Value Creation Through Our Business Activities

Power Generation Business

We will work to develop a power source mix in line with the S + 3E policy (Safety + Energy Security, Economic Efficiency and Environment), while engaging in efforts aimed at decarbonization and enhanced competitiveness.

Nuclear power generation is a key element in addressing global warming, and in this area, we are working to resume operation of Unit 2, and begin operation of Unit 3, at the Shimane Nuclear Power Station, provided that we have ensured its safety. We are also developing the Kaminoseki Nuclear Power Station as a vital power source for the future.
Moreover, while making steady progress with our thermal power transition, we will proactively work to achieve the targets outlined in our Group Corporate Vision to newly introduce renewable energy.
In addition, to ensure stable power supplies we will strive for the stable operation of power sources and reinforce our resistance to fuel price fluctuation risks.

Kitano Tatsuo
Representative Director,
Vice President &
Senior Managing Executive Officer
Head of Power Generation Division

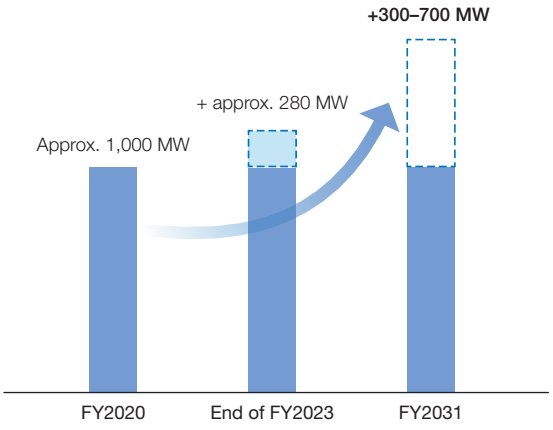
Vision and Key Initiatives

Power source mix in line with the S + 3E policy

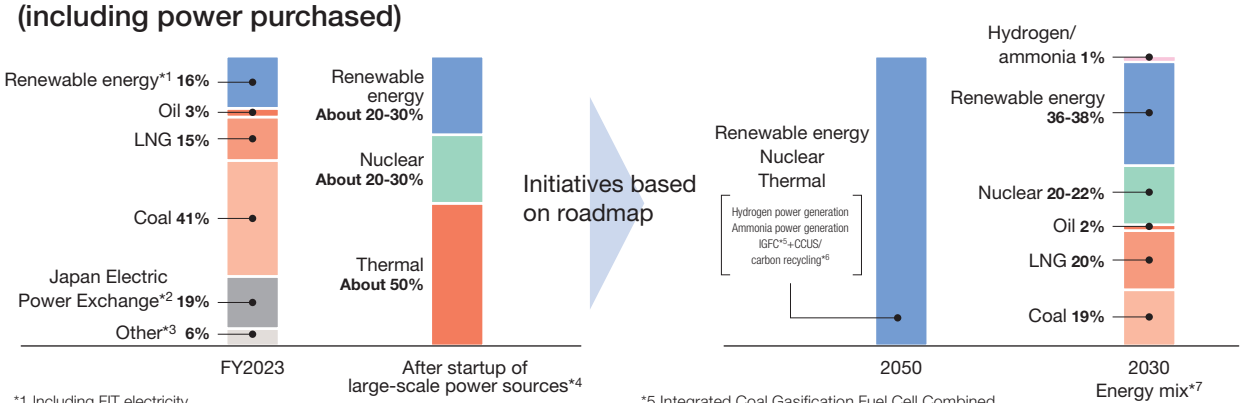
Nuclear	· Early start and stable operation of Shimane Units 2 and 3 with safety assurance as the top priority · Development of the Kaminoseki Nuclear Power Station
Thermal	· Replacement of aging thermal power facilities in line with operation of large-scale power sources · Promotion of efforts to improve efficiency and achieve lower carbon emissions through technology development and introduction of cutting-edge technology
Renewable energy	· Maximum introduction and utilization of renewable energy to improve environmental friendliness · Effective utilization of hydroelectric power through replacement of aging facilities
Fuel procurement	· Securing stable fuel supplies through early and decentralized procurement, etc. · Procurement cost reductions through expansion of acceptable fuel quality

Target: New introduction of renewable energy

+300–700 MW by FY2031 (compared to FY2020)



Proportion of generated electric power (including power purchased)



*1 Including FIT electricity.
*2 Including electricity traded for procurement using cross-regional interconnection lines.
*3 Including power procured from other companies whose power stations cannot be specified, etc.
*4 After the startup of Misumi Unit 2, and Shimane Units 2 and 3. Does not include the portion traded on the Japan Electric Power Exchange.
*5 Integrated Coal Gasification Fuel Cell Combined Cycle Technology.
*6 Technology to separate and capture CO_2 for reuse, underground storage, or the like.
*7 Sixth Strategic Energy Plan.

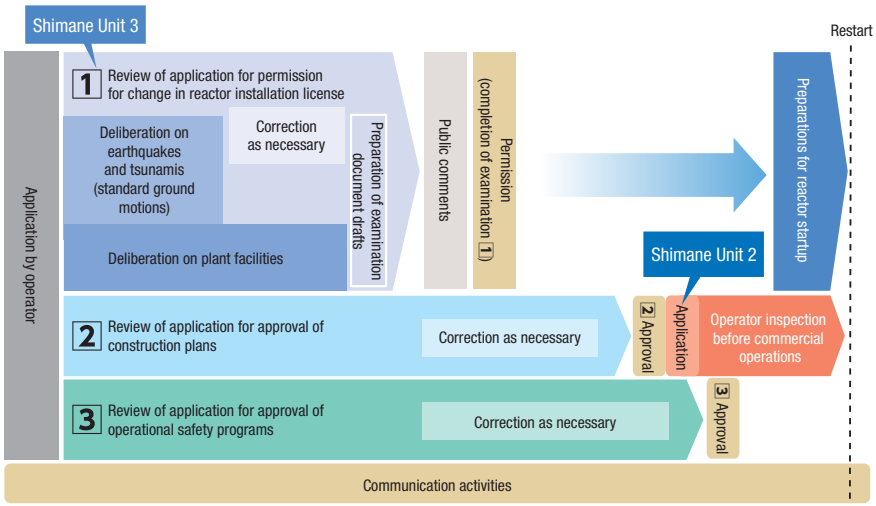
Further Improvement of Safety of Nuclear Power Stations

▶ Strengthening and Improving Existing Businesses

Response to conformity reviews for new regulatory requirements at Shimane Nuclear Power Station

In August 2023, Chugoku Electric received approval from the Nuclear Regulation Authority for a construction plan for Shimane Nuclear Power Station Unit 2. Following this, we submitted an application for pre-operational confirmation,*1 which includes processes for operator pre-operational inspections*2 in September 2023. These inspections are currently underway and are in line with the approved construction plan.
For Unit 3, since submitting our second amendment to the application for permission to change our reactor installation license in June 2022, inspections have been continuing, and current inspections are focusing on fuel analysis codes and other matters.
Elsewhere, we aim to complete safety measure work on Unit 2 in May 2024 and Unit 3 in the first half of FY2026.
Moving forward, in addition to ensuring flawless and appropriate response to these inspections, we will provide thorough explanations as to the nature of our measures to gain the understanding of our local communities in preparation for its startup.

Unit	Shimane Nuclear Power Station Unit 2 Unit 3 (under construction)
Output	Unit 2: 820 MW Unit 3: 1,373 MW
Location	Matsue City, Shimane Prefecture



*1 Inspections by the operator that confirm work is being conducted in line with the approved construction plan (materials, dimensions, functions, performance, etc.)
*2 Confirmation from the Nuclear Regulation Authority that operator pre-operational inspections have been appropriately implemented and completed. This is done by witnessing the operator's inspections and by confirming records.

