Commitment to Solutions

Our Group has been meeting the various demands of our customers and society by offering total solutions that combine our services, including comprehensive energy supply which is mainly offering electricity, as well as telecommunications, daily life and businesses.

While customers and society have increasingly different needs, with social changes triggered by the global decarbonization movement and COVID-19 infection, we are committed to exceeding customers' expectations so that they will continue to select the Kansai Electric Power Group. Specifically, we are addressing head-on the needs and problems of customers and society while expanding and providing valuable service solutions for home use, businesses and communities.

Services for residential customers

We offer a variety of services to help customers live comfortably, conveniently, and cost-efficiently. These include electric charging plans tailor-made to suit customers' lifestyles, combined price plans for gas and electricity, and a subscription plan (Hapi e Set, Hapi e Set Solareji) for promotion of electrification toward zero carbon, which combines a fixed amount of electricity, the lease of the energy-saving electric hot-water supply system EcoCute, and solar power generation equipment.

We also offer services, such as dispatch of support personnel to customers experiencing problems (sudden power outages, etc.) and operating the Kanden Kurashi Mall for the convenience of customers. These are all designed to help customers live a fulfilling life, with solutions available that are specifically made in response to customers' needs and lifestyles.

As an energy company, we are committed to improving these services for customer satisfaction.

Hapi e Set



The Hapi e Set is an electrification subscription plan comprises a "fixed amount of electricity" and the "lease of electric appliances" (energy-saving electric hot-water supply system EcoCute, etc.), where customers are free to choose an electric charging plan and electric appliances according to their lifestyle needs. It is a 10-year, fixed-rate plan of electrification that ensures a safe, comfortable, and convenient life.

Hapi e Set Solareji



The Hapi e Set Solareji, a new packaged plan comprising a "fixed amount of electricity" and the "lease of equipment" (solar power generation equipment, etc.) is designed for newly built residential housing.

Kanden Kurashi Mall



The Kanden Kurashi Mall is an EC mall that helps customers solve problems in their daily lives. It consists of services offering in "real estate and housing," "insurance," "housekeeping support," "life support" and "healthcare and learning," offering wide-ranging services to provide solutions to customers.

Capturing customers' feedback to create and improve services

We work to create and improve services in response to requests received from customers through our contact centers, website, etc. so we can meet our customers' needs.



2022. 4 - 2023. 3 results



Services for corporate customers

The "Zero Carbon Package" solution

While we are committed to working together with customers and communities to realize decarbonization and carbon neutrality, we offer solutions (Zero Carbon Package) made specifically to meet their needs. These range from consulting and planning services for CO₂ emission reduction to support for implementing specific measures.

The Zero Carbon Package provides solutions for each stage of CO₂ emission reduction: ① "visualization" of energy, ② "production" of energy, ③ "conservation" of energy, and ④ "switching" energy.

As for the (1) "visualization" of energy, we collaborate with Zeroboard Inc. in providing the cloud service "zeroboard," which calculates and visualizes CO₂ emissions based on international GHG protocol; CO₂ emissions originating from customers' operations are visualized and analyzed to develop the best possible reduction solution. In addition, we will help customers calculate and visualize CO₂ emissions originating from their supply chains, products, and services.

On-site solar power generation services are also available for the ⁽²⁾ "production" of energy. Customers have on-site solar power generation equipment installed by the group company Kanden Energy Solution Co., Inc. (hereinafter, "Kenes") and use the electricity generated, with the bill charged according to the amount they use. Many customers opt for these services as they are very convenient. (For details, refer to "Concrete measures" on page 52.)

"SenaSon," an Al-based system optimizing operations of distributed energy resources, made its debut in April 2023 for the ③ "conservation" of energy. It is designed to control energy resources such as solar power equipment, storage batteries, EVs, air-conditioning units, and production facilities*1.

For ④ "switching" energy, Kenes' utility services implement electricity switching at fossil fuel facilities. They take care of design, financing, and construction of facilities involving electricity switching, providing follow-up services spanning from tuning to operation and maintenance. Additional plans for offsetting CO₂ emissions through CO₂-free electricity are also available for electricity used in facilities that have completed the transition to electricity. The renewable energy certificate "I-REC," which is valid in more than 50 countries (primarily Asian countries), moreover, is obtained for overseas customers while the value of renewable energy electricity is provided.

