Environmentally Friendly Business

ENVIRONMENT

Policy and Concept

Further developing and leveraging renewable energy

Leading Japan in zero-carbon energy production, the Kansai Electric Power Group is generating over 2 million kW of renewable energy, aiming to expand its installed capacity at home and abroad to 6 million kW in the 2030s.
On the domestic front, for example, we focus on increasing hydropower output and promoting solar power, onshore wind power, offshore wind power, biomass power and geothermal power generation, the total capacity of which stands at about 4.14 million kW as of the end of March 2021. We also focus on commercializing projects in the development stage, monitoring fundamental reviews of the FIT system. In addition, we are committed to helping customers and society achieve zero carbon by contributing to local communities and supplying power sources that are either developed or acquired while reducing power generation costs to become independent from the FIT system.

Goals

Advancing efforts to control CO_2 emissions

- Keep the top spot for the amount of zero-carbon power generation in Japan
- Halve CO_2 emissions associated with power generation in Japan in FY 2025 (compared to FY 2013)

Further development and utilization of renewable energy

- Achieve 6 million kW of installed capacity by 2030s (2 million kW or more new development in Japan and abroad)

Efforts

Status of domestic development in fiscal 2020

- Renewable Japan Co., Ltd., Tokyu Land Corporation, ENEOS Corporation and the Kansai Electric Power Co., Inc. jointly set up a limited liability company called the "Sustainable Power Supply Fund" to promote and manage renewable power sources, with funding completed in June 2020.
- Our Group entered into a capital and business alliance with Renewable Japan Co., Ltd. in July 2020.
- Our Group took part in a solar power generation project with ENEOS Corporation in December 2020 planned in Kamigori-cho, Ako-gun, Hyogo Prefecture.
- Our hydropower generation project capitalizes on our Sakagami Dam and Utsubo Dam (both located in Miyagawa-cho, Hida City, Gifu Prefecture), where the Shin-sakagami Power Station and the Shin-utsubo Power Station will be built immediately downstream.
  This project will use abundant water impounded by the two dams, and the two power stations are designed for a total output of 9,240 kW. Construction on the Shin-sakagami Power Station started in March 2021 and is scheduled for commencement in August 2024. Likewise, construction on the Shin-utsubo Power Station started in August 2021 and is scheduled for commencement in February 2025. Guided by relevant authorities and supported by the local communities, these two projects are on track, with top priority given to safety.

Expansion of renewable energy power assets overseas

The total power capacity of our renewable energy assets overseas has expanded to approximately 1,055 MW* across 10 projects. In terms of international business, renewable energy accounts for about one third of the total power generation assets invested and owned by the Kansai Electric Power Company.

* As of the end of January 2022, projects under construction included.

Nam Ngiep 1 Hydropower Project in Laos

Aviator Onshore Wind Farm Project in the U.S.

◆Renewable energy capacity of facilities that have begun operation (completed construction) in Japan and abroad: 4,142 MW (as of the end of FY 2020)

[Energy Conservation Grand Prize]

Enudge 2.0 (an energy management service based on AI and the nudge theory, provided by the Kansai Electric Power Group for corporate customers) and a project ongoing in Nakanoshima, Kita-ku, Osaka (a "high efficiency district heating and cooling system using river water heat and temperature stratified heat accumulation tanks") were awarded the Energy Conservation Grand Prize 2020, the former in the Product & Business Model category and the latter in the Energy Conservation Practice category.

Enudge 2.0, a service designed for companies operating many stores and business establishments, such as commercial facilities and supermarkets, encourages employees to practice energy conservation. It is highly valued for its ability to conserve energy in a stress-free, efficient manner, empathizing both "humans" and "machinery."

The "high efficiency district heating and cooling system using river water heat and temperature stratified heat accumulation tanks," meanwhile, is designed to improve the efficiency of conventional district heating and cooling plants, boasting one of the highest efficiency rates in Japan.

We are committed to improving our energy management expertise as part of our efforts to boost the asset values of our customers.

Performance data

Development and promotion of renewable energy		Unit	FY 2018	FY 2019	FY 2020
Development and promotion of renewable energy	Capacity of facilities that have begun operation (completed construction)	10,000 kW	372.46	388.58	414.17
	Projects underway		66.14	54.02	61.30
	Accumulated installed capacity		438.60	442.60	475.47
	• Solar power generation		8.17	8.17	11.31
	• Wind power generation		30.40	30.95	59.65
	• Hydroelectric power generation		374.6	377.80	378.84
	• Biomass power generation		25.67	25.67	25.66
	• Geothermal power generation		—	0.01	0.01