Shimane Unit 2 Processes for operator pre-operational inspections

Jun. 2024	Start of fuel loading
Aug. 2024	Reactor startup
Aug. 2024	Generator paralleling (restart)
Sep. 2024	Resumption of commercial operation

WEB Status of conformity reviews for new regulatory requirements
https://www.energia.co.jp/judging/index.html

TOPICS **Safety Work at the Shimane Nuclear Power Station**

We are implementing safety measures at the Shimane Nuclear Power Station that are focused on both preventing accidents and dealing with any accidents that do occur, while taking into account the multiplicity and diversity of measures for ensuring safety.
We also publish details of our efforts and progress on our website.
In the future, we will not only meet the new regulatory standards set by the country, but also strive to further improve safety by further increasing the power of our equipment and human resources.

WEB Safety Work at the Shimane Nuclear Power Station
https://www.energia.co.jp/anzen_taisaku/movie/index.html

Improvement of emergency response capability

Emergency response drills are repeatedly carried out in preparation for a nuclear emergency such as loss of all power due to a large earthquake or tsunami.
Furthermore, as an effort to ensure smooth evacuation support for community members, we participate in nuclear power disaster response drills held by relevant municipalities as we aim to strengthen our collaboration with such municipalities and organizations.


Command center drill

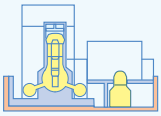
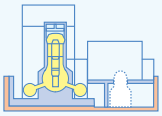
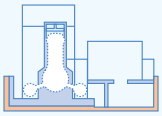

Drill to strengthen partnerships with relevant municipalities (using our assistive vehicles)

Decommissioning of Shimane Nuclear Power Station Unit 1

WEB Decommissioning Plan for Unit 1
https://www.energia.co.jp/atom_haishi/index.html

The decommissioning plan for Unit 1 was approved in April 2017, and currently we are making preparations for the dismantling work—the first stage of the decommissioning. We will make safety assurance our top priority as we proceed with decommissioning.

(As of June 30, 2023)

	Date of approval of decommissioning plan–FY2023	FY2024–FY2030	FY2031–FY2038	FY2039–FY2046
Decommissioning implementation breakdown	Period of preparation for dismantling work (1st stage)	Period of dismantling and removal of peripheral equipment around reactor body, etc. (2nd stage)	Period of dismantling and removal of the reactor body, etc. (3rd stage)	Period of dismantling and removal of buildings, etc. (4th stage)
				
Main work	Safe storage →	→	Dismantling and removal of reactor body	
		Dismantling and removal of equipment inside radiation-controlled area (other than reactor body)		Dismantling and removal of buildings, etc.
	Carrying out and transfer of fuel			
	Investigation of contamination situation			
	Removal of contamination			
	Dismantling and removal of equipment outside the radiation-controlled area			
	Treatment and disposal of radioactive waste			

Initiatives for Carbon Neutral Thermal Power Generation

▶ Strengthening and Improving Existing Businesses
▶ Taking on the Challenge of New Business

Coal-fired thermal power has excellent advantages in terms of fuel supply stability and economy, however its CO_2 emissions are a major issue. To reduce these CO_2 emissions, we are working to introduce cutting-edge technology and expand use of mixed-fuel combustion using biomass. Moreover, one element of our R&D strategy is to achieve innovation in energy and environmental technology for decarbonization. In line with this strategy, we will proactively move forward with R&D to realize Carbon Neutral 2050.

Transition Plan for Thermal Power Generation p. 26

Operation of highly efficient thermal power plants and increased use of mixed-fuel combustion

At Misumi Power Station Unit 2, which began commercial operations in November 2022, we have installed ultra-supercritical generation equipment—which is the best available power generation method—achieving outstanding economic and environmental performance as a result. At the same time, we are working to boost equipment reliability by applying the knowledge from our achievements at Misumi Unit 1.
Further, through mixed-fuel combustion at Misumi Unit 2 and Shin-Onoda Units 1 and 2, we are working to achieve further reductions in CO_2 emissions. (Misumi Unit 2: Approx. 10% mixed-fuel combustion rate; Shin-Onoda Units 1 and 2: Approx. 8% mixed-fuel combustion rate)
Moreover, as we aim to decarbonize our power sources to achieve carbon neutrality and reinforce our competitive advantage, in line with the start of operations at Unit 2 of our Misumi Power Station, we have determined to shut down our inefficient, aging thermal power plants (Kudamatsu Power Station Unit 3: Jan. 2023 shutdown; Mizushima Power Station Unit 2: Apr. 2023 shutdown; Shimonoseki Power Station Units 1 and 2: Jan. 2024 shutdown [scheduled]).

View of the Misumi Power Station

Unit	Misumi Power Station, Unit 2
Output	1,000 MW
Generation method	USC*
Start of construction	November 2018
Start of operations	November 2022
Location	Hamada City, Shimane Prefecture

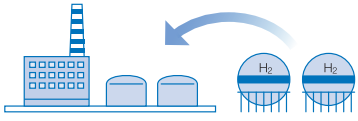
*Ultra Supercritical: A generation system that is one of the best available technologies (BAT)

Wood pellets　Wood chips

TOPICS Yanai Power Station Replacements and Environmental Impact Assessments

As part of our decarbonization efforts, we have begun examining equipment replacements at Yanai Power Station Unit 2 (four LNG plants) and preparing for environmental assessments. Through these replacements we will work to reduce CO_2 emissions by improving power generation efficiency, while we will also look at the equipment required for the launch of hydrogen co-firing

Investigation into future hydrogen co-firing



TOPICS Investigation of Supply Chains for Rollout of Next-generation Fuels

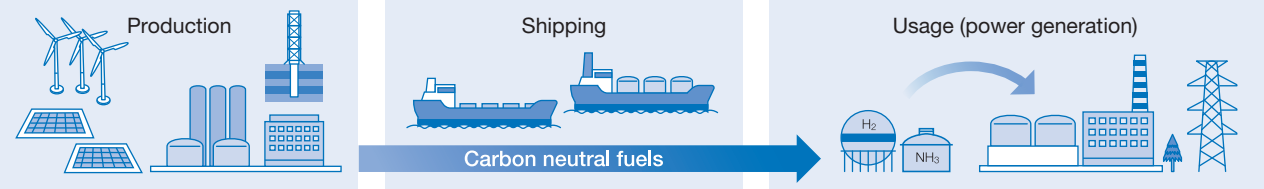
With an eye on the utilization of various support systems, we will continue with examinations to quickly build an economically rational supply chain for next-generation fuels.

Procurement (production, shipping)

We will examine specific procurement methods, including carrier selection, with a focus on joint procurement through a consortium comprising seven power companies*

Usage (power generation)

We will work to quickly introduce and expand use of biomass- and ammonia co-firing for coal-fired thermal power and hydrogen co-firing (including direct ammonia injection) for LNG-fired thermal power



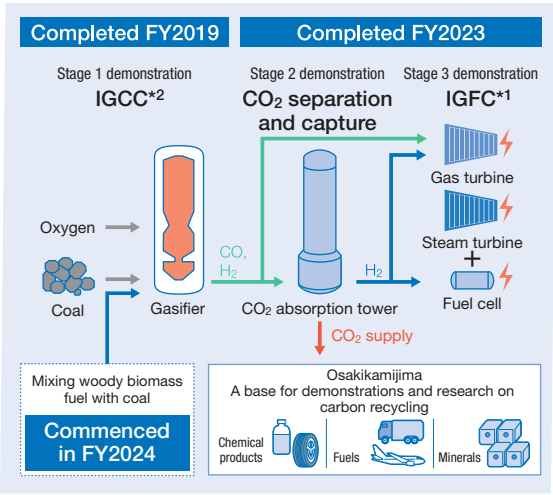
*Chugoku Electric, JERA, Kyushu Electric Power, Shikoku Electric Power, Tohoku Electric Power, Hokuriku Electric Power, and Hokkaido Electric Power

Promotion of the Osaki CoolGen Project

Through the demonstration projects undertaken by Osaki CoolGen Corporation, a company we established jointly with Electric Power Development Co., Ltd., we worked to develop an integrated coal gasification fuel cell combined cycle (IGFC)*1 with CO_2 separation and capture capabilities. The demonstrations were completed in FY2023, and we achieved the targets in all tests, including plant performance and reliability.

