 50,000 tons of greenhouse gas. Furthermore, we promoted the “Energy Co-operation Project” and the “Green Credit Excavation Support Project” with Korea Energy Agency to improve energy management by diagnosing energy at small and medium businesses and transferring energy and greenhouse gas education and reduction technologies.

“Special Award” for the Climate Change Disclosure Project

EWP participates in the Climate Change Disclosure Project (CDP), which is recognized as a world-class authority in the field of environmental information disclosure. We have been voluntarily participating in the disclosure of CDP information for eight consecutive years since 2012 to cope with climate change. In April 2020, we received the “Special Award for Carbon Management” at the “2019 CDP Awards” organized by the Korean Committee for CDP, recognized for our excellence in environmental management.

GHG Reduction Project for Developing Countries

EWP also engages in greenhouse gas reduction projects in overseas regions. We are initiating the Clean Development Mechanism¹⁾ Project in Myanmar’s Mandalay and Yangon cities that will reduce 2.5 million tons of greenhouse gas emissions through waste landfill gas treatment, and supply water purifiers to 2,000 schools in Uganda to reduce about 1 million tons of greenhouse gas emissions. In Ghana, we supported high efficiency cook stoves²⁾ to 500,000 households, reducing 700,000 tons of greenhouse gas emissions and contributing to improving the lifestyles of the people of the region.

1) Clean Development Mechanism Project: An emission-reduction project in a developing country implemented by a country with an emission-reduction commitment under the Kyoto Protocol

2) Cook stove: High efficiency cooking equipment that lessens the use of fuel by 20-30%, reducing discharge of air pollutants

[GHG Emissions]

(Unit: 1,000 tons CO₂-eq)

Category	2017	2018	2019
Total Emissions	49,607	52,329	50,906
Scope1	38,499	39,431	38,944
Scope 2	79	85	74
Scope3	11,029	12,813	11,888



Agreement on the Reduction of Greenhouse Gases and Mutual Growth of Small and Medium Enterprises



“Special Award” for the Climate Change Disclosure Project



Public Hearing with Stakeholders for the Clean Development Mechanism Project in Ghana, Africa



2019 Best Practice Competition for Enhancement of Energy Efficiency

Managing Wastewater and Waste Disposal

Development of Technology for Reusing Wastewater from Power Plants

EWP is developing technologies for reusing wastewater produced by power plants. We are focusing on localizing the membrane¹⁾ water treatment technology with the aim to reuse 70% of wastewater as industrial water. If this R&D performance is extended to the plant, we expect to reduce the risk of power supply in power plants due to shortage of industrial water and minimize environmental impact by reducing the space of the existing wastewater treatment facility by 50%.

1) Membrane (selective barrier): A thin, solid barrier for selectively allowing clean water to pass through, while filtering out impurities

Promotion of Commercialization for Recycling Waste Denitrification Catalysts

In June 2019, EWP commenced a project for recycling waste denitrification catalysts used for removing nitrogen oxide, which is classified as an air pollutant. The waste denitrification catalysts that have been buried after the end of their service life can cause soil pollution due to the lack of recycling technology. To prevent this, we plan to provide our waste denitrification catalyst to an external agency for ten years to support the recycling of organometals collected from the waste denitrification catalyst as industrial materials. With this project, we expect to reduce the possibility of soil pollution and create new jobs.

Leading of the Waste-to-Resource Circular Economy

EWP is the first in the nation to utilize waste mushroom medium²⁾ as fuel for generation, leading the transition towards a world of resource circulation. In May 2019, we signed an MOU for using waste mushroom medium as biofuels. In the same year in December, our Dangjin Coal Fired Power Complex successfully conducted the combustion test, realizing the upcycling³⁾ of waste mushroom medium. Through this method, we can replace imports of resources that are highly dependent on foreign countries and contribute to preventing environmental pollution by using eco-friendly fuels. We also foresee that mushroom farms will generate additional profits by stably treating waste mushroom medium.

2) Waste mushroom medium: Remnants from plants used for growing and proliferating mushrooms

3) Upcycling: A concept of making use of potential values of resources to be discharged

[Waste Generation]			
(Unit: 1,000 tons, %)			
Category	2017	2018	2019
Total Generation of waste	2,054	2,153	2,055
Recycled Amount	1,559	1,644	2,300
Recycled Percentage	76	76	112

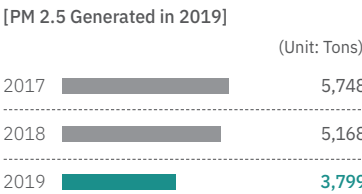


CEO Visiting Mushroom Production Facility at Green Peace Farm

Reducing Air Pollutants

Measures for Reducing Fine Dust

Since the bill classifying fine dust as a social disaster passed in March 2019, more thorough countermeasures and management against PM 2.5 have been in demand. For this reason, EWP strengthened its comprehensive measures and is working on reducing the generation of PM 2.5 by 68% by 2030 compared to data from 2018. In 2019, we proactively improved the processes and reduced PM 2.5 emissions by 1,369 tons, or by 26% compared to that of 2018.



Reduced Operation of Coal-fired Power Plants

With the government's policy for seasonal management of fine dust¹⁾, EWP stopped the operation of its large-volume coal-fired power plants from December 2019 to February 2020 and limited the operation output of 12 power generators by up to 80%. As a result, we reduced a total of 294 tons of PM 2.5 and 3.84 million tons of greenhouse gas emissions compared to the same period in 2018.

1) Seasonal management of fine dust: A policy implemented to strictly restrict the emission of fine dust from December to March, the season during which the concentration of fine dust is high

Increasing the Use of Low Sulfur Coal

To reduce the amount of sulfur oxide, which takes up most of the fine dust discharged from coal power plants, EWP is utilizing low-sulfur coal instead of high-sulfur coal. The environmentally friendly low-sulfur coal has a low sulfur content of 0.3% and is capable of reducing the emission of sulfur oxides. After increasing the use of low-sulfur coal in 2019, fine dust has been reduced by 686 tons.

Construction of Indoor Coal Storage Sheds for All Coal-Fired Power Plant

EWP is working on the construction of indoor coal storage sheds that prevent coal from scattering in the air due to strong winds coming from the ocean. This project that commenced in March 2020 cost KRW 300 billion with plans to convert the coal storage sheds of Dangjin Coal Fired Power Complex that are 1.32 million tons in volume into completely indoor facilities. Through successful execution of this project, we hope to establish cutting-edge, eco-friendly facilities and contribute to improving air quality.

[Emission of Air Pollutants]			
(Unit: Tons)			
Category	2017	2018	2019
SOx	12,082	10,932	7,813
NOx	15,988	13,308	9,724
Dust	480	523	509

Energy for Happiness



Sustainability Context

Every type of corporation, including public enterprises, is a member of society that can greatly impact the local communities to which they belong. For this reason, corporations comply with regulations and engage in social responsibility activities by responding to the various interests of stakeholders to fulfill their responsibilities and roles in local communities.

EWP Approach

Vitalizing Local Economies

- Creating Shared Values Based on a Win-win Model



Solutions for Local Issues and Tailored Social Contribution

- With the Youth
- With the Local Community
- With Social Minorities

Exchanges and Communication with Local Communities

- Sharing with Local Communities
- Contributing the Development of Local Communities

2019 EWP Performance

CSR in the Community Received the C-mark in recognition of social contribution activities as First Public Enterprise	Awarded by the government in recognition of social contribution Triple Crown	Economic rehabilitation in coal mine regions Generated Social Value KRW 11.6 billion
Global language and culture education Supported 300 people	Donated 3 solar energy generation facilities	Donated in funds for social welfare KRW 200 million

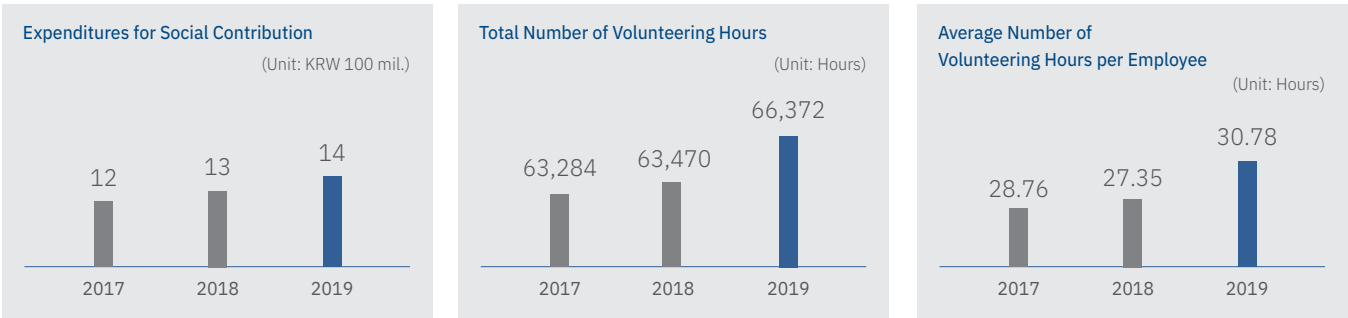
Social Contribution Initiative Process

Korea East-West Power aims to achieve its goal of becoming a “reliable energy company that fulfills social responsibility through sharing” through social contribution activities in the fields of energy, safety, and environment.

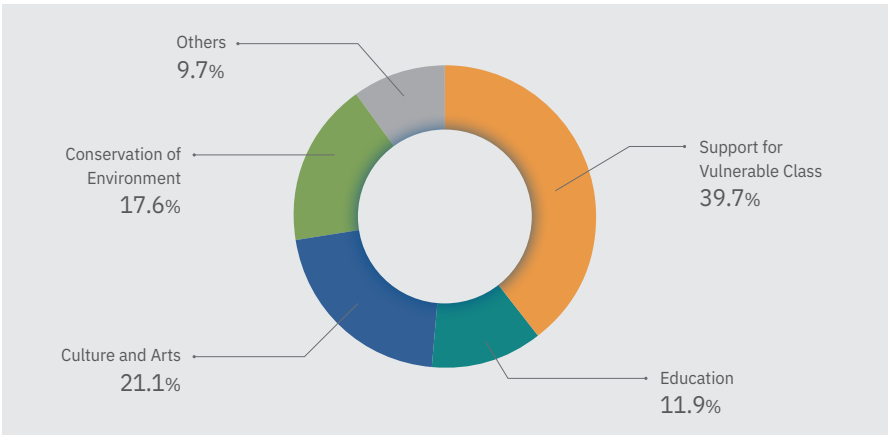
[Social Contribution Initiatives]

Vision	A Reliable Energy Company that Fulfills Social Responsibility through Sharing		
Goal	Bringing Happiness to the Local Community through the “Happy Energy Dream”		
Initiatives	Companions of EWP		
	With the Youth	With the Local Community	With Social Minorities
	<ul style="list-style-type: none">- Support for education of the future generation- Support for fostering entrepreneurs- Comforting support	<ul style="list-style-type: none">- Support for vitalizing the local economy- Support for safety welfare- Support for improving the environment	<ul style="list-style-type: none">- Support for independence of social minorities- Support health welfare of the less privileged- Support people in need of energy
Tasks	Strengthen the social contribution system for CSV capability enhancement	Expand designs of tailored projects for local communities	Create an all-inclusive infrastructure for social contribution

[Social Contribution Achievements]



[Ratio of Donations]



Vitalizing Local Economies

Creating Shared Values Based on a Win-Win Model

Utilizing Burnt Trees from the Forest Fire in Gangwon as Fuel

As part of EWP's social contribution project associating power generation with disaster recovery, we are utilizing the trees burnt from the forest fire that occurred in Gangwon Province in April 2020 as biomass fuels. We process the burnt trees into woodchips to supply them as fuel. This enables the reduction of fuel supply costs, increases the income of local residents, and revitalizes local economy by recycling in conjunction with local businesses. The costs saved from utilizing burnt trees are used to create a corporate forest, install wind and solar power generators, and other tailored projects to support and contribute to local communities.

Boosting the Economy in Coal Mining Regions

EWP supported a coal mining region in Gangwon Province, which is undergoing the crisis of massive unemployment of coal mine workers and a regional economic downturn due to the rapid decrease in the use of anthracite for power generation in Korea. After discussions with the Ministry of Industry and Korea Coal Association, our Donghae Coal Fired Power Plant increased the purchase of anthracite from 225,000 tons to 400,000 tons, in 2019. As a result, we saved 170 jobs of coal mine workers and expect a yearly KRW 11.6 billion in economy recovery generated from their incomes.

Solutions for Local Issues and Tailored Social Contribution

With the Youth

Fostering Instructors from Diverse Cultural Backgrounds

To provide employment to marriage migrant women and improve the perception on multicultural families, EWP designed a "Global Edu Bridge" to cultivate female instructors from diverse cultural backgrounds. We offered support for six sessions of instructor-training programs for migrant women from China and Vietnam in collaboration with the Multicultural Family Support Center and Touch for Ulsan. As a result, we cultivated 11 language instructors from Chinese and Vietnamese language-speaking regions and provided them with sustainable jobs. The instructors conduct 3-month language courses with about 300 children from regional child centers and elementary schools, improving the perception of migrant women at the same time.

Fun (Sinbaram) Energy Education

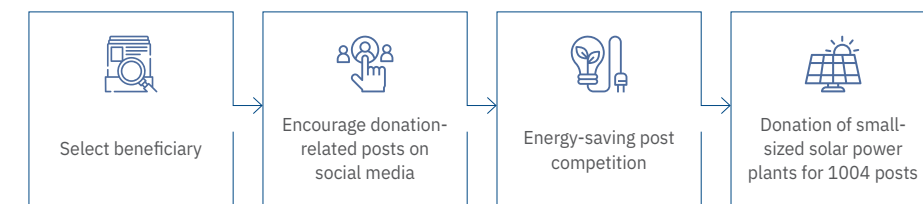
To improve the interest and understanding surrounding renewable energy of the future generation and support career exploration in the energy field, EWP is operating the "Fun (Sinbaram) Energy School" and "Fun (Sinbaram) Energy Playground." The "Fun (Sinbaram) Energy Playgrounds" promote programs for solving energy issues and career exploration in regional child centers. The "Fun (Sinbaram) Energy Schools" are for middle school students, composed of energy art and energy science programs and field trips to related organizations. The Fun (Sinbaram) Energy Education program that began in 2016 broadened the scope of benefits and advanced programs to suit a more diverse variety of beneficiaries. In 2019, about 1,800 students from elementary and middle schools, as well as regional child centers participated in this educational program.