In addition to these services, the Zero Carbon Package provides various solutions that meet customers' needs. It is available nationwide, not just limited to the Kansai area, and has been utilized by many customers.

*1 Solar power generation equipment and storage batteries are subject to control as of the end of April 2023, and EVs and air-conditioning units to be added by the end of fiscal 2023. More equipment will be added in the near future.

Zero Carbon Package



*Offsets CO₂ emissions from grid power. Certificates to be purchased are expected to decrease as CO₂ emission intensities decrease gradually.

Providing SenaSon

SenaSon (Smart energy aggregate Solution), which was released in April 2023, controls all kinds of distributed energy resources in real-time, thereby helping customers reduce CO₂ emissions and save energy.

Compatible with the DR*² order, it also reduces constraints in power systems caused by increased introduction of renewable energy, contributing to realize a decarbonized society.

2 Demand Response: Energy resources are controlled to strike a balance between supply and demand of electricity, with demand patterns adjusted accordingly.



Business Overview



Concrete measures

<Example of on-site solar power generation services provided> Nikken Kosakusho Works, Ltd. came up with the slogan "Machining ECO" in 2009 to provide customers with products that contribute to saving energy and improving efficiency (energy and cost saving). As efforts are underway worldwide to promote decarbonization and achieve SDGs, the company is committed to further pursuing "Machining ECO." As part of its commitment, the company decided to start studying introduction of a solar power generation system.

The company emphasized cost-effectiveness as well as energy-saving performance when planning the system. As a result of reviewing our estimation, the company found it sufficiently cost-effective and adopted our "on-site solar power generation services," of solar panels with a total area of 20,000 m² and a capacity of 1,920 kW, which were installed on the rooftop of the company's main plant in January 2022. Storage batteries are also in place to prepare for power outages during disasters, etc., which are estimated to be capable of supplying electricity for lighting fixtures and airconditioning units at offices, and servers for about five hours. The company think they are effective for emergency response measures as these systems ensure the safety of employees and information securities.



Nikken Kosakusho Works' trade name and solar panels on the rooftop

Services for customers in the community sector

We are developing new solutions, taking into account the challenges and needs of customers and local communities, while working on sustainable, attractive urban development through our community business, which coordinates and provides company attraction programs (for vitalizing the Kansai economy and creating electricity demand) and the Group's wide-ranging proprietary solutions.

Japan's first Renewable Energy 100 Town Suita Sustainable Smart Town inauguration

Japan's first Renewable Energy 100 Town was launched in April 2022, where area bulk power receiving, renewable energy, and non-fossil fuel certificates are used to power the whole town virtually and exclusively with renewable energy. Solar power generation facilities, storage batteries, and EVs, meanwhile, contribute to improving resilience to emergencies.



Supplying renewable electricity (virtually 100%) by leveraging non-fossil fuel certificates

Close to zero CO₂ emissions at World Heritage and National Treasure Himeji Castle

Our Company and the Himeji municipal government jointly applied to the Decarbonization Pilot Area Program, hosted by the Ministry of the Environment, and Himeji City was designated as one of the first pilot areas.

We will be addressing the needs and challenges of Himeji City to come up with specifically made solutions, thereby virtually eliminating all CO₂ emissions from power consumption at Himeji Castle and its neighboring public facilities by fiscal 2026.



Creating a decarbonization domino, originating from a zero carbon castle

Energizing the Kasai economy by attracting data centers and creating demand for electricity

While the increasingly digitalized society is resulting in an exponential increase in the amount of data, there has been a construction boom for data centers, where telecommunication equipment operates 24 hours a day, 365 days a year, consuming a massive amount of electricity.

We have been providing services to data centers for a long time through the course of our business, working to create electricity demand in the Kansai area and provide solutions specially developed by the Group. These efforts have led to the development plan for the Optage Sonezaki Data Center, which was announced in fiscal 2022.

Business Overview



Providing area value improvement and community delivery services in Smart Eco Town Hoshida

"Area value improvement services" were launched in the Smart Eco Town Hoshida, which is being developed by Kanden Realty & Development. These services include town security maintenance and car-sharing service provided jointly with other companies, all designed to support community development and management.