Following on from this project, in June 2023 we began technological development for the gasification of biomass-mixed fuel for use in an integrated coal gasification combined cycle (IGCC)*2 with CO_2 separation and capture capabilities. Through this project, aiming to achieve negative emissions in coal-fired thermal power using coal gasification technology, we will collect and analyze fundamental data relating to the gasification characteristics of coal and biomass-mixed fuel, and examine the impact across IGCC systems.

(A project funded by the New Energy and Industrial Technology Development Organization (NEDO).)



*1 Triple combined cycle coal-fired thermal power generation that combines fuel cells with IGCC.
*2 Coal is gasified, and the product gas is used to drive gas turbines alongside steam turbines to achieve combined cycle coal-fired thermal power generation.

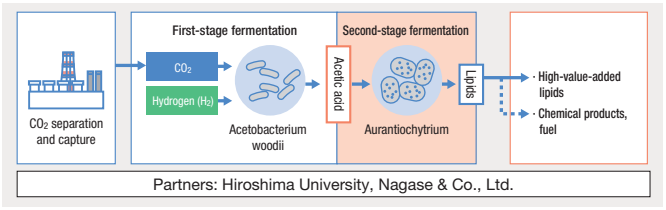
Carbon recycling technologies

Based on contracts from NEDO, at Chugoku Electric we are working on the development of technologies for the effective utilization of CO_2 in chemical products, civil engineering materials, and others.

Development of a gas-to-lipid bioprocess (Commercialization target: around 2030)

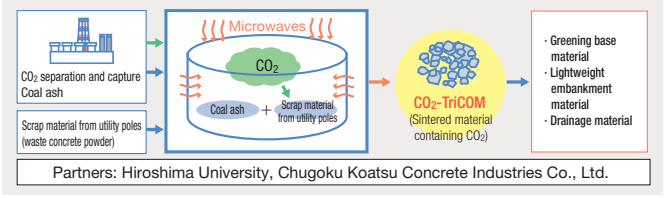
Aiming to develop a bioprocess for CO_2 recycling, we are making use of the fermentation functions of two microorganisms to develop a technology that can use hydrogen and CO_2 emitted from power plants to produce high-value-added lipids for the manufacture of health foods, etc.

Since FY2023, we have conducted the relevant demonstrations in Osakikamijima, an area that has been positioned as a base for demonstrations and research on carbon recycling by the Ministry of Economy, Trade and Industry.



Development of "Triple C" recycling technology (CO_2-TriCOM) (Commercialization target: 2030 onwards)

We are currently developing technologies to create sintered material that can be used in civil engineering work. The process first involves mixing CO_2 and coal ash from power plants, as well as scrap materials from utility poles. The CO_2 is then solidified through a sintering process using microwaves.



Further Introduction of Renewable Energy

▶ Taking on the Challenge of New Business

Renewable energy initiatives

We are positioning renewable energy not only as a response to global environmental problems, but also as a growth area. As part of this effort, we are introducing hydro, wind, and other renewables inside Japan and also developing renewable energy overseas to achieve the target indicated in our Group Corporate Vision to introduce 300–700 MW more renewable energy by FY2031 (compared to FY2020).
As of the end of March 2023, we have newly introduced approximately 280 MW of renewable energy, and we are on course to achieve our target of approximately 300 MW in FY2024. Looking ahead, we will proactively look to develop offshore wind power—which we believe has particular potential for growth—and continue to maximize introduction of renewable energy.

Introduction of renewable energy since FY2021

Domestic	Hydro	· Repowering of existing hydroelectric power [Takiyamagawa: April 2021]
	Biomass	· Mixed-fuel generation with woody biomass [Shin-Onoda Units 1 and 2: Expansion of mixed-fuel combustion from August 2020 onward] [Misumi Unit 2: November 2022]
		· Biomass power generation business [Kaita Biomass Power Co., Ltd.: April 2021] [ENERGIA POWER YAMAGUCHI CORPORATION: Expansion of mixed-fuel combustion from September 2021 onward]
Domestic	Hydro	· Repowering of existing hydroelectric power [Kitahara: Scheduled for March 2024; and 5 other power plants]
Overseas	Hydro	· Taiwan hydroelectric power generation project

: Projects scheduled for commercial operation in the future

Initiatives in the biomass power generation business

We have been engaged in the biomass power generation business via our subsidiary Energia Power Yamaguchi Corporation* since 2019, and Kaita Biomass Power Co., Ltd., our joint venture with Hiroshima Gas Co., Ltd., since 2021. Through these businesses, in addition to generating profit to ensure further growth of the Chugoku Electric Power Group, we are effectively utilizing local forest resources as much as possible, in accordance with the situation at each location, and thereby contributing to local revitalization.

*AWEP Yamaguchi Corporation, a joint venture we established with Air Water Inc., was made into a wholly owned subsidiary in January 2023

Kaita Power Station—the largest biomass mixed-fuel combustion power plant in Japan

Further introduction of renewable energy and improving adjustment capabilities

In line with the expansion of renewable energy, pumped storage plants, grid storage batteries, and adjustment capabilities using thermal power are growing in importance. We will therefore work to both expand introduction of renewable energy and improve our adjustment capabilities.

Further expansion

Increasing introduction of renewable energy

Solar

We are proactively developing solar power as an effective means to increasing introduction of renewable energy

Ube Photovoltaic Power Station

Wind

Offshore wind power: Considering participation in projects both inside and outside our areas of operation
Onshore wind power: Considering participation in new projects and replacement projects

Onshore wind power (Ama-cho, Shimane Prefecture)

Hydro

We are proactively promoting repowering projects and new developments while carefully examining profitability and future environmental value

Improvement work on Kitahara Power Station (Power output: 15.6 MW → 17.7 MW)

Introduction support

Improving adjustment capabilities

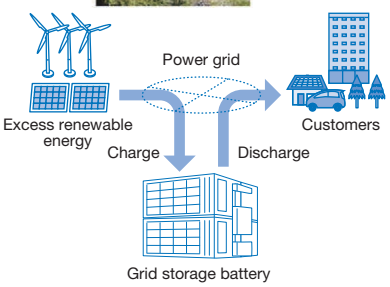
Pumped storage

We are aiming for maximum use of the value of pumped storage power generation

Pumped storage power station: Matanogawa (our largest pumped storage power station)
1.2 GW (30 x 4 units)

Grid storage batteries

We are considering how to contribute to the effective use of excess energy through various types of power trading with storage batteries



Thermal power

We are working to decarbonize our thermal power generation

Sales Business

Based on thorough compliance, we will aim to boost our profitability through the expansion of services that meet our customers' needs.

With rising procurement costs caused by soaring fuel and electricity market prices and rising competition among electricity retailers, the Sales Business environment continues to undergo change. For us to maintain profitability, it is essential that we roll out high-value-added services from the customer's perspective, all the while ensuring thorough compliance.
For customers to continue to select the Chugoku Electric Power Group as their electricity provider, even as their needs change, it is paramount that we enhance our range of electricity rate plans and services more than ever before. In addition, in line with rising awareness of environmental management, we will move forward with the development of services that solve customers' issues as they seek to achieve decarbonization.
Moreover, by securing demand through the promotion of electrification and driving electricity sales outside of the Chugoku region, we will aim to maximize profit from electricity sales. We will also work to increase earnings through fuel sales to city gas companies and corporate customers in the Chugoku region.