With the Local Community

Solar Energy Donation Project with the Citizens

EWP is promoting the "EWP Energy 1004" project, which supports the installation of solar power plants through donation to local residents, to promote the need for renewable energy to local residents and raise awareness of the energy welfare of the vulnerable groups. This program encourages local residents to share their energy-saving activities on social media platforms of EWP (blog, Instagram), and if they complete a certain mission, a small-sized solar power generation facility is donated to vulnerable groups of the region. Through this project, EWP intends to promote energy-saving activities to local residents and reduce energy costs for vulnerable groups to contribute to enhancing welfare.

[EWP Energy 1004 Process]



Sales Support for Regional Farms

EWP purchased agricultural products from farms that were hit by excessive supply and natural disasters, such as typhoons and heat waves. This donation program, which supported farms that were undergoing difficulties in a timely manner, increased sales, encouraged purchases, and promoted a foundation for creating new markets. EWP purchased 10 tons of onions (KRW 5.5 million) from farms that were suffering from price plunges and fruits (KRW 20 million) from orchards hit by typhoons. In addition, by expanding unmanned local food stores located in the lobby on the first floor of our headquarters to promote local agricultural consumption, we received positive responses from local agricultural product sellers who have difficulty selling their products, executives, and visitors.



Unmanned Local Food Store



Support for Damaged Farms



Donated

3 solar energy generation facilities



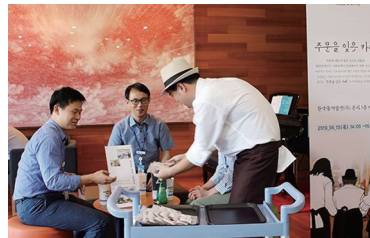
Instructors from Chinese/Vietnamese

language-speaking regions



Global language/cultural education support for

300 people



Café of Forgotten Orders

With Social Minorities

“Café of Forgotten Orders” for Improving Awareness of Seniors with Dementia

EWP operates the “Café of Forgotten Orders” to support the rehabilitation of people with dementia and developmental disabilities. This is a pop-up café where baristas with developmental disabilities and servers with dementia work, programed to improve awareness of these social minorities and support their contributions to society. For the operation of this café, we implemented the first AAC* ordering café in Ulsan and supported job training for the beneficiaries. In 2019, we opened eight pop-up cafes, and plan to open a regular café to promote an environment in which people with developmental disabilities and seniors with dementia are treated equally as members of society. Moreover, we will expand the branches of “Café of Forgotten Orders” throughout the nation in cooperation with related agencies, broaden the business area to restaurants, and more.

* Augmentative and Alternative Communication (AAC): A way to help people with disabilities communicate through alternative means such as photos, pictures, and words

Self-reliance Support for the Hearing Impaired

EWP supports the creation of jobs for people with disabilities and contributes to the self-reliance of socially vulnerable groups. To establish a social enterprise that sells the artwork of individuals with hearing impairments, we provide a variety of arts courses. In 2019, we supported calligraphy and pottery class for 23 hearing-impaired members of Ulsan Association of the Deaf. Among the programs, creating pottery using coal ash was selected as a social contribution idea, which later lead to the conclusion of an MOU with a coal ash recycling agency. This is recognized as a social contribution project that secures emotional stability for people with hearing impairment and support economic independence while making use of power plant resources.

“Magic Lamp” Travel Support for Families with PWDs

EWP offered a total of KRW 10 million in support of 13 households in Ulsan through the “Magic Lamp” program that offers support in the form of travel expense for families with people with disabilities. EWP provided traveling opportunities for families with members with disabilities or lower-income families who had never been on a family trip due to physical and emotional distress.



Calligraphy Training for Hearing-Impaired Individuals



“Magic Lamp” Travel Support



Education for hearing-impaired individuals

23 beneficiaries



Magic Lamp Travel Expenses

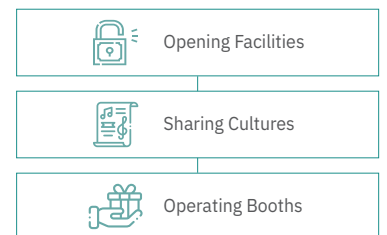
Total support of
KRW 10mil.

Exchanges and Communication with Local Communities

Sharing with Local Communities

Usage of Our Resources

EWP practices social contribution activities through sharing its resources. We open our tennis court, futsal court, outdoor theater, and other facilities at all times for use by local residents. Around 4,159 residents made use of these facilities, and we selected two multicultural couples who had not had their wedding ceremonies due to financial difficulties to offer support for their wedding march by providing the main auditorium of our headquarters. In the lobby and auditorium of our office building, we provide sign language and guitar lessons, and youth theater groups perform plays. In one side of the building, we installed a recycling booth to collect donations from our employees that are delivered to local welfare centers. In 2019, we gave away 3,438 items, including clothes, books, and toys. Later on, we plan to install more of these booths in public offices, libraries, and more.



Support for Overcoming the COVID-19 Crisis

To support local communities affected by COVID-19, EWP donated funds to Community Chest of Korea, Ulsan. In addition to funds, we also supported disinfection activities and delivery of relief supplies such as hand sanitizer, masks, and snacks for workers on the frontline. Furthermore, we opened the “One Table, One Flower” campaign for flower farms, which have been strongly affected by the Improper Solicitation and Graft Act and the COVID-19 pandemic. This campaign, which encourages employees to place one flower on each desk in the office, boosted flower consumption and helped the local economy through the purchase of KRW 21 million worth of flowers. The flowers were used to decorate offices and given to children of employees who entered schools.



Donation of

KRW 200 mil.
to Community
Chest of Korea

Contributing to the Development of Local Communities

Support for International Events and Emergency Relief Supplies

EWP is contributing to local communities by supporting international events of the region. We offered KRW 100 million in funds to the 2019 World Aquatics Championships in Gwangju and supported promotional booths for new and renewable energy at the 2019 International Hydrogen Forum in Donghae. Moreover, we created the “Design Street of Lights” for the Shipbuilding & Sea Festival in Ulsan and “Garosu-gil Light Street” in the innovation city, contributing to vitalizing the local communities. In addition, we strive to fulfill our responsibilities as a member of the community by providing emergency relief supplies to disaster-affected areas such as fires at the Ulsan Agricultural and Fishery Products Wholesale Market and forest fire in Gangwon.



Support for Merchants in Ulsan Agricultural and Fishery Products Wholesale Market

Energy for Coexistence



Sustainability Context

The competencies of SMEs may impact not only individual companies, but also the nation's competitiveness. Corporations, as members of society, have the responsibility to cooperate and grow together with SMEs and small business owners to promote sustainability. As a public enterprise, it is important that we secure sufficient capabilities through win-win cooperation with partner SMEs to stably supply electricity and lead the 4th industrialization of power-generating facilities.

EWP Approach

Support for Strengthening Competencies of Partners

- System for Mutual Growth Strategies
- Leading Domestic Manufacture of Parts
- Supporting Domestic and International Sales
- Enhancing Competitiveness of SMEs



Win-win Culture with Partners

- Improving Remuneration for Partners
- Establishing a Fair Economic Order

2019 EWP Performance

Amount of purchased technology development products	Amount of purchased products from corporation run by female leaders	Expenditure for win-win payment
108% increase	18% increase	74% increase
Support for establishing smart factories for	Testbed support for demonstration	Domestic/international exhibitions and purchase conference support
18 companies	19 cases	426 SMEs

Support for Strengthening Competencies of Partners

System for Mutual Growth Strategies

Korea East-West Power strives towards mutual growth with SMEs and small business owners based on communication and cooperation. We conduct mutual growth strategies and monitor our performance with the intention to establish an “inclusive ecosystem for growth” and realize social values through a win-win growth culture.

[System for Mutual Growth Strategies]

Goal	Establishing an Inclusive Growth Ecosystem through Future-oriented Win-win Growth Policies			
Mutual Growth Strategy	Strengthening technology and domestic manufacturing	Supporting sales channels through communication and cooperation	Building competitiveness of SMEs through differentiated strategies	Realizing social values by expanding growth support
Tasks	<ul style="list-style-type: none"> - Develop domestic manufacturing of power facilities - Support testbeds for core parts - Strengthen competencies of the technologies of the 4th Industrial Revolution 	<ul style="list-style-type: none"> - Strengthen CEO's communication with field workers - Support systematic sales channels - Expand the export to overseas markets 	<ul style="list-style-type: none"> - Cultivate small competitive corporations - Cultivate second- and third-tier partners - Expand support for establishing smart factories 	<ul style="list-style-type: none"> - Establish a growth foundation for small business owners - Reduce wage gaps between conglomerate and SME employees - Create quality jobs

Leading Domestic Manufacture of Parts

To strengthen the competitiveness of the domestic energy industry, it is important that the materials, parts, and equipment are locally manufactured. For the domestic manufacture of facilities, EWP invested KRW 1.9 billion in research and development and locally manufactured 33 core parts of a gas turbine (model 501D5), saving KRW 11 billion in production costs. Furthermore, to enhance the reliability of products developed by SMEs and secure their technology competitiveness, we have been supporting testbeds for demonstration since 2011. In 2019, we suspended the operation of our power plants for 60 days to support the demonstration of “generator stator windings,” a core part of power plants, for the first time in Korea. To minimize the burden on SMEs, an exception clause was inserted in the testbed operation policy. EWP reduced the construction period by four months and costs by KRW 300 million. We plan to add more products for demonstration to promote overseas exports.

Supporting Domestic and International Sales

Strengthen CEO's Communication with SMEs

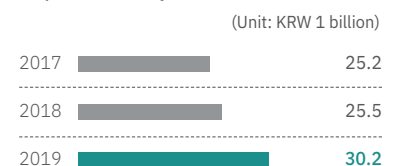
The CEO of EWP visits SMEs at least once a month to continuously communicate with SMEs and pay attention to their concerns. From the field, we received 31 concerns in relation to purchasing, sales channels, R&D, contracts, and bidding. In December 2019, the CEO hosted an Inspection Meeting to act on 29 of the concerns received. The CEO also hosted an exhibition to promote products of corporations run by female leaders to support their growth, conducting one-on-one purchase consultations with working-level staff. With the CEO's interest to support companies of female leaders, we focused on expanding sales channels for them. As a result, we purchased KRW 30.2 billion of products from such corporations, exceeding our goal by KRW 4 billion.

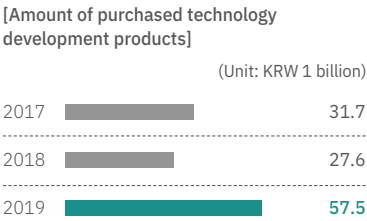


Testbed support for demonstration

148
accumulated cases

[Amount of purchased products from corporation run by female leaders]





Support Systematic Sales Channels

EWP is purchasing more from SMEs to support those struggling to find sales channels. We focus on supporting expansion into overseas markets, discovering and managing companies through operation of a supplier council, securing technologies through localized R&D, and cultivating future leaders. In 2019, we supported domestic and overseas exhibitions and purchase consultation for 426 companies, contributing to seeking new sales channels for SMEs. We purchased a total of KRW 57.5 billion worth of products purchasing more products made from domestic manufacture technology produced by SMEs.

Support for Born Global Startups

EWP supports born global startups¹⁾ to become powerful global companies through a one-stop assist program that offers support for everything, from starting a business to commercialization. We discovered entrepreneurs that have the potential to enter the global market and provided the necessary support needed for establishing growth roadmaps and selecting target markets. As a major achievement, the “SNL Enterprise” that we offered KRW 90 million in support for producing prototypes achieved USD 1 million in exports in 2019. EWP will continue to target niche overseas markets and support entrepreneurs with commercialization for boosting exports of SMEs.

1) A startup that targets overseas markets from the initial stages

Enhancing Competitiveness of SMEs

Tailored Growth Support for Second- and Third-tier Partners

To provide growth opportunities to SMEs, EWP is expanding mutual growth relationships with second- and third-tier partners. In 2019, to proactively respond to environmental regulations such as IMO2020²⁾ and resolve long-term economic recessions of the shipbuilding industry, we initiated a win-win relationship with a shipbuilding material supplier. With this arrangement, we signed a contract valued at KRW 5.2 billion for installing a desulfurization facility with a local shipping company as a first-tier supplier together with second- and third-tier suppliers. By installing desulfurization facilities on long-term bituminous coal charter vessels and using high-sulfur oil, sulfur oxides have been reduced by 98% compared to previous years. Based on this three-party win-win model, EWP was able to proactively respond to environmental regulations.

2) IMO 2020(International Maritime Organization 2020): International Maritime Organization (IMO) regulations that strengthened the upper limit of sulfur content in ship fuel oil from 3.5% to 0.5%, effective starting on January 1, 2020

Expanded Support for Establishing Smart Factories

For effective management of SME productivity and product quality, EWP is expanding support for establishing smart factories³⁾ according to the sizes and capacities of corporations. In 2019, by advancing smart factories through tailored technological solutions, we achieved a 44.6% average increase in productivity, quality, cost, and delivery. Moreover, we formed a growth foundation in preparation for the 4th Industrial Revolution by supporting smart factory awareness enhancement programs and installing relevant kiosks for small-sized enterprises. In this manner, EWP strived for creating a smarter manufacturing process to contribute to increasing productivity and quality of SMEs, achieving KRW 1.43 billion in financial performance.

3) Intelligent production plant that improves productivity, quality, and customer satisfaction by applying information and communication technology (ICT) that combines digital automation solutions in the production process such as design, development, manufacturing, distribution, and logistics



Win-Win Growth Performance Presentation

Win-win Culture with Partners

Improving the Treatment of Business Partners

Reduce Wage Gaps Between Conglomerate and SME Employees

EWP aims to lessen the wage gap between employees of large companies and SMEs. In 2019, we offered KRW 29 million in support of Mutual Growth Mall points as awards for Excellent Partners and cooperative profit-sharing programs. Moreover, to maintain the stable employment of young employees and prevent turnover of core human resources, we are continuously conducting support projects for Youth’s Tomorrow Filling Deduction for 30 employees of partners.

Spreading Human Rights Management in Partners

EWP intends to create a culture that prohibits all kinds of discrimination against partners. In this manner, we announce the obligations of protecting and respecting human rights when signing contracts with partners for purchasing materials, construction work, and services. Moreover, to prevent possible violations of human rights against employees of partners, we operate a human rights protection council to discuss solutions for human rights issues. Striving towards human rights management, we also conducted human rights surveys with security and janitorial workers.

Establishing a Fair Economic Order

Operation of a Transparent Contract System

EWP aims to resolve improper and unfair practices in order to realize transparent and fair public procurement. In 2019, the customary depreciation standard was completely abolished through the application of 100% of the initial design price based on the computation of the contractual price for competitive bidding. Through this, we can induce quality improvement and ease the management burden of SMEs by guaranteeing the appropriate contractual price with partners. Moreover, we strived to break power-based relationships by improving contract terms in the blind spots of fair trade due to unfair and unclear standards.