"Community delivery services" are also available on a trial basis to support shopping and improve convenience in the town and peripheral areas. Through these services, we are committed to creating a community that satisfies the residents and the companies making inroads.

Leveraging community mobility data and reviewing "last one mile transport" services

We are using data obtained from mobility sensors to monitor behavior changes and create prosperity in Sannomiya, Kobe, where redevelopment is underway. A new mobility system, for example, was introduced in February 2022 to improve the mobility and accommodation capabilities in the community, with mobility spots* demonstrated. Beverage and food delivery services were also demonstrated in October the same year for public spaces. Going forward, we intend to propose more marketing measures such as holding events to further revitalize the local economy.

* Spots to support the movement of people, each equipped with functions other than mobility platforms, such as a telecommunication base station and rest area as well as a transport node, which promotes the movement of people.

Participating in the Toyooka City Area Micro Grid Project, etc.

An area micro grid will be constructed in the Toyooka City Hub Industrial Park to improve the resilience of the area and promote renewable energy. We, therefore, will provide support for electricity self-sufficiency to prepare for power outages during disasters, etc. In addition, the wholly owned subsidiary E-Flow will help the industrial park operate largescale storage batteries to generate revenue from trading.

We will utilize distributed resources including customer production facilities, solar power and other forms of renewable energy, storage batteries, and EVs to contribute to achieving zero carbon and striking a balance between supply and demand in electricity.

Services for customers in the transportation sector

Supporting electrification of business fleets

To help customers electrify their business fleet and, by extension, reduce CO₂ emissions from the transportation sector, we provide leasing services for EVs and their charging facilities along with EV Bus Package Services, which offer customers electric buses, charging facilities, and energy management as one package.



Supporting the switch to EVs

With this one packaged service helping customers electrify their business fleet, we provide solutions for challenges such as selection of vehicles, installation of charging and power source facilities, operation of the fleet, monitoring of electrification effects, and promotion of decarbonization.

Initiatives for mobility at Expo 2025 Osaka, Kansai

The Company will participate as one of sponsors in the Future Society Showcase Project Exhibition at Expo 2025 Osaka, Kansai. The project was adopted in July 2022 to demonstrate research and development supported by the Green Innovation Fund*¹, where 100 electric buses will be jointly operated with Osaka Metro Co., Ltd. and other companies inside and outside the venue. Newly developed technology will be demonstrated, including fleet and energy co-management, autopilot functions, and dynamic wireless power transfer, or DWPT.

In addition, we will install and operate*² the charging facilities for "flying cars" at the vertiport in the venue. We will continue to work on these future-oriented initiatives and promote electrification in the mobility sector to help realize a zero-carbon society.



2025: Participating in Expo 2025→2025 and beyond: Demonstration by city buses

*1 "Green Innovation Fund Project—Smart Mobility Society Construction," offfered by the New Energy and Industrial Technology Development Organization (NEDD) *2 Supporting opporting of OBIY Comparison (Fulsing Carl Verticipation in the Even 2025)

2 Supporting operation of ORIX Corporation's flying car vertiports in the Expo 2025 venue



Participating in VPP business

Establishment of the limited liability company E-Flow

We established the E-Flow LLC in April 2023. Leveraging the results of VPP demonstration and the expertise derived from it, E-Flow specializes in trading and operation of distributed energy resources such as customers' production facilities, renewable energy (solar power, etc.) and large-scale storage batteries.

Specifically, E-Flow extracts untapped value from existing energy resources (customer production and power generation facilities, etc.) to alleviate issues related to tight electricity supply and demand and accommodate fluctuations in renewable energy output.

As for renewable energy resources such as non-FIT solar power plants, meanwhile, the services it provides include precisely predicting renewable energy output, which is susceptible to weather conditions, and providing maximum non-fossil value.

Taking into account the characteristics of individual storage battery (capacity, degradation risks, etc.), moreover, E-Flow improves the profitability of large-scale storage batteries with Al-controlled optimized operation systems, contributing to stabilizing electricity supply and further promoting renewable energy.