Tanada Kenji
Managing Executive Officer
Head of Energy Sales Division

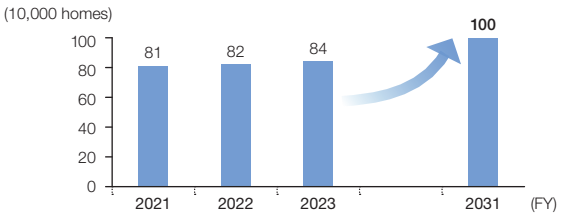
Vision and Key Initiatives

Providing better electricity rate plans and services from the customer's perspective and supporting their decarbonization needs

- Accurate understanding of customers' needs and application of knowledge to electricity rate plans and services
- Promotion of electrification, demand response, solar PPA, etc.
- Proposal of solutions that meet customers' decarbonization needs

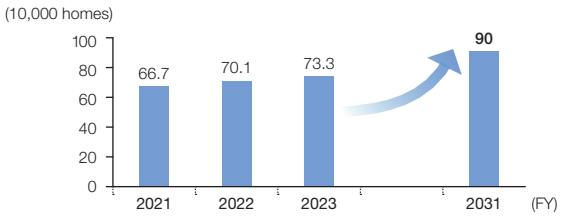
Target: No. of all-electric-home contracts

FY2031: More than one million



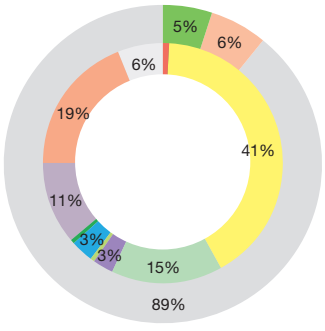
Target: No. of EcoCute units installed

FY2031: More than 900,000



Composition of power sources and use of Non-Fossil Fuel Energy Certificates at Chugoku Electric (FY2023)

(Inner circle: Power source composition; Outer circle: Non-Fossil Fuel Energy Certificates)



Composition of power sources

- Hydroelectric power (30 MW or more)
- Hydroelectric power (less than 30 MW)
- Coal-fired thermal power
- Biomass power
- Gas-fired thermal power (LNG, etc.)
- Feed-in-tariff (FIT) electricity*1
- Petroleum-fired thermal power
- Japan Electric Power Exchange*2
- Solar power
- Other*3
- Wind power

Non-Fossil Fuel Energy Certificates

- With Non-Fossil Fuel Energy Certificates (designated renewable energy)
- With Non-Fossil Fuel Energy Certificates (no designation)
- Without Non-Fossil Fuel Energy Certificates

We offer some of our customers plans that use only renewable energy sources. The composition of power sources for electricity plans with non-specified power source compositions, as well as use of Non-Fossil Fuel Energy Certificates, is as below.

*1 Part of our electricity procurement costs are funded by a levy on all electricity users, including those who are not our customers. Of this electricity, that which does not make use of Non-Fossil Fuel Energy Certificates does not have value as renewable energy or as zero-CO_2 emissions power, and CO_2 emissions from FIT electricity is regarded as the national average of CO_2 emissions from electricity, including that generated through sources such as thermal power.
*2 Japan Electric Power Exchange includes hydroelectric power, thermal power, nuclear power, FIT electricity, power from renewable energy, etc.
*3 Other includes electricity procured from power stations that cannot be specified.

Note 1 Hydroelectric power (30 MW or more), solar power, wind power, and biomass power are all less than 1%.
Note 2 As figures have been rounded up, composition figures may not add up to 100%.
Note 3 Calculated and published based on the Ministry of Economy, Trade and Industry's "Guidelines Concerning the Management of the Electricity Retail Business" (Established January 2016; Latest revision April 1, 2023).

Offering a Rate Plan and Services to Suit Customer Needs

▶ Strengthening and Improving Existing Businesses

Rate plans and services in line with customers' lifestyles

We have developed "Gutto Zutto. Plan," a rate plan that customers can select to match their lifestyles, and the "Gutto Zutto. Club" members' website. As of the end of FY2023, there were approximately 1.51 million accounts for our new rate plans, and approximately 1.36 million subscribers on our members' website. The "Gutto Zutto. Club" members' website features the Energia Loyalty Point service, as well as various special offers such as collaborative plans that we have created alongside companies with bases in the Chugoku region.

Rate plan in support of the Hiroshima Toyo Carp baseball team

Electricity rate plans using renewable energy and services using distributed energy resources

As one of our initiatives to achieve a decarbonized society, we are rolling out electricity rate plans using renewable energy and services using distributed energy resources.

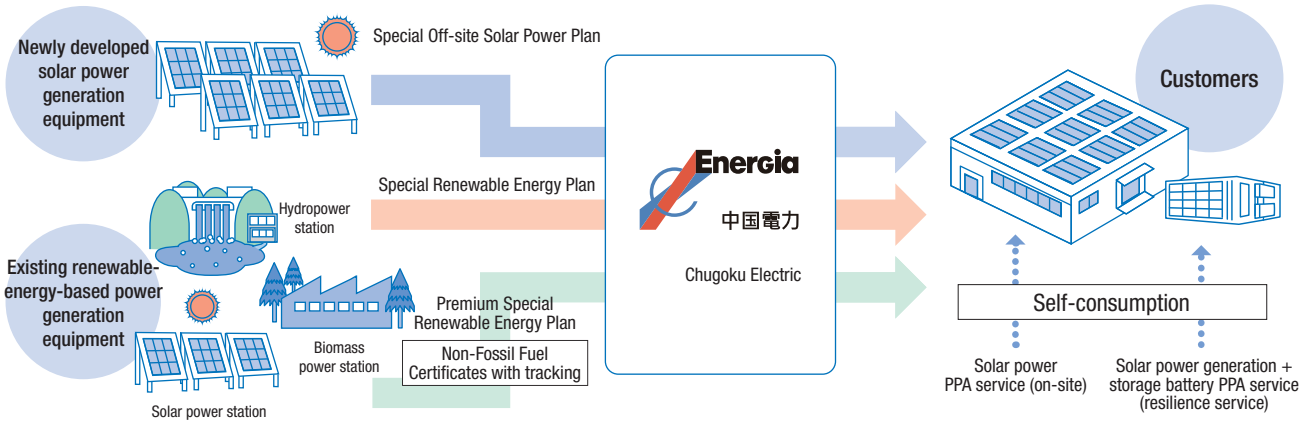
Electricity rate plans using renewable energy

These are electricity rate plans that allow customers to reduce the CO_2 emissions from the electricity they use.

Household: Gutto Zutto. Renewable Energy Green Plan
Corporate customers: Special Renewable Energy Plan, Premium Special Renewable Energy Plan, Special Off-site Solar Power Plan

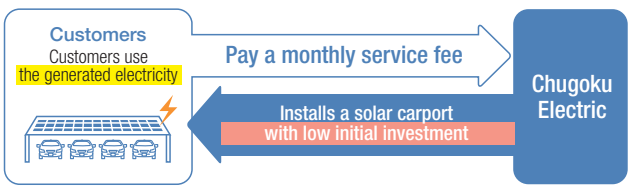
Solar power PPA service

This service involves installing solar power generation equipment in customers' buildings or on their property, enabling them to use the power generated for a monthly service fee without paying for the initial investment.



Solar carport PPA service

This is a service for businesses (under 500 kW contract power in the case of high-voltage customers) in which a solar carport (with solar power generation equipment) is installed on the customer's property, and the customer can use the electricity generated by the solar carport for a monthly service fee with a low initial investment.

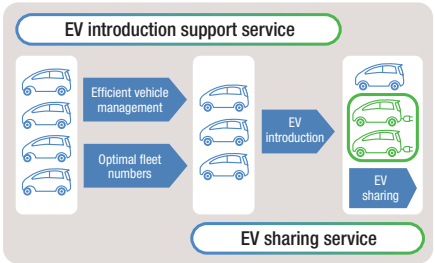


For more information about the service, please refer to the website.

WEB Chugoku Electric Solar carport PPA service
https://biz.energia.co.jp/solarcarport-ppa/#

EV solutions service (eeV)

The eeV service comprises two elements: a service to support the introduction of EVs through efficient vehicle management and optimal fleet numbers; and an EV sharing service which aims to promote efficient vehicle use and spread out expenses by setting up an EV station within the customer's grounds and sharing the vehicles among multiple companies.