[Improvement of Unfair Contractual Conditions]

Areas for Improvement	Details
Improperness/ Unfairness	- Specification of delivery date considering the period for production and procurement - Extension of contract term according to agreements between contractual parties
Ambiguity	- Mandatory specification of conditions for price adjustment reflecting objectives of the contract - Calculation of appropriate quantity and price considering history and development plan
Others	- Prohibition of adding budgets for items irrelevant to the contract purpose or participation qualification - Consideration of opportunities for bidding and contracts with other companies; 1-year contract period principle

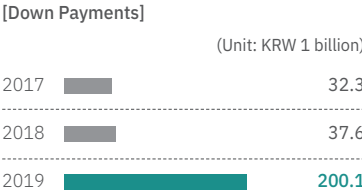
Partner-centered Cost Management Process

EWP improved the practical transaction process that partners can enjoy from the procedures of procedures bidding to payment. In order to simplify the procedures, we exempted the submission of advance payment statements for goods and service contracts worth less than KRW 200 million. Furthermore, by increasing the rate of advance payment to 80% for efficient execution of contracts, the advance payment increased 432% compared to the previous year. In addition, by initiating prompt delivery payments through compulsory use of the win-win payment system when paying for construction contracts, win-win payments reached KRW 229.1 billion in 2019.



First Public Enterprise

to provide incentives through Mutual Growth Mall points



Energy for Independence



Sustainability Context

Unemployment is a worldwide phenomenon that is constantly raised as a social issue and one of the government's core initiatives that needs to be resolved. Corporations contribute to government's job policies and the local economy by recruiting new employees and ensuring job preservation for existing employees. Furthermore, by improving job quality, corporations secure business competitiveness at the same time.

EWP Approach

Creating Sustainable Jobs

- Strategies for Creating Jobs
- Creating New Jobs
- Conversion to Permanent Positions



2019 EWP Performance

Creation of new jobs for 2,192 people	Permanent positions for outsourced employees 100% conversion	2019 Social Venture Competition the KoSEA Presidential Award
2019 Performance Assessment of Companies with Internal Ventures Best Company	Students of specialized vocational high school employed to public energy enterprises 23 graduates	Advanced donation as work-based learning scholarship KRW 22 million

Creating Sustainable Jobs

Strategies for Creating Jobs

To achieve the goal of "creating 27,000 high-quality jobs," Korea East-West Power endeavors to enhance the quality of jobs and create new jobs. We formed a foundation for creating sustainable jobs and established a labor-respecting culture. We also aimed to expand investments in our main business and create innovative jobs utilizing existing resources.

Employment Goal	Creation of 27,000 quality jobs by focusing on the main business			
Initiative	Enhancement of Job Quality		Increase in No. of Jobs	
Task	Form a management infrastructure for creating sustainable jobs	Establish a labor-respecting culture for a workplace with no discrimination	Create jobs by expanding investment in the main business	Innovative jobs utilizing existing resources and competencies
Action Plan	<ul style="list-style-type: none"> - Establish a verification system for sustainable jobs - Create jobs by improving working methods 	<ul style="list-style-type: none"> - Complete conversion to permanent positions and improve employee benefits - Employment protection for industries in crisis and vulnerable groups 	<ul style="list-style-type: none"> - Create jobs linked to the main and new businesses - Growth foundation support for partner SMEs 	<ul style="list-style-type: none"> - Entrepreneurship and growth support for internal ventures - Conduct employment support programs by utilizing internal resources

Creating New Jobs

In addition to the regular periodic recruitment of new employees, EWP hires new members through part-time jobs that can be converted into regular positions. By analyzing the nature of the positions, we selected 12 full-time convertible part-time positions and recruited candidates after research on the demand for the positions. In 2019, we hired six new employees to be a high-pressure gas safety manager, records management specialist, welfare manager, and more through this program. Moreover, we had employees converting to part-time positions because of personal needs, such as long commuting distance and desire to perform self-development activities. This resulted in reducing labor costs, which enabled the recruitment of 3 new employees.

[Job Creation Status]

	2017	2018	2019
Public	103	552	110
Private	72	821	2,082
Total	175	1,373	2,192

(Unit: People)

Conversion to Permanent Jobs

Conversion to Permanent Positions for Outsourced Employees

Based on discussions with councils for cleaning, security, fire safety, promotion and facility management, etc., EWP set the directions for conversion to permanent positions. Through fair process for permanent position conversion, we hired outsourced employees as permanent employees of our affiliates and applied wages in accordance with their positions. In 2019, we converted 100% of the 427 outsourced employees to permanent positions, including 19 fire safety employees who relatively require more job expertise.



Reduction of labor costs through conversion to part-time positions about

KRW 95 mil.



Creation of new jobs for

2,192 people



100% conversion

to permanent positions for outsourced employees



Awarded

the KoSEA Presidential Award for
the 2019 Social Venture Competition



Selected as the Best Company

for the 2019 Performance Assessment
of Companies with Internal Ventures



Award from the Minister of SMEs and Startups

awarded to our 1st internal venture
in 2020



1st internal venture selected as an

Eco-friendly Pre-social Enterprise in 2020

Support for Internal Ventures

Internal Venture Competition

EWP held a Startup Idea Competition with the aim to discover innovative business models. The 2020 competition, followed by that of the previous year, included all citizens as eligible candidates to take part in the competition with the desire to invigorate internal ventures. By hosting internal and external competitions at the same time, we received 115 submissions for energy business ideas. Among them, seven ideas were selected by external experts and internal judges to support incubation for business realization. The final project plan was selected afterwards through a final evaluation, which was released as the fourth internal venture (“Sunlight Dream Service”) in September 2020.

Support for Internal Startup Incubation

EWP allows employees to engage in entrepreneurship, establishing a support system for these employees to reinforce internal ventures. Through full support for our four internal ventures (e-CUPs, PACT-Alliance, ESP, Haetbit Dream Service)¹⁾, two teams in 2019 followed by one team in 2020 successfully spun off to become independent startups. More specifically, the second internal venture PACT-Alliance hired two technological employees from the region in 2019 and four additional employees in 2020, contributing to the creation of new jobs. Likewise, the third internal venture ESP was the first public enterprise to recruit two local university students as team members, supporting the cultivation of young entrepreneurs. Through active support for entrepreneurship, we were recognized as the first public enterprise to win the “Social Venture Competition” and the “Best Company” in the Performance Assessment of Companies with Internal Ventures in 2019. In 2020, our first internal venture e-CUPs was commended for its achievements with the “Award from the Minister of SMEs and Startups,” was selected as an eco-friendly pre-social enterprise in September.

- 1) e-CUPs: Producer of fuel made from used coffee grounds as an alternative to imported wood pellets
PACT-Alliance: Diagnoses and sells heavy electric machineries; diagnoses power generators and transformers to prevent damages
ESP: Increases solar power generation efficiency through remote cloud-based solar diagnosis
Haetbit Dream Service: Project associated with Dongseo Haetbit Dream Fund; provides monitoring services of solar power plant

Jobs Tailored by Each Life Cycle

Enhancing Employment Capabilities of Technological Talents

Building Competencies for Energy Vocational High School Students

EWP commenced the “EWP Program for Building Competencies of Students of Energy Vocational High Schools,” in hopes of boosting the employment rate of specialized vocational school students in Ulsan. We made industry-and-school support agreements with energy-related vocational schools and provided tailored education programs by developing curriculum suitable for high school students. As a result, the employment rate of specialized vocational high school students to energy public enterprises increased 3 times compared to that of the previous year. Our program was recognized as an outstanding practice, which was later introduced to the public institutions of other cities. In 2020, we expanded this program by collaborating with nine public institutions and the Office of Education under the title “High School Open School.” Moreover, this EWP Energy Program is planned to be included as a formal subject in the High School Credit System that will soon be implemented.

Job Matching Day for Technological Talents in High School

To provide actual employment support for students of specialized vocational schools, EWP hosted the “Job Matching Day for Technological Talents in High School” to fully support school-to-corporation recruiting programs. We introduced EWP’s employment support program as one of the main events and installed a booth where teachers in charge of the employment of students can consult with representatives of our partners.



Job Matching Day

Employment Support for College Students and the Youth

Employment Mentoring

To provide customized support programs for university students who seek employment in public institutions, mentor-mentee relationships were formed between our employees and university students in April and May 2019 to develop strategies for employment. In June, we hosted the “Youth Employment Camp” and provided special lectures for preparing for the National Competency Standards (NCS) test and job interviews. The mentors were composed of office workers and technological talents to provide assistance in preparing for employment and provide practical information, such as job descriptions by position.



Mentoring Day

Cultivation of Youth Activists

EWP conducts a “Project for the Creation of Job Tailored to the Life Cycle” by cultivating youth activists who are specialists in urban regeneration projects. By signing MOUs with Ulsan Metropolitan City Authority and Support Network for Community Creation, we organized the “Youth Activist Training Program for Urban Cultural Regeneration” in November 2019, in hopes of cultivating the cultural planning skills of youth activists. The program was composed of 7 fields related to urban regeneration and regional promotion with the participation of 50 youth activists. EWP will continue to support youth activists to regenerate the old regions of Ulsan and bring more life to the city.

Support for Work-based Learning Workers

EWP contributes to cultivating competent technological talents of Ulsan by offering support in the form of scholarships of KRW 2 million for each person who faithfully completes the work-based learning program¹⁾. Based on the MOU signed with Human Resources Development Service of Korea in December 2019, we selected 16 SMEs related to the energy industry and funded KRW 14 million in scholarships for employees who participate in the work-based learning program. In the first half of 2020, we provided KRW 22 million in scholarships in advance to support in overcoming the COVID-19 crisis.

- 1) Work-based learning program: A program to support SMEs in cultivating talents through a 1-year education and training program for work-based learning workers



Advanced donation of

KRW 22 mil.

as work-based learning scholarship

Employment Support for Retirees and the Self-employed

EWP takes part in “L:IN:K(Labor In Key)” and the “Challenge and Connection” projects, designed to support retirees and self-employed business owners in Ulsan. We offered support in the form of consultation and education funds for the reemployment of retirees from various fields, which led to the employment of 282 individuals out of the 600 beneficiaries. We also visited self-employed business owners to provide management support and low-interest financial consulting. EWP will continue these kinds of employment support programs for senior citizens.

Energy for Trust



Sustainability Context

The strengthening of the Occupational Safety and Health Act and enforcement of anti-bullying laws in the workplace are some examples of laws and regulations that guarantee the rights of workers that have been strengthened over time. To provide a safe and happy workplace for employees, it is necessary to understand and respond to the latest trends in socio-economic laws and regulations regarding problems that may arise in the workplace, and to fully guarantee the safety, health, welfare, and human rights of workers.

EWP Approach

Operating a Safe Power Plant

- Disaster & Safety Management System
- Smart Safety Management for Sites
- Strengthening Workers' Safety and Health

Recruiting Future Leaders

- Fair Recruitment Model
- Rational System for Performance Management
- Developing Capabilities of Human Resources

Creating a Happy Workplace

- Work and Life Balance
- Realizing a Company Culture of Communication

Practicing Human Rights Management

- System of Human Rights Management Initiatives
- Internalizing a Culture of Respecting Human Rights

2019 EWP Performance

Death accident rate ZERO (3rd consecutive year)	Received family-friendly management certification for 11th consecutive year	Reduced accidents in partners 67%
No. of employees making use of flexible working arrangement 2,363 Employees	Education and training costs per employee KRW 3.89 million	Establishment of the Committee for Human Rights Violation Relief

Operating a Safe Power Plant

Disaster & Safety Management System

Korea East-West Power operates a disaster & safety management system for the safety of our employees, our partners' employees, as well as all Korean citizens. We manage the risk factors in our workplaces and facilities, such as fires, explosions, and leaks of hazardous substances, fulfilling a safety-first management policy.

[Disaster & Safety Management System]

Goal	Operation of safe power plant for the protection of workers' lives and health			
Initiative	Disaster Safety Reinforcement of public safety	Human Safety Formation of a safe community	Industrial Safety Internalization of a win-win safety culture	Facility Safety Securement of safety in facilities
Task	- Develop a control system - Strengthen counter-measures for fires and explosions - Strengthen response to earthquakes	- Safety of local communities - Reduce fine dust - Enhanced safety of partners	- Proliferate safety awareness and culture - Remove risk factors - Develop innovative technology for safety	- Verify safety of facilities - Reinforce safety of the headquarters - Complete abolition projects without disasters

Smart Safety Management for Sites

Improvement of Safety System and Policies

To strengthen safety practices, EWP is improving its safety system and policies. Our existing system required workers to personally go to the offices to use computers for approving field work. This caused a delay in work as employees had to move from the field to the office. As a solution, we implemented a mobile approval system. This made the immediate approval of work after confirming the fulfillment of safety requirements, thus securing more time to work and reducing likelihood of accidents. Moreover, we reflected the safety responsibility items in the personal assessment to strengthen the responsibility of the management supervisor. Failure to report safety accidents are scored 0 with the purpose to prevent the concealment of accidents.

Intellectualization of Management of Dangerous Work

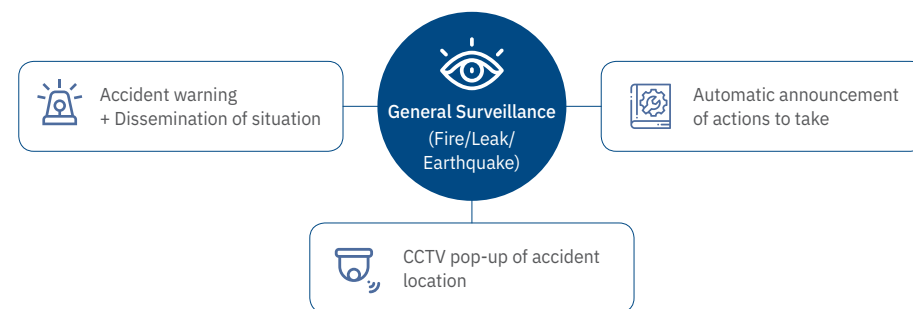
EWP is establishing a safe working environment by developing innovative technologies related to safety. We use infrared light sensors, considering the safety of employees who work by conveyor belts and are easily exposed to risk factors. The sensor immediately detects an employee who approaches an operating conveyor belt and sets off a warning. Then, the surveillance camera screen is enlarged to directly control unsafe movements of the employee. Likewise, in confined, contaminated areas where workers are prone to choke or drown, we developed an unmanned cleaning robot that can remove debris sludge and inspect the operating equipment. By cleaning wastewater tanks with underwater robots, the number of hours spent on cleaning was reduced from ten days to five and the "4 Zeros¹⁾" for safe work was realized.

