



# **Korea Western Power Co., Ltd.**

## **Green, Social and Sustainability Financing Framework**

**January 2019**

## Introduction

Korea Western Power Co., Ltd. (“KOWEPO”) was established on April 2, 2001 and has since been developing into a leading and innovative energy provider in Korea. KOWEPO is one of six, wholly-owned power generation subsidiaries of Korea Electric Power Corporation (“KEPCO”), accounting for circ. 80% of the generation capacity in Korea. KEPCO is the sole electricity transmission and distribution company in Korea, which is 51% owned by the Government of Korea.

The Government of Korea has committed to elevating renewable energy as the country’s fuel of choice for power over the medium term with the objective of meeting 20% of its total electricity consumption generation with renewables by 2030. As such the country is aiming for a five-fold increase in renewable power generation to 63.8 gigawatts (GW) over this time period. KOWEPO, in recognition of the role it plays in the context of the Government’s energy policy supporting renewable energy, and also its own vision (“Beyond Energy, Create Happiness”) of contributing to society with the best energy generated in harmony with human, technology and environment, plans the development of the electric power generation source in accordance with the national power supply plan. As such KOWEPO has established the New & Renewable Energy 3025 Roadmap that aims to increase the portion of power generation from new & renewable sources to 25% by 2030. The 3025 label, referring to the year 2030 and 25% Renewable energy is an increase of the Korean government’s Renewable Energy 3020 plan.

As of Sep 2018, KOWEPO operated 70 generation units with a combined generation capacity of 11,314 MW including LNG (30%), Coal (54%), BC Oil (12%) and Renewable Energy (4%). In line with the Government’s objectives for increasing renewable contribution to the energy mix to 20% by 2030, KOWEPO aims to secure additional renewable generation capacity (and associated investment) while replacing existing LNG and Heavy Oil generation units with more efficient and eco-friendly power plants.

KOWEPO’s commitment to the environment is reflected in setting targets such as greenhouse gas reduction to cope with climate change (30% reduction compared to “business-as-usual”), recycling of by-products (100%) and fine dust reduction programs to assure healthy living environments for citizens (80%). The Company is applying new technologies and identifying the reduction projects to achieve these targets. KOWEPO is also preparing for the industrial safety and disaster control with the goal of becoming the global best-in-class in safety by 2030 (currently KOWEPO’s industrial accident rate is 0%).

KOWEPO, as a government-owned enterprise, is committed to its social responsibility of creating good jobs, growing together with its business partners, and continuously identifying and carrying out the Company’s differentiated business to promote the local economy. The Company has launched “WP Social Value Fulfilment Committee” to lead fulfilling social values and is actively developing business models and supporting welfare benefits to create jobs and carry out collaborative cooperation programs with local communities.

## KOWEPO’s Green, Social and Sustainability Financing Framework

KOWEPO has prepared this Green, Social and Sustainability Financing Framework (the “Framework”), with an intention of financing in either Green, Social or Sustainability format depending on the Company’s financing and strategic objectives.

KOWEPO Green, Social and Sustainability financing will be governed by this Framework, and is designed to be aligned with the International Capital Markets Association (“ICMA”) Green Bond Principles (2018), ICMA Social Bond Principles (2018), ICMA Sustainability Bond Guidelines (2018) and LMA’s Green Loan Principles. The Framework consists of the following core components:

1. Use of Proceeds;
2. Process for Project Evaluation and Selection;
3. Management of Proceeds;
4. Reporting; and
5. External Verification

### 1. Use of Proceeds

All of the net proceeds from KOWEPO’s Green, Social and Sustainability bond issuances will be used to finance and/or re-finance, in whole or in part, new and/or existing Eligible Green and Social Assets falling (via debt and/or equity instruments) within one of the eligible categories as defined below. The lookback period for refinancing Eligible Green and Social Assets is 48 months.


#### Eligible Green Categories




- Renewable Energy
- Pollution Prevention and Control
- Energy Efficiency

#### Eligible Social Categories

- Socio economic advancement and empowerment
- Small-Medium Enterprise (SME) Financing


#### Eligible Green Categories

Category – SDG	Description	Eligible Green Assets
 <p>3 GOOD HEALTH AND WELL-BEING 7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>In line with the Korean government’s policy to expand renewable energy, KOWEPO is adapting its power plant operation paradigm to promote the nation’s sustainability initiative. KOWEPO has established the New &amp; Renewable Energy 3025 Roadmap that stipulates the investment of KRW 9.4trn to increase the portion of power generation from renewable</p>	<ul style="list-style-type: none"> <li>• Solar, wind (onshore and offshore), biomass, geothermal, run-of-river hydropower, and tidal and wave power assets</li> <li>• Research and development on offshore wind farm systems and structures</li> <li>• Projects related to Application of Renewable</li> </ul>