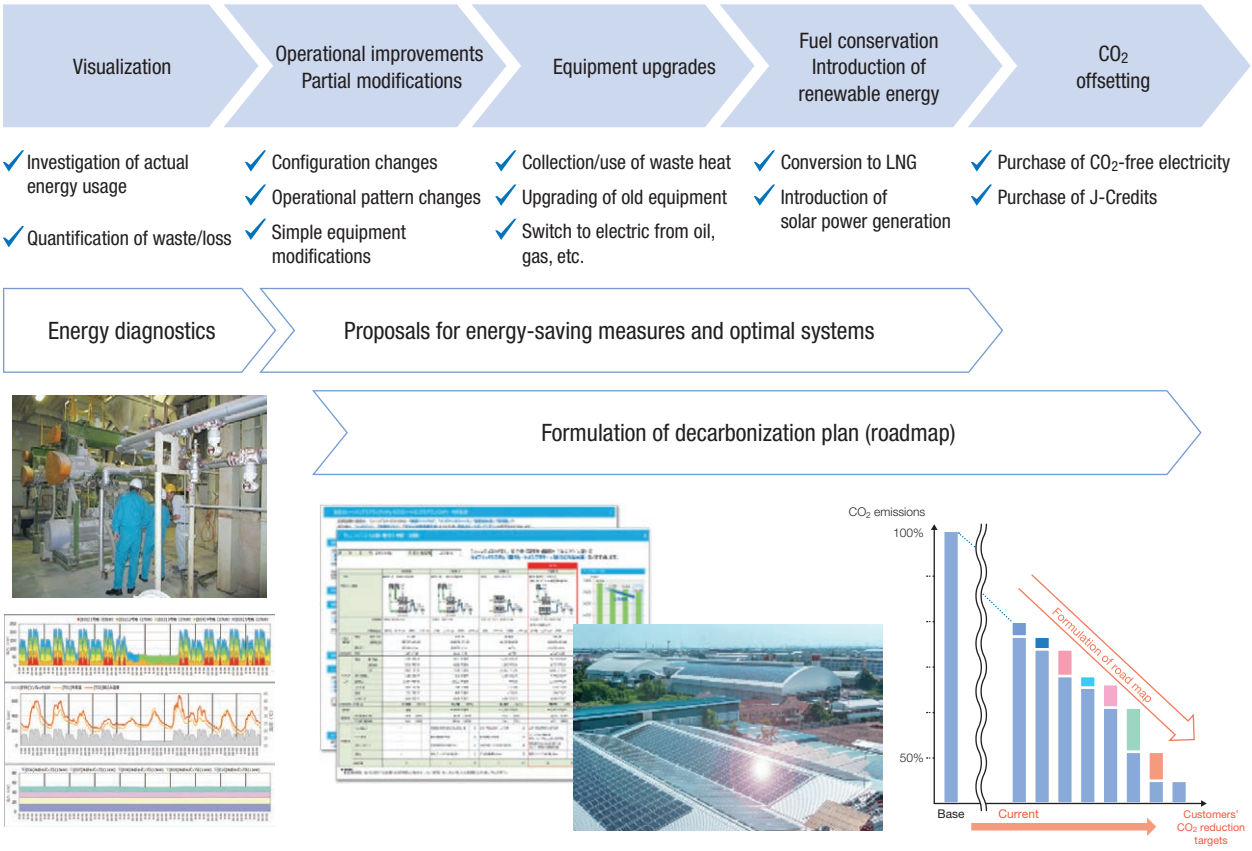


WEB Installation of an additional EV solutions service (eeV) station in Deshio and Nobori-cho, Hiroshima City
https://www.energia.co.jp/assets/info/2023/p20230630-1a.pdf

Energy-saving, Cost-saving, and Decarbonization Proposals

▶ Strengthening and Improving Existing Businesses

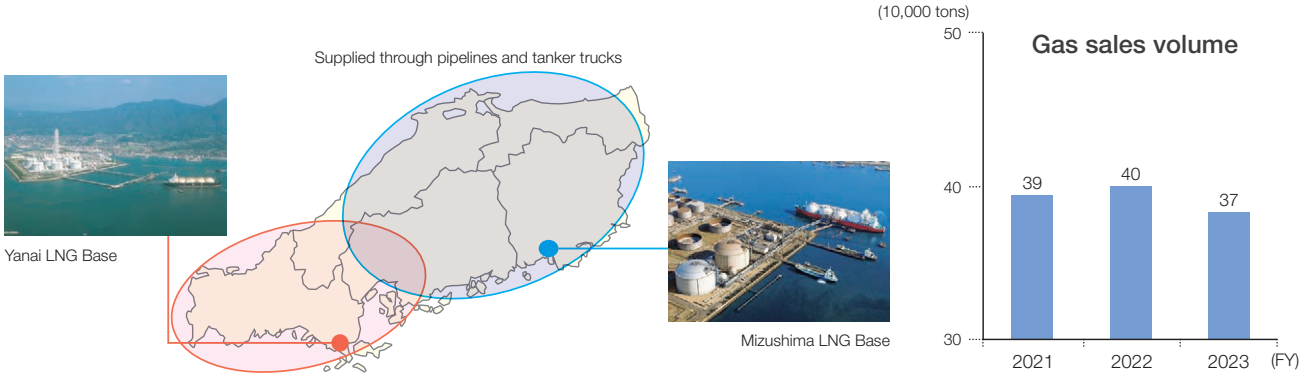
To cater to customers' decarbonization needs, in addition to our existing electrification proposals, we have begun offering a new package consulting service for energy-saving and CO_2 reduction measures. Specifically, we help customers formulate a roadmap that covers everything from the investigation and analysis of their energy usage to the implementation of decarbonization measures.



Gas Sales

▶ Strengthening and Improving Existing Businesses

Through our group company, Energia Solution & Service Company, Incorporated, we deliver natural gas (LNG) to city gas companies, factories, and other corporate customers in the Chugoku region.
While exploiting the strengths of our Yanai-Mizushima Two-Base System, we are working to respond to customers' carbon neutrality needs through a groupwide team effort in our sales activities.



Power Transmission and Distribution Business

By responding to the further introduction of renewable energy and reinforcing our resilience, we will promote the shift to a next-generation transmission and distribution network.

The management environment in the power transmission and distribution business is undergoing various changes, with further introduction of renewable energy and the increasing frequency and severity of natural disasters.
In light of the new wheeling charge system (revenue cap system) introduced in April 2023, at the Chugoku Electric Power Transmission & Distribution Company, Incorporated—which is in charge of the power transmission and distribution business—we have formulated a business plan with clear targets for FY2024–2028 to help drive us toward achievement of our long-term vision for FY2031. Through steady execution of our business plans, we will strive to sophisticate our equipment maintenance, respond to the further introduction of renewable energy, and reinforce our resilience so that we can promote the shift to a next-generation transmission and distribution network.

Hasegawa Hiroyuki
Representative Director and President
Chugoku Electric Power Transmission & Distribution Company, Incorporated

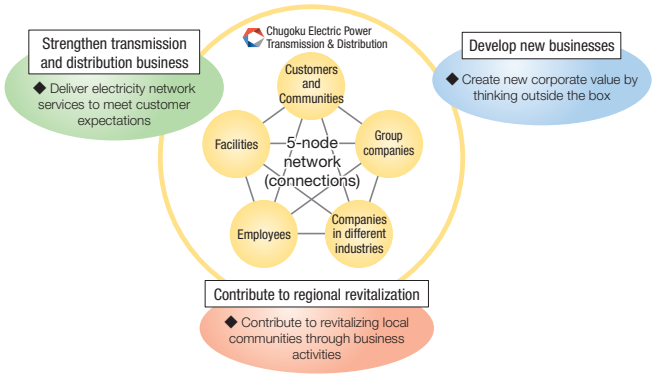
Vision and Key Initiatives

In addition to tackling the three main areas of our long-term vision—strengthening the transmission and distribution business, developing new businesses, and contributing to regional revitalization—we will strive to develop alongside our regional community while uniting the strengths of our five networks.