1) Zero suspension of facilities, zero heavy equipment, zero workers, zero drainage

Establishment of an Intelligent Disaster Management System

EWP established an intelligent disaster management system to strengthen its safety system, from detecting initial signs of fires, earthquakes, and leaks of hazardous substances to creating counter-measures for dangerous scenes. This system depicts the internal and external conditions of buildings in three-dimension images, making it is easier for users to understand the situation and take appropriate measures compared to conventional two-dimension information. In case of an emergency, it automatically announces a standardized code of conduct to prevent greater damage.

[Intelligent Disaster Management System]



Strengthening of ESS Safety

To secure safety and relieve concerns related to the Energy Storage System (ESS¹⁾) fire, EWP formed a group of both internal and external safety experts and conducted a fire detection service. We thoroughly fulfilled the safety requirements announced by the government and made voluntary supplementations to fundamentally prevent the causes of fires.

1) Energy Storage System (ESS): A device that stores renewable energy such as solar and wind power for use at a desired time

Establishment of an Evaluation System for Hazardousness of Chemical Substances

To prevent safety issues related to hazardous chemical substances, EWP established an evaluation system for the hazardousness of chemical substances. By connecting it with the Chemical Substance System of the Korea Occupational Safety and Health Agency, we classify chemical substances according to the latest information. Once we input information about a chemical into the system, it automatically evaluates its hazardousness, enhancing user convenience. We utilize this system starting from the substance purchasing stage so that unauthorized hazardous chemicals can be safely managed in our power plants.

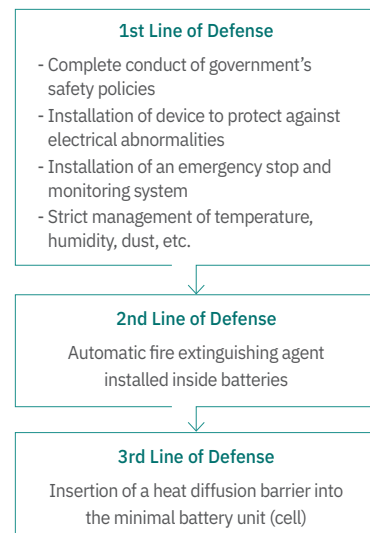
Certified as an Excellent Company for Disaster Reduction of Partners

To maintain the stable operation of partners, even in situations of disaster, EWP initiated and began conducting a pilot project for a Business Continuity System²⁾ in 2017. Through specialized consultation with five manufacturing partners in 2018, we completed the Business Continuity System in 2019. Out of the five, four were certified as Excellent Companies for Disaster Reduction by the government, recognized for their safety measures for disasters.

2) Business Continuity System: A management system to maintain business continuity in a crisis or situation of disaster

ZERO fires in ESS

[ESS Fire Safety Detection]



Strengthening Workers' Safety and Health

“Safety Culture Festival for All”

EWP organized the “Safety Culture Festival for all” in 2020 for all employees, including partners, for the living safety of the site. During the industrial safety and health reinforcement period, we participated in various safety activity presentation contests and won the prize. Also, we were selected as the best team in Ulsan and won the silver prize at the 9th Korean Ordinary People Competition, and held an in-house CPR contest to improve our ability to cope with cardiac arrest. In addition, the safety culture festival was held in a non-face-to-face manner to prevent COVID-19. To enhance understanding of safety-related regulations and statutes, we had time to internalize safety awareness through a risk assessment competition. And we conducted a challenge-golden bell in the form of quizzes and shared best practices for improving safety.






A Company-wide CPR contest

Compliance with Basic Safety Rules

To secure the safety of our field workers, EWP strengthened its basic safety rules. We mandate employees to work in pairs when working in power plants, and new employees with less than six months of experience at the company are prohibited from working alone. For the operation, cleaning, and maintenance of coal facilities, employees of partners are also mandated to work in pairs after halting the operation of the facility to secure the safety rights of workers. Moreover, we identified the safety guidelines for fieldwork to prevent accidents.

[3-Stop Safety Guidelines for Fieldwork]

Supervisor	Worker	Operator
 <p>Do not instruct people to work before risk factors are identified and the site has been inspected</p>	 <p>Do not work before risk factors have been removed and the supervisor has provided instructions</p>	 <p>Do not operate before site inspection and tag* handover</p>

* A tag that reads “Do not use during operation” and is attached to dangerous machinery when operating a circuit breaker, valve, or switch

Improvement of Workers' Risk Reporting System

EWP operates “Safety Call,” a communication channel for safety through which workers can report risk factors and request for work suspension. In 2019, we expanded the reporting target from the existing emergency risk to the general risk to create a safer workplace. Also, by expanding reporting channels through mobile phones and handwriting cards, we received a total of 197 safety suggestions, including a request to install safety handrails. Actions taken on these suggestions are shared in all of our offices.

Tailored Health Management for Workers

To protect the health of workers, EWP expanded its health checkup benefits to employees of 40 years old or less. Each of our offices signed an MOU with a medical center, and employees have received suggestions for follow-up checkups are given periodic consultations and preventive information. Likewise, through an agreement with the Mental Health Welfare Center, we operate mental health programs and provide customized health management for each disease/disorder and individual. For employees of partners, we installed a medical check device that provides health information for preventing the causes of health problems.




197

Safety Call Reports




ZERO

report of unfair and improper employment



0 requests

for information disclosure on recruitment outcomes



Recruitment of local candidates

28.6%

out of all new employees

Recruiting Future Leaders

Fair Recruitment Model

Advancement of “Blind Recruitment”

EWP conducts blind recruitment to provide fair employment opportunities to all candidates. We do not have particular qualifications for our vacancies. All candidates who do not have specific disqualifications can take the National Competency Standards (NCS). To prevent prejudices that may arise due to appearance, we have a dress code for job interviews and ask that supplementary documents are submitted after the interviews are conducted to conduct a completely “blind” recruitment process.

Competency-focused Recruitment of Specialized Talents

EWP conducts a competency-focused recruitment system to strengthen our competencies. The job test contains questions in relation to occupational duties, and the job interview requires a presentation based on a topic or situation that may actually arise in a real working situation. In 2019, we surveyed departments that need additional staff members and recruited specialized talents in the fields of information protection, ethics, and safety.

Operation of the Employment-assistance Program

EWP operates an employment-assistance program to enhance the job competencies of youth seeking employment. We disclose the average score of newly hired employees and that of applicants for comparison and providing information on what is necessary for employment. Through this program, we received 0 request for information disclosure. We will continue this program to contribute to fulfilling the needs of potential employees.

Socially Fair Recruitment

EWP conducts a socially fair recruitment system to give all job seekers fair employment opportunities. Social minority groups are given an additional 5% point on their score, the highest level of benefits among public enterprises.

[Efforts for Socially Fair Recruitment]

Type of Individual	Details
Youth	- Secure vacancies and conduct recruitment - Activate internship programs to attract more candidates
High School Graduates	- Discrimination-free recruitment through non-disclosure of educational background - Support employment competency through EWP Open School for High Schools
Women	- Non-disclosure of gender in documents - Gender equality training for interviewers
People with Disabilities	- Additional point given for each stage of recruitment - Recruitment information session and provision of “Employment Manual”
Local Talents	- Additional point given for each stage of recruitment - Job posting and promotion through Ulsan Employment TV
Talents of Non-metropolitan Regions	- Non-disclosure of hometown to prevent prejudices - Provision of “Employment Manual” on the EWP website

Rational System for Performance Management

EWP operates a rational performance management system to enhance fairness in our evaluation system and motivate our employees. All employees are required to evaluate the major achievements of the organization, and all citizens may participate in the evaluation process through social media as well. We strengthened the reinforcements for achievements and established a new reward system that reflects job performance to enhance wage satisfaction and inspire greater achievements.

Developing Capabilities of Human Resources

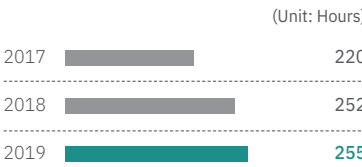
Strategies for Developing Employee Capabilities

To constantly develop the capabilities of employees, EWP reflected the needs of employees when establishing the strategies for capability development. By taking the initiatives based on the 4 big strategies, we hope to lead the eco-friendly energy market by cultivating creative leaders of the future.

[Strategies for Developing Employee Capabilities]

HRD Model	Creative leaders of the future who will lead the eco-friendly energy market			
4 Big Strategies for Building Capabilities	Enhancing core capabilities	Building basic capabilities	Adding selective capabilities	Expanding the capability system
Main Tasks	- Education on safety, environment, and 4th Industrial Revolution - Education on new projects for new and renewable energy - Build leadership competencies	- Compulsory job training system - Form training groups and organizations - Cultivate of female leaders	- Education on social values and human rights - Expand the 2nd Life Design Education - Support for license acquisition	- System for developing new competencies - Program for overcoming low performances

[Average number of hours spent on training and education hours per employee]



Strengthened Future Leader Training Program

EWP conducts capability-building programs for fostering leaders of the future generation of the eco-friendly energy market. The one-on-one leadership coaching program that was conducted for manager-level employees or above has been expanded to female employees of assistant manager levels. Also, by expanding long-term commissioned education for employees, such as the operation of local and international university degree programs, a total of 58 employees participated in the capability-building programs, showing an increase of 41% compared to the previous year.

Establishment of a Female Leader Training System

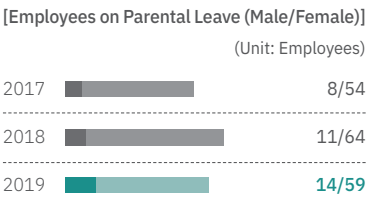
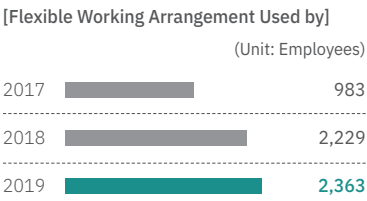
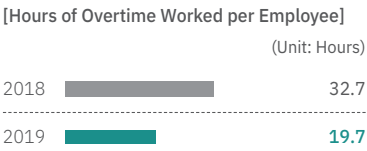
For the cultivation of female leaders, EWP conducts a leadership program for staff-level female employees with at least four years of experience at the company. In 2019, for the female leadership program targeted for manager levels or higher, we conducted a leadership mindset training program differentiated for female employees.

Creating a Happy Workplace

Work and Life Balance

Enhanced Flexibility of Working Hours

EWP strives to create a balanced work-and-life culture to improve employees’ quality of life. For this reason, we implemented the PC-OFF system, which automatically shuts down our office computers at 6:30 p.m., and encourage employees to plan their own working hours as long as they fulfill 80 hours of work for every two weeks. After reducing tediously long working hours and adapting a flexible working arrangement, the number of hours of overtime worked per employee has been reduced by 13 hours compared to the previous year. In 2020, we plan to establish the “Let’s Smile Solution” designed to digitalize standardized duties in a way to create a more efficient working environment.



Encouraged Use of Paid Leave

EWP encourages employees to take advantage of their vacation days by using vacation credits in advanced or accumulating them for later use. Also, to support a family-friendly environment, we implemented parental leaves and encourage male employees to take paternal leaves. Through these kinds of endeavors, we have been received the Family-friendly Management Certification for the 11th consecutive year.

Realizing a Company Culture of Communication

Operation of Corporate Culture Innovation Committee

EWP operates a Corporate Culture Innovation Committee, a labor-and-management joint organization, with the objective to improve corporate policies to actually benefit employees. Through the labor-and-management joint statement for the realization of social values in May 2019, the CEO arranged a one-on-one meeting with the head of the committee and pledged to engage in active social responsibility activities. The committee operates labor-and-management joint action organizations for its five subcommittees (Safety and Environmental Culture, Corporate Culture, Fair System, Eradication of Discrimination, and Future Development). Through the “Dudream Evaluation Group,” a pre-communication consultative body composed of minority unions and women, we collect the opinions for the monitoring of unreasonable practices from the field.

Process of Grievance Management

EWP established a grievance management process to listen to employees in distress. This system that was previously limited to headquarters has been expanded to all of our offices nationwide by assigning grievance counselors in each workplace. In September 2019, we opened an online counseling channel to increase accessibility to the program. Out of the 143 reported cases that were received in 2019, EWP took action on 115 cases. Unsettled cases related to personnel transfer will be acted upon in 2020 during our regular personnel appointment.

“Waggle Baggle,” an Online Forum for Discussion

EWP opened an online forum for discussion titled “Waggle Baggle” in May 2020 for employees to submit innovative ideas whenever they want. Any employee can access “Waggle Baggle” to suggest innovation related to all business fields. When an idea is selected for actual implementation, the employee who made the suggestion is given “innovative mileage” and other incentives to motivate other employees to participate in the program.

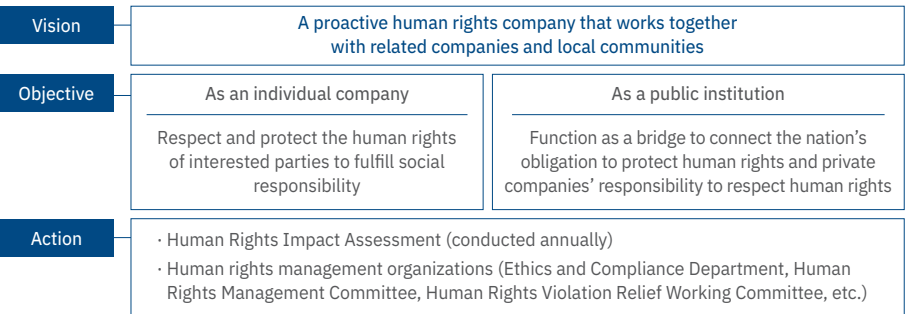


Practicing Human Rights Management

System of Human Rights Management Initiatives

EWP respects the human rights of not only our employees, but also those of all stakeholders of related companies and local communities throughout our business procedures. For this reason, we annually conduct the human rights impact evaluation and strengthen the duties of related organizations to become a proactive company for human rights management.

[System of Human Rights Management Initiatives]



Internalizing a Culture of Respecting Human Rights

Human Rights Violation Relief Working Committee

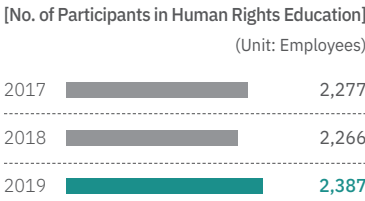
EWP newly established the new Human Rights Violation Relief Working Committee to monitor violations of human rights and properly act on related damages in March 2019. The committee is composed of the head of the related department, labor union, lawyers, and experts from external organizations, such as consultants from the human rights field. The Committee investigates and comes up with resolutions to take appropriate measures in the event of a human rights violation.