	<p>energy to 25% by 2030. According to the roadmap, the estimated capacity of KOWEPO's renewable energy facilities will be at 6.1GW.</p> <p>KOWEPO actively collaborates with local municipalities and residents in the development of renewable energy through participation and profit sharing, in order to gain local acceptance to large-scale renewable energy projects.</p>	<p>Energy Technology (e.g. Renewable fuel combustion)</p>
<p>Pollution Prevention and Control</p> 	<p>KOWEPO is also transforming into an eco-friendly enterprise that strives to promote a safer living environment for all. Being a responsible power company, KOWEPO are leading the efforts in improving the Koreans' quality of life through clean energy. KOWEPO are the pioneer in introducing a technology that can reduce fine dust drastically to improve the air quality for everyone.</p> <p>As part of KOWEPO's environmental vision of "Eco-Friendly Management for Sustainability", they have set ambitious environmental goals of 30% reduction of greenhouse gas, 80% reduction of fine dust and 100% recycling of by-products compared to BAU (Business As Usual).</p>	<ul style="list-style-type: none"> <li>• Air purification facilities for denitrification, desulfurisation and fine dust removal (e.g. cyclone-type desulfurisation technology) excluding purification directly linked to fossil fuel energy generation</li> <li>• Wastewater management facilities</li> <li>• Multi-layer insulated curtains used for vinyl greenhouse (mainly used to grow farming products during cold period) in farms in order to improve energy efficiency and reduce greenhouse gases.</li> <li>• Projects related to Eco-Friendly Natural Recycling Technology (e.g. waste-to-energy facilities, CO2 capture technologies) excluding CO2 capture from fossil fuel-based technology/ fossil fuel power generation</li> </ul>
<p>Energy Efficiency</p> 	<p>In order to develop a sustainable management base, KOWEPO is implementing the WP-Smart Plant strategy to lead the power generation industry through technological innovation in the Fourth Industrial Revolution. This strategy allows employees communicate with power generation systems with smart devices, thus enhancing productivity and efficiency of power plant operations.</p>	<ul style="list-style-type: none"> <li>• Energy Monitoring &amp; Prognostic Centre with Intelligent Predictive Analysis System (iPAS)</li> <li>• Upgrade facilities and buildings with energy efficiency solutions (e.g. LED lighting, smart metering, roof / wall / floor insulation, high efficiency boilers)</li> <li>• Energy Storage Systems</li> </ul>

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### Eligible Social Categories

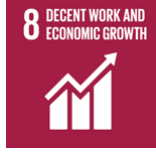
Category – SDG	Description	Eligible Social Assets
<p>Socio economic advancement and empowerment</p> 	<p>KOWEPO aspires to be a company that supports cultural life and that is trusted by and endeared to the public by leading the embodiment of social values. The company closely align ourselves with the national interest of job creation by rendering support to the neglected groups in their search for employment in order to empower the local community.</p> <p>KOWEPO also has a human rights management system in place that promotes fair hiring and provides assistance to our various stakeholders (e.g. employees, vendors and local communities) in realising all human rights.</p> <p>In recognition for our efforts, KOWEPO was named as the best organisation for job creation in the private sector in the Public Institution Job Contest jointly heled by the Presidential Committee on Jobs and the Ministry of Strategy and Finance. KOWEPO also received the Presidential Award after they were selected as one of the top 100 Korean companies in job creation.</p>	<ul style="list-style-type: none"> <li>• Support the education and vocational training of the elderly (&gt;60 years old) and other groups benefitting from our support (high school graduates, national meritorious, disabled and females in career break) to promote employability<sup>1</sup></li> <li>• Support the development of rural communities (e.g. agriculture and fishery)<sup>2</sup> and people living under poverty</li> <li>• Provide leadership training for women (e.g. KOWEPO’s Female Leadership Training program) to foster greater gender diversity and create opportunities in management positions Training and innovative job creation in rural areas<sup>3</sup></li> </ul>
Small-Medium Enterprise (SME) Financing	SMEs form the bedrock of Korea’s economy. With the vision for shared	<ul style="list-style-type: none"> <li>• Finance SMEs<sup>4</sup> (R&amp;D, financial support and</li> </ul>

<sup>1</sup> Promoting employability can include groups such as the underprivileged, specialized high school students or farmers and fishermen

<sup>2</sup> Pursuant to the government’s project ‘Agricultural-Fishery Win-Win Cooperative Fund’, KOWEPO have contributed KRW 5.3bn in 2017 and KRW 3.2bn in 2018 to vitalize Agricultural and Fishery economy in Korea