Corporate Vision of Chugoku Electric Power Transmission & Distribution

Aims for FY2031

A company which develops together with the regional community by uniting the strengths of its "5-node network"



Financial and quality targets

- Attain ordinary income of ¥14 billion by FY2031
- Maintain world-class electricity quality, and minimize social impacts due to power outages

Main initiatives

- Countermeasures for aging equipment to ensure stable supply of power and maintain quality
- Response to further introduction of renewable energy aimed at decarbonization
- Reinforced resilience to counter increasing frequency and severity of natural disasters
- Sophistication and enhanced efficiency of operations through use of DX technologies
- Development of new businesses using management resources

Overview of Chugoku Electric Power Transmission & Distribution Revenue Cap System

Formulation of business plans

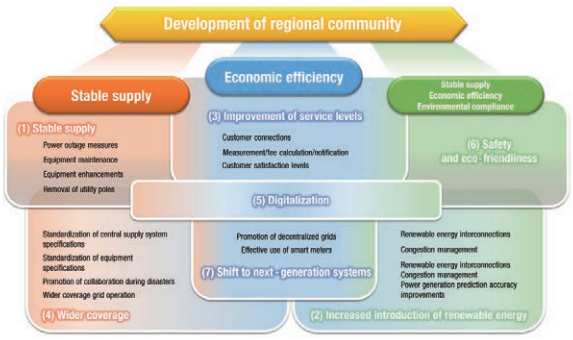
- Formulate business plans with clear targets for FY2024–2028 in line with national guidelines
- Ensure a good balance between stable supply, economic efficiency, and environmental compliance in business plan targets and contribute to development of regional community

WEB Chugoku Electric Power Transmission & Distribution Business Plan (FY2024–2028)
https://www.energia.co.jp/nw/company/activity/rc/doc/shinsei_jigyoukeikaku.pdf

Income forecast

➢Income forecast: 315.3 billion yen/year
➢Existing cost reductions: -9.2 billion yen/year (previous cost comparison)

Overview of targets in business plan



Sophistication of Equipment Maintenance and Further Introduction of Renewable Energy

▶ Strengthening and Improving Existing Businesses

Sophistication of equipment maintenance

To ensure the stable supply of electricity to customers at low cost, we are proactively using the latest digital transformation technologies to sophisticate and enhance the efficiency of equipment maintenance work.

Further introduction of renewable energy

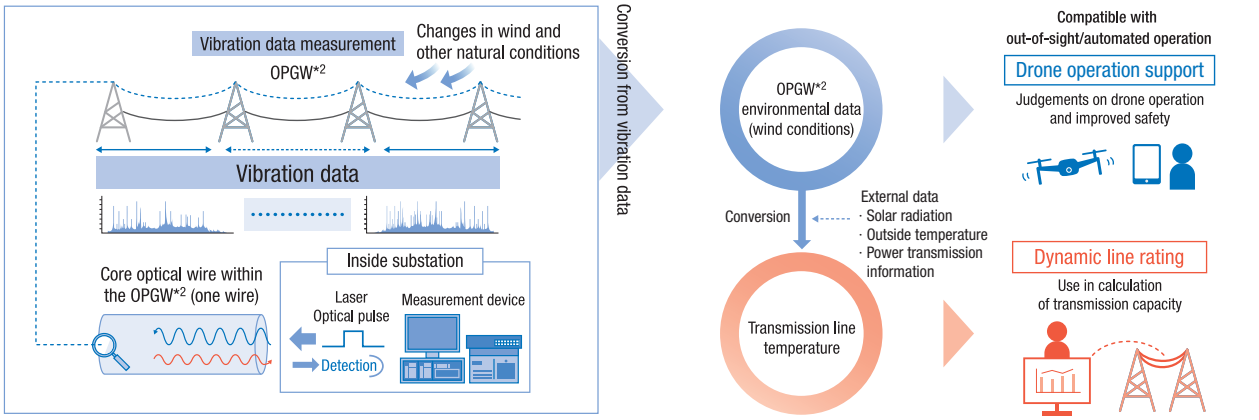
WEB Renewable energy applications
https://www.energia.co.jp/nw/energy/kaitori/status/

To ensure power producer predictability in the face of an increasing number of connection applications for renewable energy, the website of Chugoku Electric Power Transmission & Distribution discloses the volume of solar power generation applications and information on available grid capacity, and measures are being taken to enable the grid to handle increased introduction.

TOPICS Trialing Further Introduction of Renewable Energy and Sophistication of Power Transmission Equipment Maintenance

To promote the further introduction of renewable energy, for one year starting in September 2021, Chugoku Electric Power Transmission & Distribution and Fujitsu Limited worked together toward the use of dynamic line rating*1—a promising next-generation power network technology—and the use of drones for the sophistication of transmission equipment maintenance. Specifically, the two companies tested the practicality of using environmental data (on wind conditions) acquired using power transmission equipment. The trial involved the estimation of environmental data and comparisons with actual data, and results confirmed the efficacy and accuracy of the estimations. The trial thus confirmed that the data can be applied to the use of dynamic line rating and drone-based patrols and inspections, helping to promote the further introduction of renewable energy and sophistication of transmission equipment maintenance.

WEB Chugoku Electric Power Transmission & Distribution and Fujitsu conduct trials aimed at the further introduction of renewable energy and the sophistication of transmission equipment maintenance
https://www.energia.co.jp/nw/press/2022/14333.html



*1 A method for the flexible handling of transmission line capacity based on climate conditions

*2 Optical Ground Wire. Overhead ground wires (which protect transmission lines from lightning strikes) with internal optical fiber cables.

Strengthening Resilience

▶ Strengthening and Improving Existing Businesses

To strengthen resilience (toughness and ability to recover in a disaster), we are taking measures to prevent accidents and speed up recovery when accidents occur. Moreover, during power outages, we communicate relevant information via power outage information apps, our website, and other channels.

Temporary repair of disconnected line using Kyushu Electric Power Transmission and Distribution power lines and emergency power transmission drill using high-voltage generator vehicle (May 2022)

We were the first general electricity transmission and distribution company to introduce a disaster recovery command (DREC) vehicle
The vehicles are set up at disaster sites and recovery response work is conducted from inside

Information is provided via a power outage app

Push notifications | Maps of individual municipalities and prefectures | Recovery schedule

The company communicates easy-to-understand information on power outage areas and recovery schedules through a dedicated app, website, and social media

Information and Telecommunications Business

We will help customers improve the quality of their operations and enhance their competitive advantage through digital transformations, and strive to provide solutions and create added value.

There are growing opportunities to use information and communications technology in all areas of business and life due to progress in fields such as AI, IoT, and 5G, and in today's post-COVID society its importance is growing by day. There are rising expectations within society for this technology to cater to new lifestyles and accelerate digital transformations suited to the ever-changing business environment.
Within our Group, Enecom, Inc.* is engaged in the information and telecommunications business. In addition to building high-quality, high-reliability communications networks, Enecom provides a wide range of services spanning data centers, the cloud, security, DX solutions, and other elements. Through these activities, Enecom will utilize state-of-the-art ICT to provide solutions and create added value and support the lifestyles and businesses of its customers.

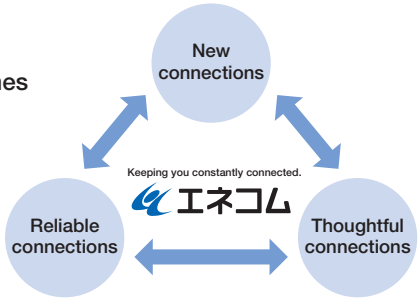
Okabe Keiji
Director and President
Enecom, Inc.

*Energia Communications, Inc. changed its name to Enecom, Inc. on July 1, 2023.

Vision and Key Initiatives

Continuing to ensure constant connections in line with the changing times

In the field of ICT, which brings shape to the connections between people, things, information, society, and ideas, we will strive to provide key value in three areas: new connections through advanced technologies and services, reliable connections that must be protected despite changing times, and thoughtful connections to ensure that everyone can enjoy and benefit from developments in ICT.



- Improved awareness and thorough implementation of compliance-first operations to respond to the demands of customers and society
- Promotion and expansion of consumer-oriented services in line with customer needs
- Establishment of a service foundation for corporate customers in platform areas such as the cloud and security
- Improvement of reliability of existing equipment for better BCP and examination and adjustment of equipment configurations in line with new customer needs
- Promotion of and support for DX that can reform the Chugoku Electric Power Group and customers' businesses
- Promotion of carbon neutrality initiatives

Efforts to Strengthen and Expand Our Information and Telecommunications Business

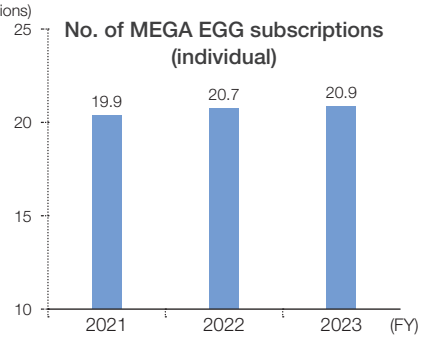
▶ Strengthening and Improving Existing Businesses

Individual customers

In addition to ensuring secure internet connections through optical fiber, we will also support customers' lifestyles through convenient, enjoyable services.