Conduct of the Human Rights Impact Evaluation

EWP annually conducts the Human Rights Impact Evaluation to identify the risk factors of human rights violations of stakeholders that may arise in our business activities. In 2019, six evaluators, including an expert from an external organization, conducted the Human Rights Impact Evaluation on 126 indices related the operation of our organization and our power plant business. We were able to identify eight items that required improvement and acted on them, including the human rights management system and human rights of employees of partners. Also, to systematically evaluate our grade of human rights management, we developed the EWP Human Rights Index in May 2020. The index is composed of 40 sub-indices that are related to quantitative indicators, such as the employment rate of people with disabilities, as well as the overall management system. Based on this index, we plan to proliferate a human rights culture year by year.

Human Rights Education for Employees

EWP conducts human rights education to boost the human rights sensitivity of employees and guide the measures that must be taken when human rights are violated. In 2019, we conducted this program for our employees and those of EWP Service, one of our affiliates. We also conducted anti-bullying education to acknowledge the execution of the anti-bullying act in workplaces. To determine cases of bullying within our premises, we conducted a survey with all employees in November 2019.



Core Basis



for Creating Values

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Governance

Composition and Roles of the Board of Directors

The Board of Directors of Korea East-West Power consists of four internal directors, including the president, and five external directors. A non-executive (external) director chairs the board in accordance with the provisions of Article 37-2 to secure the independence of the board. The board has specialized sub-committees, an audit committee, and a corporate executive nomination committee for efficient operation of the board. Decisions are made on major agenda items, such as management and service innovation based on social values.

[Composition of the Board]

Name	Gender	Position	Background	Term (MM.DD.YYYY)	
Park Il-Jun	Male	President	Former Head of Planning and Coordination Office, MOTIE Former Head of Industrial Policy Office, MOTIE	02.13.2018~02.12.2021	
Sung Shik-Gyeong	Male	Executive Director	Former Executive Auditor of KAIT Former Policy Research Fellow of the National Assembly	06.25.2018~06.24.2021	
Lee Seung-Hyeon	Male		Head of Safety & Engineering Group	Former Head of Planning Group, EWP Former Head of Power Generation Division, EWP	06.10.2020~06.09.2022
Cho Sang-Gi	Male		Head of Business Development Group	Former Head of Power Generation Technology Development Institute, EWP Former Head of Ilsan Combined Heat & Power Complex, EWP	06.10.2020~06.09.2022
Yang Seung-Joo	Female	Non-executive Director	Research Fellow, Global Multicultural Research Center, Hanyang University Former Director, Equal Employment Department, MOEL	11.14.2018~11.13.2020	
Lee Gyeong-Weon	Male		Advisor, Ulsan Jung-gu Council, National Unification Advisory Council Head of Ulsan Office, Korea Center for Leading Disadvantaged Adolescents	03.22.2018~03.21.2021	
Kim Hong-Cheol	Male		Managing Partner, Law Firm Tax-Ro Former Certified Public Accountant, Deloitte Korea	11.14.2018~11.13.2020	
Bae Yeong-Il	Male		Executive Director, Business Office, GS E&R Former Non-executive Director, KETEP	09.10.2019~09.09.2021	
Choi Gyu-Sang	Male		Executive Director, BS Co., Ltd. Former President, Chungju Office, KEPSCO	06.11.2020~06.10.2022	

[Committees of the Board]

Committee	Composition	Chair	Members	Objective
Audit Committee	Composition Executive Auditor Non-executive Director	Lee Gyeong-Weon	Sung Shik-Gyeong, Lee Gyeong-Weon, Kim Hong-Cheol	Audit of duties/accounting, report of results to the board
Eco-friendly Energy Committee	Executive Director Non-executive Director	Bae Yeong-Il	Cho Sang-Gi, Lee Gyeong-Weon, Bae Yeong-Il	Utilization of non-executive directors' expertise and provision of management suggestions

Appointment of Directors

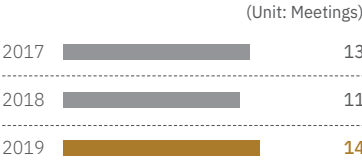
EWP appoints its directors in accordance with the “Articles of Korea East-West Power.” The president of EWP is appointed by the president of ROK for three years of service after multiple recommendations of the candidate by the Executive Nomination Committee, deliberation and resolution of the Public Institution Operation Committee, shortlisting in the general shareholders’ meeting, then a final recommendation by the Minister of Trade, Industry and Energy. Executive directors, excluding the president, are nominated by the president after the resolution of a general shareholders’ meeting, while non-executive directors are recommended by the Executive Nomination Committee, deliberated and shortlisted by the Public Institution Operation Committee, selected at the general shareholders’ meeting, and finally appointed by the Minister of Economy and Finance. All directors, excluding the president, hold office for two years, and their terms can be extended by one year. Executives whose terms have concluded must continue their duties until a successor takes over the position.

Active Operation of the Board

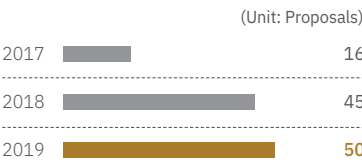
Board Meetings

EWP conducts Board Meetings with the presence of at least one third of the registered directors. For major agenda items of the company, such as management goals, budgets, and business plans, we come to a resolution when the majority of registered directors, excluding those who have conflicts of interest, come to agreement. In 2019, we pursued the active participation of the board through discussions under the themes of “social value,” “management transparency,” and “strengthened communication.” Our meetings do not solely focus on agenda items, but function as a venue for discussions. Through in-depth discussion on the 48 major agenda items, we were able to achieve management transparency.

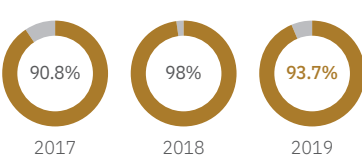
[Number of Board Meetings]



[Number of Business Proposals]



[Meeting Attendance Rate]

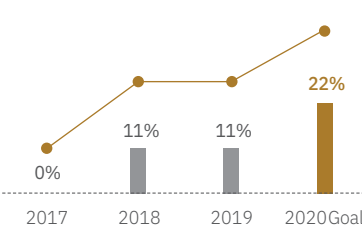


Increased Involvement in Business of Female Executives

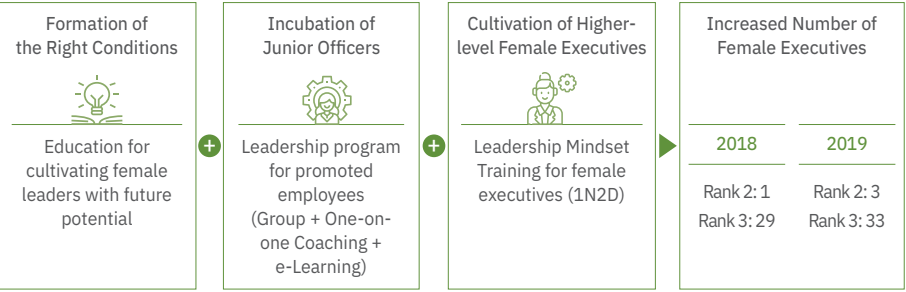
Endeavors for Realizing Gender Equality

To realize gender equality through the increased participation of female executives, the Executive Nomination Committee increased its recommendations of female candidates. The recruitment of executives has been posted on the websites of EWP, related agencies, and the Ministry of Gender Equality and Family. Female members of the EWP Audit Committee, as well as those in the academic field were also included as candidates. Moreover, we expanded the participation of female executives in professional committees and reflected their proposals in our business, appointing a female chair for the first time in our company. EWP endeavors to cultivate female leaders so that they make up 33% of executives by 2024. Through programs such as the “Three-Level Leadership Training for the Cultivation of Female Executives,” we strive to increase the number of female executives and expand the female executive pool to eventually contribute to gender equality.

[Ratio of Female Executives]



[Three-Level Leadership Training for the Cultivation of Female Executives]



Ethics and Compliance

Operation of a System for Compliance and Ethical Management

Ethical Management System

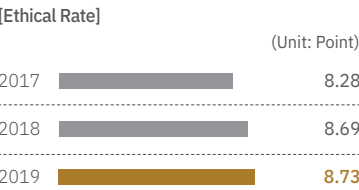
Korea East-West Power is a major public institution of Korea that complies with ethical responsibilities. EWP has established a system for compliance and ethical management to boost internal integrity. In January 2019, we selected 45 tasks for action and established strategies to enhance integrity and ethical values. To accomplish our initiatives, we are actively engaged in establishing an organization fully dedicated to ethics and monitoring ethical practices. We also strive to enhance all employee's awareness of integrity.

[System for Compliance and Ethical Management]

Visions for Compliance and Ethics	A respected public institution that grows through compliance and ethical management Slogan: Integrity will bring you to retirement, corruption will bring you to yesterday			
Initiatives	(+) Adding an integrity promise starting from me	(-) Firmly taking away corruption and solicitation	(x) Multiplying proud behavior and conscience	(÷) Dividing and sharing integrity-led mind-sets for everyone
Tasks	(Voluntarism) 9 tasks, including integrity relay for all employees	(Transparency/ Fairness) 12 tasks, including the Integrity Instructor System	(Action) 11 tasks, including a clean mileage certification system	(Integrity) 13 tasks, including Ethics and Cultural Festival associated with social values

Foundation of the EWP Ethics Action Group

EWP founded the “EWP Ethics Action Group” to focus our competencies in enhancing integrity. The EAG is an organization of which the roles and functions of six ethical management organizations, including Code of Conduct Officer, Ethics Practice Leader, Business Office Ethics Officer, Internal Integrity Instructor, Compliance Officer and Integrity Working Group, are all generally integrated. The EAG plays different roles to establish integrity in the workplace, including deliberating the ethical management promotion plan, inspecting vulnerable areas, and suggesting and supporting improvement measures.



Selected as
1st Class
in Anti-corruption Policy Evaluation for
2 consecutive years



Received the
Best Institution Award

for Integrity and Ethics at
the 2019 Korean Auditors Conference

Strengthening of Transparent Records Management System

EWP strengthened the record security system to safely protect the information assets of our institution. Based on authenticity, integrity, availability, and reliability, we have established a faithful management system by clearly setting responsibilities related to the protection of records. Moreover, we identified problems, such as insufficient locking devices, poor security, and lack of management personnel, by inspecting the status in which document storage was maintained. To resolve these problems, we have implemented an optimal environment for preserving records by reinforcing external locking devices and digitalizing non-electronic documents.

Enhancement of Employees’ Integrity

To internalize a culture of integrity, EWP organizes various programs, such as the Company Ethics Week, Ethics Culture Festival, and Nonviolence Dialogue Workshop, to raise employees’ awareness and encourage voluntary participation. We create fun approaches to the theme of ethics through games and performances to enhance employees’ awareness of integrity.

[Programs for Spreading a Culture of Integrity]

Company Ethics Week (May-June)
· Integrity Busking, Integrity Musical Performance · Games for creating a respectful culture
+
Ethics Culture Festival (September)
· Screening of a movie with ethical message · “Book Talk” with authors of ethical management in books
+
Nonviolence Dialogue Workshop (April, May, August)
· Debate by rank · Nonviolence education

Monitoring of Ethics and Measures for Violations

Internal Monitoring System for Eradication of Corruption

EWP operates an internal monitoring system to eradicate internal corruption or illegal acts. The internal monitoring system is classified as comprehensive audit, specific audit, performance audit, and service audit. Moreover, we prevent corruption and minimize recurrence through consulting and consultation on ethics and law. The measures determined through internal audits are constantly improved for implementation in the executives’ decision-making process.

[Operation and Performance of the Internal Monitoring System]

Internal Monitoring	Comprehensive Audit	Specific Audit	Performance Audit	Service Audit
Performance	3 times (237 people)	13 times (124 people)	2 times (18 people)	4 times (51 people)
Measures	Status/administrative measures: 309 cases; On-site measures: 88 cases; Best practices: 51 cases; Active administrative exemption: 4 cases			

Various Reporting Channels for Unethical Acts

EWP operates various channels to receive reports on unethical acts of employees and external stakeholders, such as the online reporting system, mail, telephone, and fax. Moreover, to protect the identity of informants, the reports are received anonymously, and we strengthened measures to prevent disadvantages from reporting to encourage all members not to tolerate corruption. In 2019, 77 complaints were received, and the measures were taken in accordance with the procedures.

Risk Management

Integrated Risk Management System

Korea East-West Power operates an integrated risk management system to proactively manage the major risks that the company may encounter. We classified the major risks that may arise under the categories of financial risks and operational risks. The department in charge analyzes the impact to our company and lists the countermeasures for each possible risk. Significant risks are reported to the head of office, CRO, and CEO for quick and immediate decision-making on which countermeasures to take.

[EWP Integrated Risk Management System]

Major Risks	Financial Risks			Operational Risks		
	Exchange Rate	Interest	Liquidity	Power Generation	Bituminous Coal	Investment
Key Risk Indicator	Exceeding foreign currency VaR (%)	3-year government bond (%)	Target (KRW 100 million)	Forced outage rate (%)	Fuel cost (US \$)	Debt ratio (%)
Monitoring System	Integrated Financial Risk Management System, Bloomberg, Yonhap Infomax, etc.					
Monitoring Council	Business Strategy Council, Financial Risk Management Committee, Financial Performance Improvement Committee, etc.					