<sup>3</sup> Examples of a programmes KOWEPO worked on is the Greenhouse Gas Reduction Supporters initiative in which a training course for ‘Agriculture-specific Greenhouse Gas Reduction project managers’ and the KOWEPO agreement with the Foundation of Agri. Tech. Commercialization & Transfer (FACT) to cooperate in creating innovative jobs in rural villages

<sup>4</sup> KOWEPO has supported SMEs (incl. small enterprises with less than 5 employees) located also in rural economies through 1year loans (rollable) with a very low interest rate. SME support also includes the financing of SMEs’ facilities and operations in the recycling sector

	<p>growth, KOWEPO is carrying out various programs with SMEs such as the expansion of collaborative culture, development of creative technologies, customer communication and support of sales channels.</p>	<p>shared growth projects) to promote employment and economic growth</p>
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### Exclusionary Criteria

The following projects/activities are ineligible for the Use of Proceeds:

- Large-scale hydro power projects (i.e. projects with a generating capacity of >25MW)
- Nuclear energy technology, equipment or infrastructure
- Production or refining of palm oil
- Any fossil fuel-related assets or projects (fossil fuel-based electricity production, distribution, operational improvement or R&D), and
- Supporting SMEs operating in business sectors such as alcohol, weapons, munitions, tobacco, palm oil, gambling, adult entertainment, palm oil and related activities

## 2. Process for Project Evaluation and Selection

KOWEPO will establish a Sustainability Working Group (“SWG”) to oversee the Green, Social and Sustainability Financing Framework.

The SWG is expected to be comprised of members from the following teams/departments across the Company:

- Government Agenda Office (Job Creation Team, Social Contribution Team, Shared Growth Team and Public Relations Team)
- Budget and Financing Team;
- Renewable Energy Department;
- Overseas Renewable Energy Team;
- Power Generation Management Department; and
- Other functional teams/departments (as required).

The role of the SWG will be to:

- Review, select and validate the pool of Eligible Green and Social Assets based on Green, Social and Sustainability Financing Framework;
- Validate annual reporting for investors;
- Monitor on-going evolution related to the Sustainable Capital Markets practices in terms of disclosure/reporting in order to be in-line with best market practices; and
- Review Green, Social and Sustainability Financing Framework to reflect any changes with regards to the Company’s sustainability strategies and initiatives.

The list of Eligible Green and Social Assets will be managed by KOWEPO's Budget and Financing Team. At any time of the lifetime of the financing, the outstanding amount will not exceed the value of Eligible Green and Social Assets.

### **3. Management of Proceeds**

The net proceeds from Green, Social and Sustainability Bond issuances will be deposited in KOWEPO's general account and an amount equal to the net proceeds will be earmarked for allocation to the Eligible Green and Social Assets as selected by the SWG.

The payment of principal and interest on any financing issued by KOWEPO under this Framework will be made from their general funds and will not be linked to the performance of any Eligible Green and Social Assets.

Pending the allocation or reallocation, as the case may be, of the net proceeds, KOWEPO will invest the balance of the net proceeds, at its own discretion, in cash and/or cash equivalent and/or other liquid marketable instruments, as per KOWEPO's budgeting and financing policy.

In the case of an asset no longer meeting the eligibility criteria, the funds will be reallocated to other Eligible Green and Social Assets.

### **4. Reporting**

Within one year of the Green, Social and Sustainability Bond issuance, and until full allocation of the proceeds, KOWEPO will provide investors with the sustainability bond report as part of KOWEPO's annual sustainability report or via the company's website: <https://www.iwest.co.kr/eng>. The sustainability bond report will include:

- The list of Eligible Green and Social Assets, including brief project descriptions (subject to confidentiality agreements);
- The aggregated amount of allocation of net proceeds to the Eligible Green and Social Assets for each of the eligible categories;
- The balance of unallocated proceeds invested in cash and/or cash equivalent; and
- Subject to feasibility, KOWEPO will produce relevant impact metrics related to the Eligible Green and Social Assets.

#### **Impact metric examples**

##### *Green Bond Examples*

- Installed renewable energy capacity (MW)
- Annual energy savings (MWh)
- GHG emissions reduced (tCo2)

##### *Social Bond Examples*

- Number of SME loans granted
- Amount of social contribution spent and others

- Number of beneficiaries

## **5. External Review**

As per the Green and Social Bond Principles, KOWEPO's Green, Social and Sustainability Financing Framework has been reviewed by Sustainalytics. The Sustainability Financing Framework and Second Party Opinion is available on KOWEPO's website: <https://www.iwest.co.kr/eng>