Internet connection service MEGA EGG

Enecom offers MEGA EGG as an Internet connection service for personal use.
In addition to providing secure, reliable internet connections, in July 2022 Enecom began offering MEGA EGG contracts alongside Chugoku Electric electricity plans. Further, to cater to rising demand for home Internet, Enecom also provides optional Wi-Fi 6 (mesh compatible) routers, offering various communications solutions to cater to customers' needs.



Corporate customers

From communications networks and data centers to cloud, security, and DX solutions, we offer a rich range of services to cater to customers' diverse needs.

EneWings solution service for corporate customers

For corporate customers, in addition to communications network services, Enecom offers management and maintenance services for network devices and servers, as well as data center, cloud, and security services.
Further, at the EneWings Hiroshima Data Center, Enecom offers a range of services through safe and secure facilities and robust security.
In April 2023, Enecom began offering the Enewings Direct Exchange Service, enabling connections to the mega cloud services of four major US-based IT companies from Hiroshima.

Hiroshima Data Center

Support for promotion of digital transformation of companies through consulting

Enecom is helping companies reinforce their competitive advantage by supporting their DX efforts using the latest technologies.
Specifically, Enecom is using RPA and AI to automate routine office work, transforming handwritten text into data and providing automated voice responses to telephone calls.
The company is also focusing on consulting services for companies interested in DX, providing support for the analysis and utilization of the vast volumes of data they generate on a daily basis.

TOPICS **Rollout of New Services**

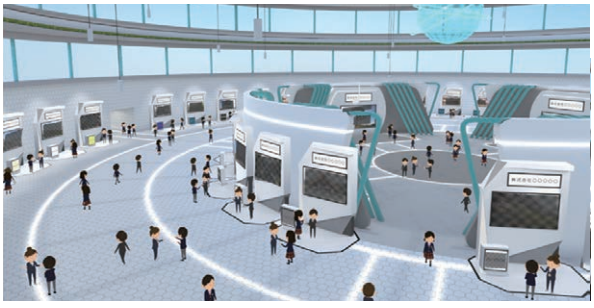
Enecom is working to develop advanced services that create new value.

EneLearn Drone Meister

To promote the acquisition of national drone certifications, Enecom offers the EneLearn Drone Meister e-learning service, combining its own on-site expertise with rules specified by the Ministry of Land, Infrastructure, Transport and Tourism.

Metaverse Exhibition Maker

In a metaverse space utilizing XR technology,* Enecom offers multiplayer functions, diverse device compatibility, and a diverse range of booth management functions to enable the simple creation of virtual exhibitions.



*An umbrella term for technologies that express and provide experiences for things and information that do not exist in the real world

Taking on the Challenge of New Business

We will aim to expand our field of business and generate new profit to ensure the sustainable growth of the Group.

Forecasts suggest there will be major changes in the environment of the electricity business in the future. Under these conditions, we will need to further accelerate efforts to expand our field of business in order for our Group to continue its sustained growth as we move forward.
To achieve the profit/financial targets set forth in our Group Corporate Vision, we are also working to ensure that our international businesses can contribute to Group profits. To do so, in addition to moving forward with the development and acquisition of power generation projects, we will actively engage in other areas such as the network and retail businesses, electricity-related businesses, and new energy businesses.
Moreover, based on two concepts—creating the future of the region and creating the future of electricity—the Energia Creative Lab aims to use open innovation to offer advanced products and services that can offer solutions to regional issues related to carbon neutrality, digital transformations, and the creation of a smart society, and in turn generate new profit.

International Business

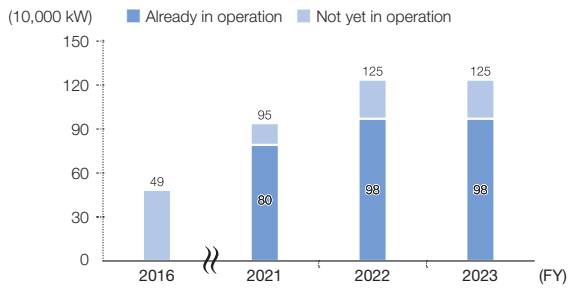
Initiatives to Expand Our International Businesses

▶ Taking on the Challenge of New Business

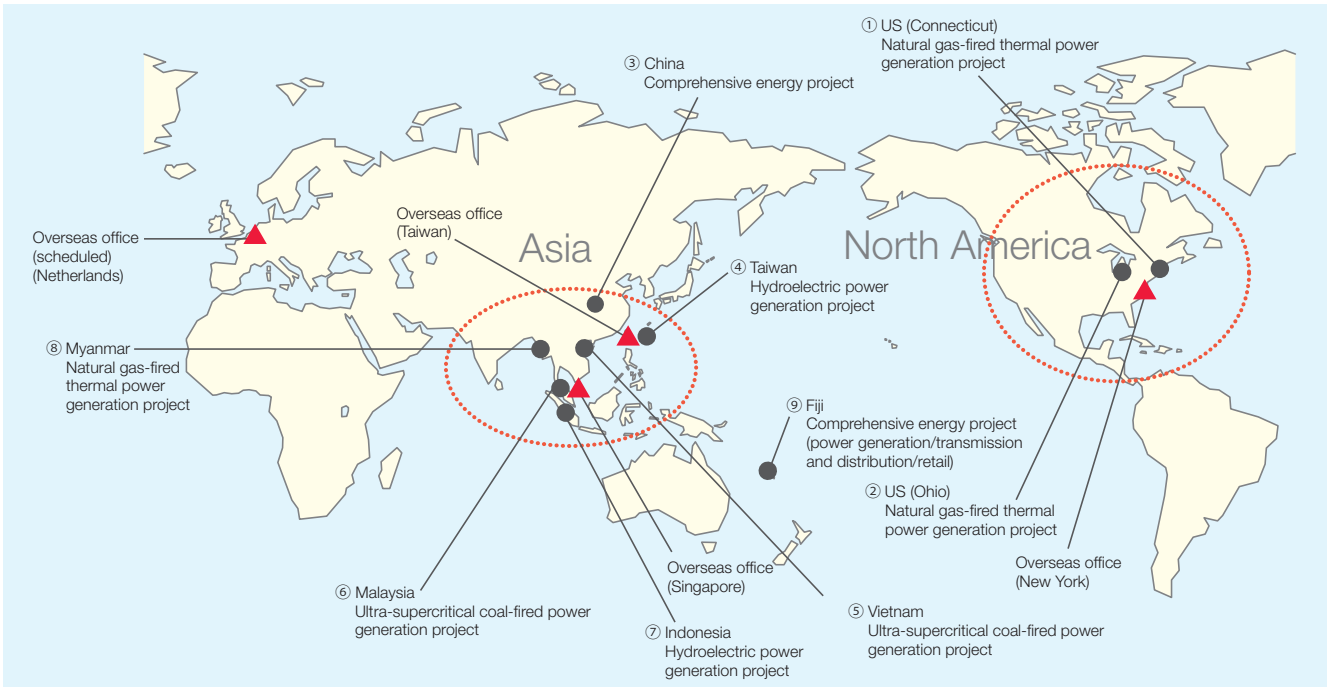
Approach to overseas investments

To strengthen our management foundation, we are industriously working on our international businesses while making use of our technological expertise, experience in overseas projects, and strategic investments.
With regards to overseas investments, we have set out to invest in projects with a higher rate of expected return than those in Japan. At the same time, in line with global trends toward decarbonization, we will prioritize the development of renewable energy projects.
Meanwhile, we have determined not to newly participate in any conventional coal-fired thermal power projects.