[Risk Management Process]



[Countermeasures by Type of Risk]

Risk	Risk Analysis		Countermeasure
Exchange Rate	Increased foreign exchange volatility due to the global economic slowdown		Review of foreign exchange hedge ratio adjustment, etc.
Interest	Decline in companies' profitability due to shift in energy paradigm		Market analysis and capture of the best time for publication
Liquidity	Financial stability burden due to large investments such as RPS implementation		Addition of floating funds and strengthening of current financial management
Power generation	Increased failure rate due to obsolete facilities		Improvement of facility operation efficiency
Bituminous Coal	Increased bituminous coal price and raw material volatility		Strategic purchase based on optimal portfolio
Investment	Expanded investment to enhance economic vitality		Minimization of borrowing and increase of profits

Environmental Risk Management

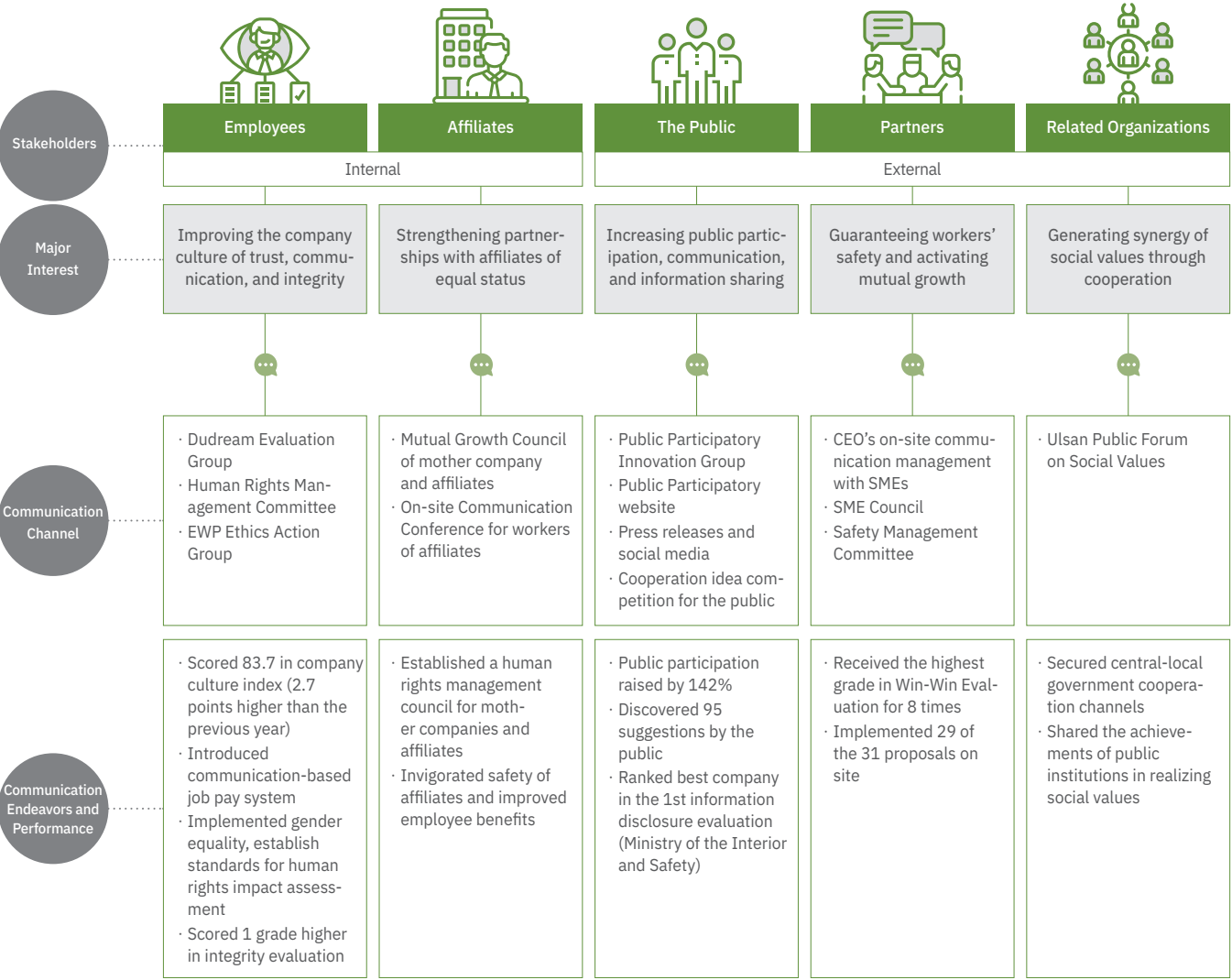
EWP established the Environmental Risk Management System (ERMS) to proactively prevent environmental risks. We strengthened the facility management system by establishing an environmental facility performance examination system that evaluates environmental risk on a five-level rating scale. As a result, in 2019, we scored 0.98 in the environmental risk index, 0.34 points lower than that of the previous year.

Dialogue with Stakeholders

Communication Channels for Stakeholders

Korea East-West Power operates communication channels for different groups of stakeholders, including employees, affiliates, the public, partners, and related organizations, to receive different opinions. Such opinions are collected and reflected in our management to realize stakeholder-centered business activities.

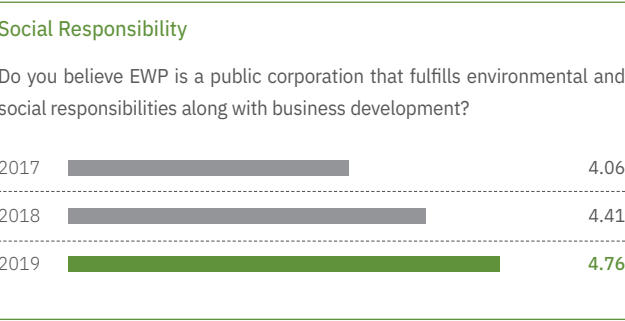
[Communication Channels for Stakeholders]



Result of Communication with Stakeholders

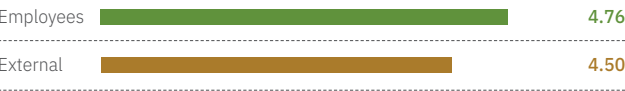
Korea East-West Power conducted a 2020 Sustainability Management Stakeholder Survey to investigate opinions on four key topics, including corporate management, economy, environment, employees, business partners, and local communities, and the degree of awareness surrounding EWP's sustainability management. The hundreds of responses that were collected will be reflected in the future sustainability management activities of EWP.

[Results of Stakeholder Awareness Survey]



Cooperation

Do you believe EWP supports an eco-friendly lifestyle and a safe working environment?



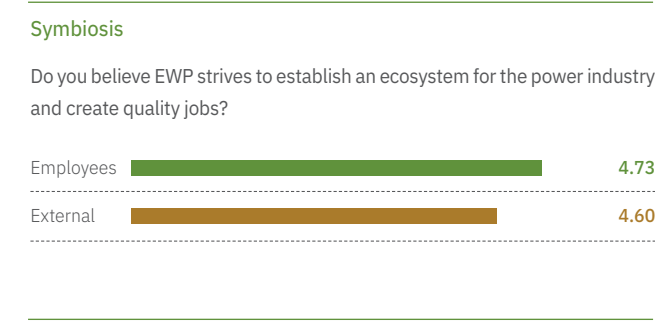
[Stakeholders' Answers by Topic]

Business/Economy

- Design specific blueprints for each business unit and the company as a whole
- Develop new projects in accordance with the Green New Deal and environmental restrictions
- Sell power transmission to power demand sources near power plants
- Utilize idle land (solar power) for making profit
- Actively promote construction projects to replace abolished workplaces
- Aim towards becoming the world's best electric power company through expansion of new overseas offices
- Expand long-term transportation contracts and prepare stable bituminous coal supply and demand plans

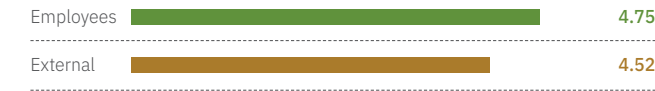
Employees

- Create a horizontal communication culture
- Innovate work arrangement through implementation of non-face-to-face methods
- Strengthen work-and-life balance (parental leave, sabbatical, etc.)
- Change materials of work attire considering safety and improved safety and health education
- Cultivate specialists to respond to the 4th Industrial Revolution and new environmental regulations
- Cultivate female leaders and establish a culture that embraces diversity
- Prepare incentives for work on safety and security



Sympathy

Do you believe EWP contributes to improving local communities and people's quality of lives?



Environment

- R&D initiatives for reducing environmental pollution
- Establish energy conversion business strategy in preparation for reduction of energy greenhouse gases
- Advance internal operating technology in line with environmental regulations
- Reduce use of fossil fuels to prevent air pollution
- Promote performance improvement such as desulfurization and denitrification facilities to reduce waste generation

partners and Local Communities

- Strengthen social contribution activities
- Select social values desired by the public
- Find resolutions to conflicts with local residents near workplaces
- Raise public awareness through media exposure and social media
- Prohibit solicitation and practice the Code of Ethics by high-ranking officials
- Provide a venue for regular communication with partners

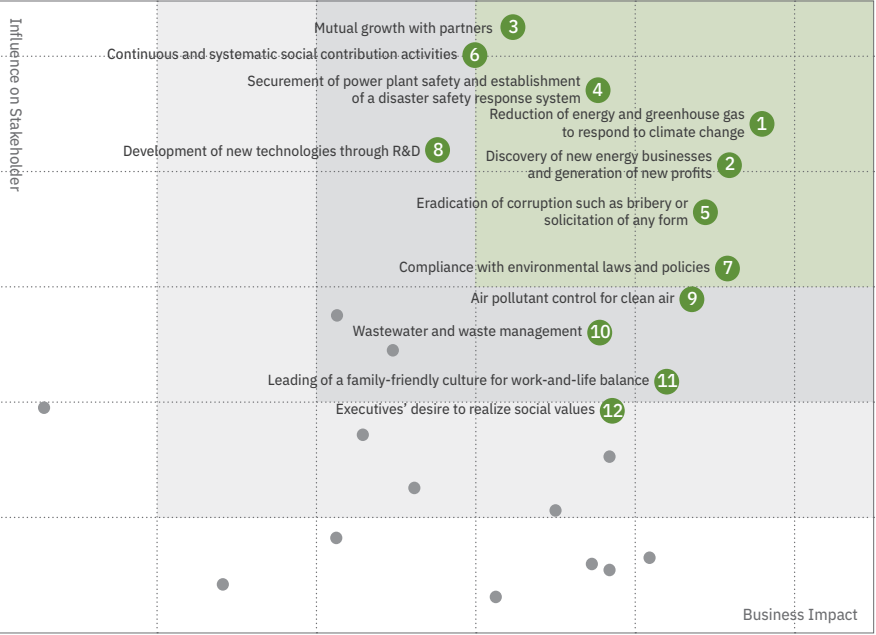
Materiality Assessment

Korea East-West Power selects topics for sustainable management that require attention based on the opinions of internal and external stakeholders. For the materiality assessment of 2020, we selected 12 significant topics by forming a pool of sustainable management issues, conducting a survey on stakeholders, analyzing the media, and benchmarking. EWP's activities and achievements for each topic are carefully described in this Sustainability Report.

Materiality Assessment Process



Materiality Assessment Result



Rank ¹⁾	Area	Topic	Page
1(▲4)	Environment	Reduction of energy and greenhouse gas to respond to climate change	31
2(▲6)	Economy	Discovery of new energy businesses and generation of new profits	27-28
3(▲9)	Society	Mutual growth with partners	41-43
4(-)	Society	Securement of power plant safety and establishment of a disaster safety response system	49-51
5(▼2)	Society	Eradication of corruption such as bribery or solicitation of any form	60-61
6(▲4)	Society	Continuous and systematic social contribution activities	35-39
7(-)	Environment	Compliance with environmental laws and policies	30-33
8(new)	Economy	Development of new technologies through R&D	29
9(▼8)	Environment	Air pollutant control for clean air	33
10(▼4)	Environment	Wastewater and waste management	32
11(-)	Society	Leading of a family-friendly culture for work-and-life balance	54
12(new)	Society	Executives' desire to realize social values	58-59

1) Changes in ranks of the Materiality assessment results in comparison to the data of the previous year

Rank	Area	Topic
13(▲5)	Society	Social and environmental risk management of partners
14(▼5)	Economy	Stable supply of power via risk minimization
15(▼1)	Society	Cultivation of creative talents
16(▼14)	Society	Creation of a human-centered and safe working environment
17(▲2)	Society	Strengthening of compliance with social and economic laws
18(▲4)	Society	Strengthening of communication and cooperation with local residents and stakeholders
19(▼4)	Society	Active communication between labor and management
20(▼7)	Society	Implementation of human rights protection and grievance management systems
21(new)	Society	Strengthening of information security of power facilities
22(▼5)	Society	Realization of social values by creating jobs
23(new)	Economy	Securement of global competitiveness
24(▼3)	Economy	Supply of affordable power by reducing costs
25(▼5)	Society	Employment of workers from diverse backgrounds

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Data Center

Financial Performance

Summary of Separate Statement of Financial Position

Classification	Unit	2017	2018	2019
Current Assets	KRW 100 million	10,615	10,242	12,416
Non-Current Assets	KRW 100 million	77,940	77,202	84,827
Total Assets	KRW 100 million	88,555	87,444	97,243
Current Liabilities	KRW 100 million	14,114	7,085	15,133
Non-Current Liabilities	KRW 100 million	27,928	33,839	35,096
Total Liabilities	KRW 100 million	42,042	40,925	50,229
Paid-in Capital	KRW 100 million	22,186	22,186	22,186
Retained Earnings	KRW 100 million	24,969	24,442	25,047
Other Capital Components	KRW 100 million	△642	△109	△219
Total Equity	KRW 100 million	46,513	46,519	47,014

Summary of Separate Comprehensive Income Statement

Classification	Unit	2017	2018	2019
Sales	KRW 100 million	46,443	49,335	48,560
Cost of Goods Sold	KRW 100 million	40,922	47,578	45,839
Gross Profits	KRW 100 million	5,521	1,757	2,721
Sales and Administrative Expenses	KRW 100 million	1,195	1,197	1,464
Operating Profits	KRW 100 million	4,326	560	1,257
Other Revenue	KRW 100 million	218	161	185
Other Costs	KRW 100 million	148	57	45
Financial Income	KRW 100 million	2,153	1,100	1,117
Financial Cost	KRW 100 million	3,263	1,840	2,033
Earnings (Losses) Before Taxes	KRW 100 million	3,267	△105	415
Income Tax Expenses	KRW 100 million	1,091	△138	△152
Net Income	KRW 100 million	2,176	33	567

Economic Performance

Classification		Unit	2017	2018	2019
Installed Capacity		MW	11,183	11,189	11,193
Renewable Energy Capacity			424.7	514.7	533.0
Power Generation Volume	Fossil Fuel	Coal	41,189	41,227	41,456
		LNG	7,527	9,446	7,840
		Oil	2,086	2,480	1,247
		Subtotal	50,802	53,153	50,544
	Renewable	Overall	315	322	347
	Company	Overall	51,117	53,475	50,891
RPS Performance Rate		%	100	100	100
Sales Volume		GWh	48,372	50,766	48,204
Sales Revenue		KRW 100 million	44,463	47,772	46,576
Unit Sales Price		KRW/KWh	91.92	94.1	96.62
Forced Outage Rate		%	0.039	0.027	0.011
Unplanned Loss Rate			0.069	0.056	0.019
Operation Rate			90.36	85.17	87.44
Utilization rate			52.22	54.57	51.89
Thermal Efficiency			39.36	40.03	39.55
Power Station Internal Load			5.69	5.39	5.56
R&D of Renewable Energy	R&D investment costs	KRW 100 million	17.7	30.3	41.5
Officers & Employees	Salary, welfare costs		2,304	2,487	2,447
Shareholders	Dividends		614	10	180
Creditors	Interest expenses		982	1032	1158
Government	Corporate taxes, local taxes		1,864	200	95
Local Community	Social contribution, donations		41	43	54
Reinvestment	Surplus excluded from dividends		1,596	24	387