Participating in a storage station business

Utilizing the national government's subsidiary, we will have a stake in one of the largest storage stations in Japan (48 MW / 113 MWh) and E-Flow will be in charge of its operation. With this business, we will contribute to stabilization of electricity supply and demand and the further introduction of renewable energy.



Rendering of the planned storage station

Initiatives abroad

Cooperating with WASSHA Inc. in providing electricity services to areas without electricity in Africa

The Company entered into a business partnership with WASSHA Inc. in August 2019 to provide electricity services to areas without electricity in Africa, particularly in Tanzania, where solar panels are installed at grocery stores called "kiosks" for lease of LED lanterns equipped with solar-charged batteries to those living in areas without electricity.

We procure equipment such as LED lanterns to be leased to WASSHA, which seeks partnership with kiosks to have them introduce the leased equipment for promotion and expansion of the services.

We would like to expand the scope of this service business and explore the further value creation for it by utilizing our knowledge and expertise that have been accumulated in our electricity business over the years. At the same time, we are committed to contributing to sustainable growth of society by providing solutions to global social challenges such as SDGs and decarbonization.





Specific initiatives

We have been developing our business in a variety of areas internationally for over 20 years, not just limited to Japan.

Demand-side initiatives

As a demand side initiative, we started surveying energy management in Japanese companies' plants in Thailand in around 2016.

While companies are stepping up efforts to address environmental issues to achieve carbon neutral by 2050, there have been a growing number of customers who want to save energy and reduce CO₂ emissions, but do not have the systems required or cannot afford to implement them on their own.

Business Overview



Some of them do not even know where to start with energy management at their overseas plants.

We, therefore, established Kansai Energy Solutions (Thailand) Co., Ltd. (K-EST) in Bangkok in August 2018 and Kansai Energy Solutions (Vietnam) Co., Ltd. (K-ESV) in Ho Chi Minh in December 2021 to provide solutions primarily to Japanese plants operating in these countries.

Providing on-site services in Thailand and Vietnam with no initial investment

K-EST and K-ESV

K-EST and K-ESV serve Japanese customers that have business footholds (plants) in Thailand and Vietnam. They provide overseas solutions for solar power generation systems, co-generation systems (CGS), on-site control of water chillers and boilers, I-REC, energy-saving measures, etc. to help customers reduce energy use, costs and CO₂ emissions.

They also provide on-site services, where they own and operate facilities (solar power generation systems, CGS, boilers, etc.) installed at customers' plants, which in turn customers use the electricity and heat (steam, chilled water, etc.) generated by those facilities, with service fees paid to K-EST and K-ESV during contact periods.

K-EST and K-ESV have three major advantages.

First, no initial investment is needed, and cost-saving effects can be expected upon receiving the services. Second, being full-maintenance services, they eliminate facility maintenance work and costs. And third, solar power output and steam production are visualized.

K-EST and K-ESV, moreover, uses JCM (Joint Crediting Mechanism) facility subsidies in providing on-site services abroad.

Providing such services as part of JCM projects contributes to bilaterally reducing CO₂ emissions and alleviating the cost burden on customers.

JCM project examples

Our demand-side initiatives abroad started with services from K-EST, which introduced a co-generation system to Teijin Thailand Limited.

As a JCM project, a high efficiency 10 MW engine generator was installed at the Teijin Thailand plant.

With the services in place, Teijin Thailand Limited has shown a significant reduction in CO₂ emissions in addition to power supply in times of power outages, with CGS operating on its own. They all contribute to stable operation at the Teijin Thailand plant.

Through this project, we have proceeded to many other JCM projects such as installation of high-efficiency chillers/ boilers and solar power generation systems.

More recently, we reached an agreement with Sumitomo Rubber (Thailand) Co., Ltd. on the implementation of solar power generation systems (about 22 MW) and CGS (about 13 MW). In addition, offering our Group's total solutions including I-REC procured by the Company, we help customers achieve carbon neutrality in electricity usage.

As for these projects, we cooperate with reliable local partners with the intent of passing on our technology to Thai technical staff. The objective is to introduce "Japan-quality" facilities and keep them operating efficiently. We are committed to expanding operations in target countries to help customers reduce energy use and CO₂ emissions in the long term.



Rendering of solar panels to be installed at Sumitomo Rubber (Thailand)