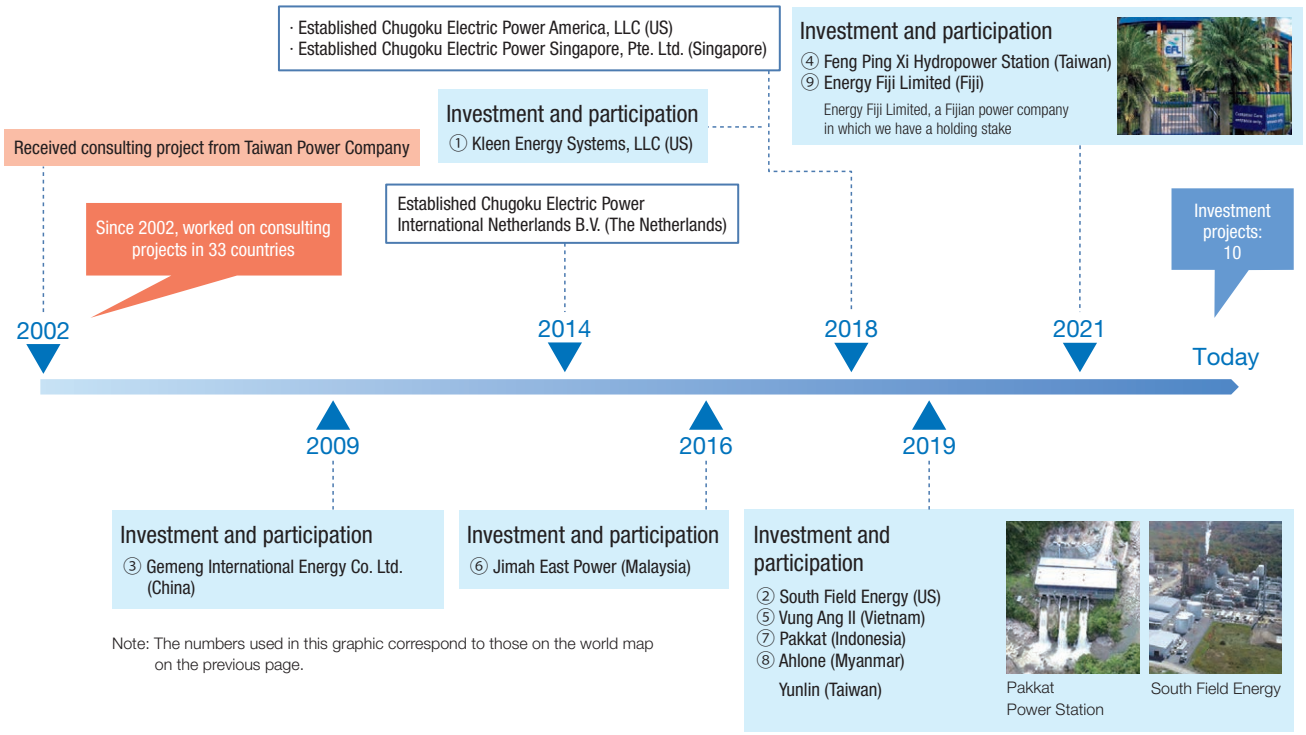
Equity ownership in electricity output in overseas projects



Overseas projects ● and manned overseas offices ▲



Main initiatives to date



Note: The numbers used in this graphic correspond to those on the world map on the previous page.

TOPICS Examples of Consulting Projects

Project to Introduce Hybrid Power Generation in Cabo Verde

In March 2021, alongside Kyuden International Corporation, we were commissioned by the Japan International Cooperation Agency (JICA) for a consulting project to support the introduction of renewable energy in Cabo Verde, an island nation in West Africa. Our role in the project is to pass on operational technologies to improve renewable energy ratios. Although the majority of power in the country is supplied through diesel power generation, in recent years it has introduced solar and wind power generation, and has set itself the target of improving the ratio of renewable energy to 50% by 2030.

However, improving renewable energy ratios without thorough adjustment capabilities* in place can cause instability in power grids, leading to heightened risk of power supply interruptions across the island. As the island did not have proper operational rules for its power generation equipment, it would frequently curb its output of renewable energy and decrease ratios.

Wind power station in Cabo Verde

As part of the project, we therefore created an operational manual for a hybrid power generation system. The manual provides supply-demand plans to maximize renewable energy ratios, as well as operational rules for power generation equipment. In June 2023, we provided on-site technological guidance and operational support using the manual.

Using the expertise we gained from the hybrid storage battery system demonstration we conducted on the Oki Islands, we will strive to facilitate stable power supplies and boost renewable energy ratios in Cabo Verde.

*The necessary power to match demand with supply when demand and renewable energy output fluctuate

Project to Formulate a Clean Energy Transition Roadmap for a Carbon Neutral Society in Cambodia

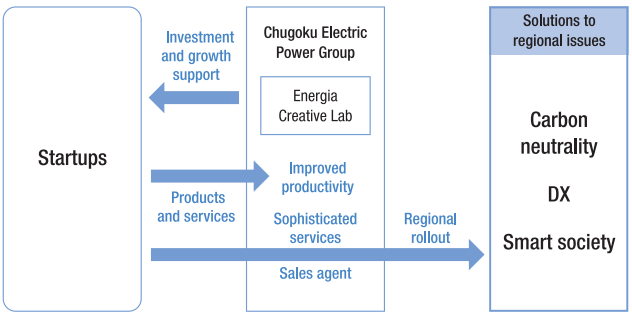
In March 2023, alongside Kyoto University and Nippon Koei Co., Ltd., we were commissioned by JICA for a project to formulate a clean energy transition roadmap to achieve a carbon natural society in Cambodia.

Cambodia has set itself the target of achieving carbon neutrality by 2050. Through this project, we will conduct studies for the formulation of an energy transition roadmap and support the country's achievement of carbon neutrality.

Efforts at the Energia Creative Lab

▶ Taking on the Challenge of New Business

With carbon neutrality, digital transformations, and a smart society as the overarching themes, we are offering our regions the latest products and services from startups via the Group to simultaneously create new sources of profit and tackle regional challenges.
To promote the rollout of diverse services, we are investing in startups that have the potential to achieve quick growth and aiming to generate new profit.



Businesses and investments

We are widely investing in advanced products and services that can provide solutions to regional issues. As of March 31, 2023, we have invested in 16 projects, including funds.

Carbon neutrality

- Development of new energy services
- Achievement of a decarbonized society

Themes

- Renewable energy
- EVs and storage batteries
- Electrification and energy-saving measures, etc.

D X

- Promotion of digitalization among companies and local governments
- Solutions to industrial issues through improved productivity and sophistication of operations

Themes

- AI·IoT
- Robotics
- Data science, etc.

Smart society

- More comfortable lifestyles and improved convenience
- Regional revitalization and solutions to social issues

Themes

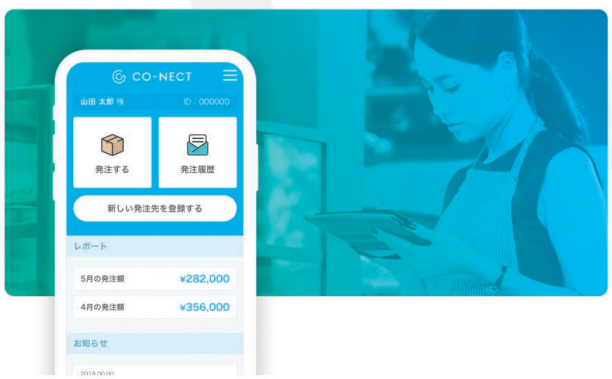
- Homes, lifestyle services
- Disaster preparedness, smart cities
- Regional traffic safety, etc.

Co-creation activities

Through customer touchpoints, regional networks, and collaboration with our group companies, we are moving forward with the regional rollout of products and services from startups.

CO-NECT

In 2021, we invested in CO-NECT, a company that offers the CO-NECT business-to-business order and supply system. For customers using our electricity plans, we have launched a DX Support Discount which gives them discounts on CO-NECT usage fees.



CoCooking
cooking a better world

In 2020, we invested in CoCooking, a company offering a food sharing platform to reduce food loss. On our “Gutto Zutto. Club” members’ website for families, we offer CoCooking coupons and advertise the company’s TABETE app.