Environmental Performance

Classification		Unit	2017	2018	2019
Greenhouse Gas	Scope 1	1,000 tons CO2-eq	38,499	39,431	38,944
	Scope2		79	85	74
	Scope3		11,029	12,813	11,888
Energy Consumption	Energy Consumption volume	TJ	463,403	484,063	469,057
	Energy Source Unit	GJ/MWh	9.12	9.05	9.22
Fuel Usage	Coal	10,000 tons	1,659	1,654	1,646
	Oil	1,000 KL	363	445	184
	LNG	1,000 tons	1,080	1,354	1,131
Air Pollutant Emissions	SOx	Ton	12,082	10,932	7,813
	NOx		15,988	13,308	9,724
	Dust		480	523	509
Air Pollutant Unit Emissions	SOx	ton/GWh	0.2379	0.2057	0.1546
	NOx		0.3148	0.2504	0.1924
	Dust		0.0095	0.0098	0.0101
Water Pollutant Emissions	COD	Ton	14	13	7
	SS		7	8	6
	T-N		20	22	15
	T-P		0.05	0.09	0.04
Water Pollutant Unit Emissions	COD	Kg/GWh	0.28	0.25	0.13
	SS		0.14	0.15	0.12
	T-N		0.40	0.41	0.3
	T-P		0.001	0.002	0.001
Water and Waste	Seawater	million tons	6,587	6,187	6,315
	Total water usage	1,000 tons	12,226	12,821	12,100
	Wastewater generation volume		4,090	3,948	3,680
	Total waste generation volume		2,054	2,153	2,055
	Recycled	%	1,559	1,644	2,300
	Waste recycling rate		76	76	112
Desulfurized Plaster and Cinder	Desulfurized plaster generation volume	1,000 tons	472	430	262
	Desulfurized plaster recycling volume		411	434	268
	Cinder generation volume		2,021	2,117	2,024
	Cinder recycling volume		1,531	1,615	2,277

Social Performance


Classification		Unit	2017	2018	2019
Total Number of Officers and Employees		People	2,407	2,463	2,470
Status of Officers and Employees_ By Type of Employment	Full time	Total	2,407	2,463	2,470
		Women	281	310	316
		Men	2,126	2,153	2,154
		Domestic	2,407	2,463	2,470
		Overseas	0	0	0
		Total	17	20	48
	Part time	Women	4	1	1
		Men	13	19	47
		Domestic	17	20	48
		Overseas	0	0	0
	Non affiliated manpower		975	552	576
Status of Officers and Employees_ By Type of Service	Full day working system	Total	2,407	2,463	2,470
		Women	281	310	316
		Men	2,126	2,153	2,154
	Part time	Total	0	0	0
		Women	0	0	0
		Men	0	0	0
Diversity of the Board of Directors	Women		0	1	1
	Men		9	8	8
	Less than age 30		0	0	0
	30-50 years of age		0	2	2
	Over 50 years of age		9	7	7
Diversity of Officers and Employees	Ratio of the disabled		%	3.6	4.1
	Ratio of women		%	11.7	13.8
	Number of women managers		People	37	37
	Ratio of women managers		%	5.6	5.7
No. of New Hires	New hires		99	144	91
	Women		29	27	20
	Men		70	117	71
	Less than age 30		81	116	69
	30-50 years of age		18	22	21
	Over 50 years of age		0	6	1
	Talents of non-metropolitan area		55	88	54
	Talents of relocated area		15	28	18
	Men of national merit		9	14	9
	High school graduates		22	7	13
	Disabled		8	7	2
Employment Security	Average years of continued service		Year	16.1	15.9
	Turnover rate		%	0.58	1.46
Operation of Board of Directors	Number held		Time	13	14
	Agenda for resolution		No. of case	36	46
	Agenda for revised resolution		No. of case(%)	1(2%)	1(2%)
	Agenda reported		No. of case	11	9
	Board of directors' attendance rate		%	90	94
	Non-standing director attendance rate		%	87	100

Classification			Unit	2017	2018	2019
Family-friendly Management	On parental leave	Men	People	8	11	14
		Women		54	64	59
	Number of those continuously serving 1 year or longer since reinstatement after parental leave	Men		6	10	13
		Women		47	60	68
	Rate of those continuously serving 1 year or longer since reinstatement after parental leave ¹⁾	Men	%	100	100	100
		Women		97.8	100	98.5
	Women working under hour selection system		People	22	34	31
	On flexible working system		People	983	2,229	2,363
	Hours of Overtime Worked per Employee		Hour	-	32.7	19.7
	Number of days on vacation		Days	17.4	21.6	21.9
Talent Development	Average training hours per officer or employee		Hour	220	252	245
	Educational expenses per officer or employee		KRW 1,000	3,472	3,600	3,790
	Education budget		KRW 100 million	82.5	89.5	92.5
	Education beneficiary		People	48,378	52,467	56,547
	Women employee competency index		Point	4.76	4.66	4.63
	Officers' and employees' satisfaction	Internal education satisfaction		Point	90.6	83.6
Personnel system satisfaction		%	4.46	4.44	4.39	
Human rights policy and procedures	Number of those who completed ethics education		People	2,260	2,309	2,313
	Number of those who completed human rights education			2,277	2,266	2,387
Social contribution	Social contribution expenditure		KRW 100 million	12	13	14
	Total hours volunteered		Hour	63,284	63,470	66,372
	Average hours volunteered per officer or employee		Hour	28.76	27.35	30.78
Integrity assessment	Anti-Corruption & Civil Rights Commission's survey results		Point	8.28	8.69	8.73
Anti-corruption policy evaluation	Anti-Corruption & Civil Rights Commission's survey results		Rating	2	1	1
Labor union	Number of those subscribing to labor union		People	1,624	1,745	1,744
	Rate of labor union subscription		%	96.6	97.9	96.4
Occupational safety and health	Fatality rate ²⁾		°/ooo	0	0	0
	Number of safety accidents		Number of case	0	0	0
	Level of maturity for safety culture		Point	4.05(level 4)	4.07(level 4)	4.14(level 4)
	Level of participation for safety culture		Point	4.33	4.55	4.63
Win-win growth	Amount of purchased products from corporation run by female leaders		KRW 100 million	252	255	302
	Amount of purchased technology development products			317	276	575
Regional support project	Energy welfare for the marginalized		Household	622	621	1352
	Purchase of Onnuri gift certificates		KRW 100 million	8.8	6.93	6.68
	Purchase of social economy enterprise products	Social enterprise	KRW 100 million	98.3	98.3	120
Cooperative		8.27		4.16	6.4	
Information security violations	Number of incidences of leakage, theft and loss of customer data to the outside		No. of case	0	0	0
Anti-corruption violations	Anti-corruption violations (people)		No. of case (people)	0	0	0










1) Rate of working for more than one year after use of parental leave: Number of employees working for more than one year after returning / Number of returnees during previous reporting period * 100
2) Fatality rate = (deaths / wage earners) * 10,000







GRI Content Index

Universal Standards

Topic	Disclosure		Page Reported	Validation	ISO 26000	UN SDGs
Organizational profile	102-1	Name of the organization	6	v	6.3.10/ 6.4.1-6.4.2/ 6.4.3/6.4.4/ 6.4.5/6.8.5/ 7.8	
	102-2	Activities, brands, products, and services	8-11	v		
	102-3	Location of headquarters	6	v		
	102-4	Location of operations	6, 8-9	v		
	102-5	Ownership and legal form	6	v		
	102-6	Markets served	8-13	v		
	102-7	Scale of the organization	6, 12-13	v		
	102-8	Information on employees and other workers	69-71	v		
	102-9	Supply chain	13	v		
	102-10	Significant changes to the organization and its supply chain	No significant change	v		
	102-11	Precautionary principle or approach	62	v		
	102-12	External initiatives	75	v		
	102-13	Membership of associations	78	v		
Strategy	102-14	Statement from senior decision-makers	4-5	v	4.7/6.2/7.4.2	
Ethics and integrity	102-16	Values, principles, standards and norms of behavior	60-61	v	4.4/6.6.3	
	102-17	Mechanisms for advice and concerns about ethics	60-61	v		
Governance	102-18	Governance structure	58	v	6.2/7.4.3/ 7.7.5	
	102-40	List of stakeholder groups	63	v		
Stakeholder's involvement	102-41	Collective agreement	Collective agreement application rate: 100%	v	5.3	
	102-42	Identifying and selecting stakeholders	63	v		
	102-43	Approach to stakeholder engagement	63	v		
	102-44	Key topics and concerns raised	63-64	v		
	102-45	Entities included in the consolidated financial statements	67	v		
Reporting practice	102-46	Defining report content and topic boundaries	74	v	5.2/7.3.2/ 7.3.3/7.3.4	
	102-47	List of material topics	65	v		
	102-48	Restatement of information	Not applicable	v	7.5.3/7.6.2	
	102-49	Changes in reporting	No significant change	v		
	102-50	Reporting period	About this Report	v		
	102-51	Date of most recent report	About this Report	v		
	102-52	Reporting cycle	About this Report	v		
	102-53	Contact point for questions regarding the report	About this Report	v		
	102-54	Claims of reporting in accordance with the GRI Standards	About this Report	v		
	102-55	GRI Content Index	72-74	v		
	102-56	External assurance	76-77	v		

Topic-specific Standards

Topic	Disclosure		Page Reported	Validation	ISO 26000	UN SDGs
Topic 1: Reduction of energy and greenhouse gas to respond to climate change						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26, 65	v	6.5.4/6.5.5	 
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Energy	302-1	Energy consumption within the organization	30, 68	v		
Emissions	305-1	Direct (Scope1) GHG emissions	31, 68	v		
	305-2	Energy indirect (Scope2) GHG emissions	31, 68	v		
Topic 2: Discovery of new energy businesses and generation of new profits						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26, 65	v	6.8.1-6.8.2/ 6.8.3/6.8.7/ 6.8.9	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Economic Performance	201-1	Direct economic value generated and distributed	68	v		
Topic 3: Mutual growth with partner companies						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	40, 65	v	-	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
-	-	Performance of technical cooperation with partners	40-43	v		
Topic 4: Securement of power plant safety and establishment of a disaster safety response system						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	48, 65	v	6.4.6/6.8.8	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Occupational Health and Safety	403-1	Workers representation in formal joint management–worker health and safety committees	Safety and Health Committee is operated for each project site, and the decisions made by the committee are applied to all workers.	v		
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	50-51, 71	v		
Topic 5: Eradication of corruption such as bribery or solicitation of any form						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	60, 65	v	6.6.1-6.6.2/ 6.6.3	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Anti-corruption	205-1	Operations assessed for risks related to corruption	Number of anti-corruption violations: 0case	v		
	205-2	Communication and training about anti-corruption policies and procedures	60-61, 71	v		
Topic 6: Continuous and systematic social contribution activities						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	34, 65	v	6.3.9/ 6.5.1-6.5.2/ 6.5.3/6.8	  
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	35-39, 71	v		
Topic 7: Compliance with environmental laws and policies						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26, 65	v	4.6	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	No. of Environmental Regulation Violations: 4 cases in 2019	v		

Topic		Disclosure	Page Reported	Validation	ISO 26000	UN SDGs
Topic 8: Development of new technologies through R&D						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26, 65	v	-	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
-	-	R&D investments	29	v		
Topic 9: Air pollutant control for clean air						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26, 65	v	6.5.3	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Emissions	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	33, 68	v		
Topic 10: Wastewater and waste management						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26, 65	v	6.5.3/6.5.4	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Effluents and Waste	306-1	Water discharge by quality and destination	68-69	v		
	306-2	Waste by type and disposal method	32, 68-69	v		
Topic 11: Leading of a family-friendly culture for work-and-life balance						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	48, 65	v	6.4.4/6.8.7	 
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	51, 54, 70	v		
	401-3	Parental leave	54, 70	v		
-	-	Realizing a Company Culture of Communication	54	v		
Topic 12: Executives' desire to realize social values						
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	5, 58-59, 65	v	-	
	103-2	The management approach and its components		v		
	103-3	Evaluation of the management approach		v		
Governance	102-20	Executive-level responsibility for economic, environmental, and social topics	58-59	v		

Boundaries of Topics and Reports

● Topic boundaries: Worksites that generates the impact of material topics

● Reporting boundaries: Worksites that report outcome and activities of material topics to 2020 EWP Sustainability Report

	Material Topics	Headquarters	Dangjin	Ulsan	Honam	Donghae	Ilsan	Overseas
1	Reduction of energy and greenhouse gas to respond to climate change	●●	●●	●●	●●	●●	●●	●
2	Discovery of new energy businesses and generation of new profits	●●	●●	●●	●●	●●	●●	●●
3	Mutual growth with partner companies	●●	●●	●●	●●	●●	●●	●
4	Securement of power plant safety and establishment of a disaster safety response system	●●	●●	●●	●●	●●	●●	●●
5	Eradication of corruption such as bribery or solicitation of any form	●●	●●	●●	●●	●●	●●	●
6	Continuous and systematic social contribution activities	●●	●	●	●	●	●	●
7	Compliance with environmental laws and policies	●●	●●	●●	●●	●●	●●	●●
8	Development of new technologies through R&D	●●	●●	●●	●	●●	●	
9	Air pollutant control for clean air	●	●●	●●	●●	●●	●●	●
10	Wastewater and waste management	●●	●●	●●	●●	●●	●●	●
11	Leading of a family-friendly culture for work-and-life balance	●●	●●	●●	●●	●●	●●	●
12	Executives' desire to realize social values	●●	●	●	●	●	●	●

UNGC Advanced Level

	Topic	Description	Page	GRI Contents
1	Strategies and Operations	The COP describes mainstreaming into corporate functions and business units.	8-17	GRI 102-2
2		The COP describes value chain implementation.	12-13	GRI 102-2
3	Human Rights	The COP describes robust commitments, strategies or policies in the area of human rights.		GRI 103-1
4		The COP describes effective management systems to integrate the human rights principles.	55	GRI 103-2
5		The COP describes effective monitoring and evaluation mechanisms of human rights integration.		GRI 103-3
6	Labor	The COP describes robust commitments, strategies or policies in the area of labor.		GRI 103-1
7		The COP describes effective management systems to integrate the labor principles.	58-59	GRI 103-2
8		The COP describes effective monitoring and evaluation mechanisms of labor principles integration.		GRI 103-3
9	Environmental Management	The COP describes robust commitments, strategies or policies in the area of environmental stewardship.		GRI 103-1
10		The COP describes effective management systems to integrate the environmental principles.	30-33	GRI 103-2
11		The COP describes effective monitoring and evaluation mechanisms for environmental stewardship.		GRI 103-3
12	Anti-corruption Management	The COP describes robust commitments, strategies or policies in the area of anti-corruption.		GRI 103-1
13		The COP describes effective management systems to integrate the anti-corruption principle.	60-61	GRI 103-2
14		The COP describes effective monitoring and evaluation mechanisms for the integration of anti-corruption.		GRI 103-3
15	UN Goals and Issues	The COP describes core business contributions to UN goals and issues.	17	GRI 102-12~13
16		The COP describes strategic social investments and philanthropy.	34-39	GRI 413-1
17		The COP describes advocacy and public policy engagement.	26, 55	GRI 203-1~2
18	Governance and Leadership	The COP describes partnerships and collective action.	78	GRI 102-13
19		The COP describes CEO commitment and leadership.	4-5	GRI 102-14
20		The COP describes Board adoption and oversight.	58-59	GRI 102-18
21		The COP describes stakeholder engagement.	63-64	GRI 102-40,42,43,44

Third-party Assurance Statement

Dear Korea East-West Power Generation Co., Ltd. and Stakeholders,

Introduction

STH.I.S was commissioned by Korea East-West Power Generation (“EWP”) to perform a Third-party Assurance Engagement of 2020 EWP Sustainability Report’ (the “Report”). STH.I.S presents independent opinions to the result of feasibility of the data contained in this Report. EWP has sole responsibility for contents and performance contained in this Report.

Independence

As an independent assurance agency, STH.I.S does not have any kind of commercial interest in businesses of EWP apart from undertaking a third-party assurance on the Report. We have no other contract with EWP that may undermine credibility and integrity as an independent assurance agency.

Assurance Standards and Level

STH.I.S checked the three principles of inclusivity, materiality, and responsiveness in combination with information credibility of the Report based on the GRI Standards.

Assurance Type, Scope And Limitations

We performed Assurance Engagement in accordance with GRI Standards. This implies that we verified the accuracy and quality of the statements made by EWP and the sustainability performance data included in this Report. The scope of verification is a period from Jan 1, 2019 to Dec 31, 2019, and depending on the content, the assurance engagement primarily includes the systems and initiatives undertaken by EWP including its system and action for sustainable management policies, goals, projects, standards and performance during the reporting period defined in the Report. While the company’s environmental and social data as well as financial data was verified, the scope of review concerning stakeholder engagement was limited to the materiality test process.

Methodology

The Assurers collected data, information, and evidence via following method.

- Media coverage on sustainable management of EWP
- Verification on the management system and process implemented in sustainable management improvement and Report writing
- Crosscheck between financial performance data in the Report and the data in the Assurers’ report on the Company’s financial statements and disclosures
- Track and examine internal documents and basic data

Assurance Results And Opinions [On An Assurance Principle/Process Level]

The Assurers reviewed the draft version of this Report to present our opinions as an assurance provider. Modifications were made of the Report content if deemed necessary. Assurers were not aware of any significant errors or inappropriate descriptions in this Report during the Assurance Engagement. As such, we present our opinions of the 2020 EWP Sustainability Report as follows.

INCLUSIVITY

- Did EWP include the stakeholders in the process of strategic response on the sustainability?

The Assurers verify that EWP is making full effort for stakeholders’ participation in promoting sustainable management, and we assured procurement and operation of diverse stakeholder participation process. EWP has selected stakeholders including public sector, employees, corporate customers, individuals, partner companies, local communities and local government body to receive diverse feedbacks and opinions.

MATERIALITY

- Did EWP include material information in the Report for the stakeholders’ fair judgement?

The Assurers are not aware of any significant omissions or exclusions of data that is material to stakeholders. We verified that EWP conducted materiality test with issues identified from analyses of internal and external environments and reported accordingly to the result found.

RESPONSIVENESS

- Did EWP response in accordingly to the demand and interest of the stakeholders?

The Assurers have verified EWP reflect and respond to various opinions collected through the stakeholders’ communication channels. The Assurers have found no evidence EWP responses to material issues involving stakeholders were misrepresented or misstated in the Report.

IMPACT

- Did EWP properly monitor the impact on the stakeholders?

The Assurers have verified EWP responded stakeholders’ needs and interests through reflecting stakeholders’ opinions in the Report. We are not aware of any evidence that EWP ’s response to significant issues of stakeholders was reported inappropriately.

Gri Standards Standard Application

The Assurers have verified that the Report was prepared in accordance with the Core Option of GRI Standards. Based on the data provided by EWP, contents in relation to Universal Standards and Topic-specific Standards are confirmed facts.

UNIVERSAL STANDARDS

The Assurers have verified that the Report complied with the requirements of Core Option of GRI Standard and the following indices

102-1 to 102-13 (Organizational profile), 102-14 (Strategy), 102-16 to 102-17 (Ethics and integrity), 102-18 (Governance), 102-40 to 102-44 (Stakeholder engagement), 102-45 to 102-56 (Report practice), 103 (Management approach)

TOPIC-SPECIFIC STANDARDS

The Assurers have verified that specified disclosure list on Material Aspect that was deduced disclosure list determination process, and the following indices.

- Economic: 102-20, 201-1, 205-1, 205-2
- Environmental: 302-1, 305-1, 305-2, 305-7, 306-1, 306-2, 307-1
- Social: 401-2, 401-3, 403-1, 403-2, 413-1

Opinions And Recommendations [Performance/Issues]

The Assurers offer the following proposal to implement strategies in sustainability management in response to the issues with coherence at an organizational level in EWP.

ECONOMIC PERFORMANCE

This year, when the global economy is struggling due to COVID-19, I think the power industry was relatively far from the economic difficulties. Operating a power plant and following quarantine rules may be the same. And it is believed that there will be many difficulties due to COVID-19 in the power plant operation supply chain. In this time when the global economy is struggling due to COVID-19, Korea East-West Power contributes to economic development through stable power supply by predicting and preparing for industrial power demand in advance. In addition, EWP are pursuing continuous communication with stakeholders to contribute to the development of an environment-friendly country by improving the environment and promoting resource circulation. In addition, Korea East-West Power is striving to achieve mid- to long-term management goals, such as principle management that complies with principles and fulfills autonomy and responsibility, open management of trust and trust, and value management that realizes social values. Therefore, it is recommended to continuously improve comprehensive responses from a long-term perspective, such as continuous risk management of financial and non-financial factors and reinforcement of preemptive responses to changes in the business environment for a higher leap forward.

ENVIRONMENTAL PERFORMANCE

This year, there have been many changes at home and abroad due to COVID-19. It is not yet known how these changes will affect our environmental field. As Korea’s representative power plant operating public institution, Korea East-West Power’s efforts for clean energy research and technology development, including renewable energy, energy efficiency, and advanced and cleaner fossil fuel technology, are positive. However, although the government has a high impact on energy policy making and implementation, the goals and roles of Korea East-West Power in the introduction, development, and implementation performance of new and renewable energy contained in the report are clearer compared to other power generation companies It is judged that there is a need to be differentiated. In other words, it is unclear to what extent the role of Korea East-West Power in energy generation using renewable energy. The same is true of fine dust reduction performance. Therefore, it is recommended to set up and disclose the scope of work and quantitative goals for each issue in the main policies of natural and living environments.

SOCIAL PERFORMANCE

Korea East-West Power aims to contribute to Industry 4.0 by creating new businesses in the future, such as implementing a smart power plant and building an integrated platform for power generation operation using its own power generation operation system, power generation technology experts, operation know-how, and business office database. Through this, EWP confirmed its will to grow as an institution that creates sustainable social values. I recommend that EWP establishes a more active sustainable development goal and a driving force for social value by presenting major plans for the next year, future plans and future prospects, and long-term quantitative goals for each strategy of the future sustainable development goals. It is also recommended to continuously communicate this with stakeholders through the Sustainability Report.



October 2020
STH.I.S Soo Wook Kim

Memberships

Organization	Purpose	Time of Membership
Korean Recycled Construction Resources Institute	Explore new waste recycling sites and participate in research on the latest recycling technology	2019.08
Korea Plant Industries Association	Support for overseas advancement of domestic companies and exchange of information among member companies	2019.06
Korean Association for Supporting the SDGs for the United Nations (ASD)	Participate in information exchange and domestic and international events for Sustainable Development Goals	2019.04
Korea Photovoltaic Industry Association	A Study on the Technical Trends and Information Exchange among Members	2019.03
Korea Environment Engineers Association	Exchange of data on new environmental technologies and securing the latest environmental information	2018.01
Maritime Rescue & Salvage Association	Private-public cooperation to prevent and respond to maritime disasters and accidents	2013.05
Korea Institute of Enterprise Architecture	Gathering of information on the advancement of EA level	2013.03
Korea New & Renewable Energy	Exchange of information on new & renewable energy	2013.01
Korea Smart Grid Association	Exchange of information on smart grid and examination of the industry trend	2012.07
Korea Engineering and Consulting Association	Design and technical support through certification of engineering performance and entry into new businesses	2012.07
Korea Green Business Association	Support of large and small greenhouse gas mentor projects	2012.03
Korea Association of Small Business Studies	Quick response to government policy and interchange of academic information with the organization that is part of the government policy for shared growth	2011.07
Association of the Electric Supply Industry of East Asia and the West Pacific (AESIEAP)	Gathering of information on entry into and development of overseas business	2011.02
Korea Carbon Capture and Storage Association	Exchange of information on carbon capture and storage	2010.09
Power Generation Studies Institute	Advancement of power generation industry and identification of joint research subjects	2010.07
Korea Project Management Association	Improvement of project execution capability	2008.03
Korea Electric Engineers Association	Promotion of R&D of power technologies and education/training of professionals in power	2008.03
World Energy Congress	Building of human and technology network with international energy organizations and member countries	2007.01
UN Global Compact (UNGC)	Exchange of information on sustainability and participation in domestic and international exchange events	2006.06
The Electric Utility Cost Group (EUCG)	Acquisition of international power information and benchmarking	2006.01
Korea New & Renewable Energy	Gathering of information on entry into and development of overseas business	2004.03
Korean Standards Association	Introduction of advanced quality management technique and spread of quality management mind	2003.01
Korea Electric Association	Enactment and amendment of electrical industry's technology standard and development of new code for enhancement of power generator reliability	2002.09
The Korean Institute of Electrical Engineers	Exchange of information on electricity, participation in electrical day, development of Korea Electric Power Industry Code(KEPIC)	2002.09
The Korean Society of Mechanical Engineers	Examination of domestic and overseas trends in machinery and exchange of information	2002.08
Korea Energy Foundation	Energy welfare programs such as assistance of low-income families and scholarship programs	2002.05
Korea International Trade Association	Interchange of information related to international trade	2001.05

2019 Awards

Organization	Content	Date
Governor of Chungcheongnam Province	Excellent performance in the social economy sector of public procurement in 2019	2019.12
Korean Red Cross, Chungnam Office	Certification as an excellent company for sharing activities by Korean Red Cross	2019.12
Korean Red Cross	Korean Red Cross merit	2019.12
Ministry of Health and Welfare	Contribution to spreading the sharing culture in Korea through participation in social contribution	2019.12
Gangwon Province	17th Gangwon Province Energy Awards – Energy and Technology Development sector	2019.11
Korean Recycled Construction Resources Institute	Technology Award from Korean Recycled Construction Resources Institute	2019.11
Institute of Internal Auditors Korea	Best Organization Award in Integrity and Ethics sector	2019.11
Ministry of Science and ICT	18th K-ICT Information Protection Awards	2019.11
Ulsan Metropolitan Office of Education	Commendation from the Superintendent of Public Institutions for the development of vocational education in 2019	2019.11
Korean Society of Climate Change Research	Plaque of appreciation from the Korean Society of Climate Change Research	2019.11
Ministry of Trade, Industry and Energy	Presidential Award in the 45th National Quality Management Competition (6 Gold, 4 Silver, 3 Bronze)	2019.11
Ministry of Trade, Industry and Energy	Excellent Company Award in quality competitiveness in 2019 (Minister Award)	2019.11
Climate Change Center	9th Grand Leaders Award for Climate Change	2019.10
Korea Management Registrar	Grand Prize in Safety and Management Awards	2019.10
Governor of Jeollanam Province	Jeonnam Social Welfare Center Day Commendation (Promotion of Welfare of Local Residents)	2019.10
Yeosu Rehabilitation Center for the Disabled	Plaque of appreciation for corporate social responsibility activities (supported by the Forest Healing Concert of Yeosu-si)	2019.10
Union of Japanese Scientists and Engineers	Awarded at the 44th International Quality Control System (2 Gold)	2019.09
Ministry of Employment and Labor, Korea Social Enterprise Promotion Agency	Received Excellence Award for Regular Entrepreneurship at the 2019 Social Venture Management Competition	2019.09
EUCG	2019 Fossil Best Practices Award	2019.09
Ministry of Science and ICT	2019 Smart City SOC-ICT Best Company Competition – Smart City Big Data Award	2019.09
Charlton Media Group	15th Asian Power Awards - Power Plant Upgrade of the Year	2019.09
Association of Korean Journalists	4th Industrial Revolution Power Korea, Daejeon Smart Factory	2019.08
Ministry of Employment and Labor	Grand Prize for the Best Practice of Public Institutions for Safety and Health Activities	2019.07
University of Ulsan	Achievement Award (for recruitment of local talents)	2019.06
Korean Standards Association	2019 Korea Innovation Awards	2019.06
Korean Human Resource Development Association	Korea Human Resource Development Awards (Grand Prize, won 3 times)	2019.05
Ministry of Trade, Industry and Energy	Government innovation merit	2019.04
Gangwon Community Chest of Korea	Plaque of appreciation for contribution to spreading a culture of sharing love amongst neighbors	2019.04
Donghae-si	Commendation for merit in the social welfare sector for municipal development	2019.04
Maeil Business News Korea	2019 Korea's Best Management Awards	2019.03
Mayor, Yeosu-si	Excellent Taxpayer Certificate	2019.03
Ministry of Environment	CSR Minister of Environment Awards	2019.02
The Asset: Financial magazine for Asia's decision makers	Received the [Korea Best Sustainability Bond] Award	2019.01

ENRICH THE WORLD WITH CLEAN ENERGY

EWP Sustainability Report 2020

Further information on this report and the PDF version can be found on Korea East-West Power’s official website. For inquiries related to sustainable activities and achievements described in this report, reach us using the contact below.

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<u>Address</u>	395, Jongga-ro, Jung-gu, Ulsan, Korea (44543)
<u>Telephone</u>	070-5000-1549
<u>Website</u>	www.ewp.co.kr