

Chugoku Electric Power Group Integrated Report

2021



Chugoku Electric Power Group's Corporate Philosophy

# ENERGIA

With You, and With the Earth











"Energia" stands for a "new, bright, warm and dynamic society," and signifies the Chugoku Electric Group's attitude toward achieving such a society.

# Management Philosophy

# Trust. Creation. Growth.

We take delight in earning the trust of our customers.

We create an abundant future through energy.

We will grow together with the community.





#### **CONTENTS**

About the Chugoku Electric Power Group  Publication of the Chugoku Electric Power Group Integrated Report 2021 ···· OX  History of the Chugoku Electric Power Group ··· O4  Supply Chain Overview ··· O5  Value Creation Process ··· O5  Financial/Non-financial Highlights ··· O5
Top Commitments President Interview
Feature Chugoku Electric Power Group Carbon Neutral 2050
Business Activities  Comprehensive Energy Business (Power Generation, Sales, International) 25  Power Transmission and Distribution Business 36  Information and Telecommunications Business 35  Taking on the Challenge of New Business 4  Initiatives Aimed at Reinforcing Our Competitive Strengths 45
Fulfillment of Basic Responsibilities         ESG Management and Contributions to the SDGs       47         Environment       48         Social       64         Governance       77
Management Data         Financial/Non-financial (ESG) Data       87         Corporate Data       93         Group Companies       93         Stock Information       94

#### **Editorial Policy**

This report has been prepared in order to deepen understanding of the Group among shareholders, investors, and the Group's other myriad stakeholders. It gathers together financial and non-financial information, such as that pertaining to the Group's business activities and its ESG initiatives.

Although previously we have reported on the Group's initiatives and activities through our Annual Report, CSR Report (online), Environmental Report, and other means, since last year we have put all this information together as the Integrated Report. This year's Integrated Report is the second issue.

In future reports, we will work to provide even better contents, and endeavor to disclose information to all of our stakeholders in an easy-to-understand manner.

#### Reporting Period

April 1, 2020-March 31, 2021

(Information from outside the above period is also included)

#### Reporting Scope

The Chugoku Electric Power Co., Inc. and its group companies

#### **Published**

October 2021

#### Guidelines Referenced

- METI: Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation
- IIRC: International Integrated Reporting Framework
- GRI: GRI Standards
- FSB: Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)
- MOE: Environmental Reporting Guidelines (2018)

#### Caution Regarding Forward-looking Statements

The forward-looking statements contained in this report are based on currently available information and certain assumptions, and include risks and uncertainties. As such, due to various factors, actual results may differ greatly to those in this report.

- Note 1: The company's fiscal year begins on April 1 and ends on March 31 of the following year. FY2021 is used to denote the year ended March 31, 2021.
- Note 2: Throughout this report, "ton," or its abbreviation "t," refers to a metric ton, i.e. 1,000 kilograms.

# Publication of the Chugoku Electric Power Group Integrated Report 2021

Allow us to begin by extending our heartfelt gratitude for your continued support of our business activities.

As the social and economic impacts of the COVID-19 pandemic continue over the long term, and with the ever-intensifying competition in the electricity retail market, the legal separation of our transmission and distribution department, and global momentum toward decarbonization, the environment surrounding our electricity business and the Group as a whole is undergoing huge change.

To cope with these changes, last year we formulated ENERGIACHANGE 2030, our Group Corporate Vision for FY2031. Our work toward this goal is now approaching the second year, and so while thoroughly examining the management conditions in front of us, we will look to make adjustments accordingly and make steady progress with various measures.

In this year's integrated report, in addition to introducing initiatives aimed at achieving our Group Corporate Vision, we look in detail at Carbon Neutral 2050, a plan we formulated in February of this year. We have also sought to enhance our information disclosure based on TCFD recommendations. In this way, we provide a comprehensive overview of efforts aimed at enhancing the value of the Chugoku Electric Power Group.

In May of this year we reached our 70th founding anniversary. Using this momentous occasion as an opportunity, we will renew our mindset and look closely at what to carry on and what to change, and by creating beneficial value for society through our business activities, we hope to contribute to a sustainable society and regional development. Looking ahead, on top of communicating our value creation efforts in an easy to understand manner through this integrated report, we will utilize it as a means to communicate with our shareholders, investors, and other stakeholders, and move forward with initiatives to ensure the sustainable growth of the Group.





Mareshige Shimizu
Representative Director,
President & Chief Executive Officer

Tomohide Karita

Representative Director,

Chairperson of the Board

#### **History of the Chugoku Electric Power Group**

Since its establishment in 1951, the Chugoku Electric Group has provided a stable supply of electricity to support the foundations of people's lives and of industry, and while responding to the needs of the times, it has continued to grow alongside the Chugoku region.

1951

Establishment

In May 1951, it was decided that the state-owned electricity business would split into nine privately owned electric power companies that would take charge of power generation, transmission and distribution. Chugoku Haiden merged with the Chugoku Branch of the Japan Electric Generation and Transmission Company to form Chugoku Electric.



Head office at the time of establishment

**Building facilities** to cope with increasing demand

To cope with the increasing demand for electric power during Japan's period of rapid economic growth, in addition to switching its main generation method predominantly from hydro power to thermal power, Chugoku Electric began enhancing its electricity network facilities through the construction of power lines and substations.



Mizushima Power Station (thermal) (1961)



Chugoku-Higashi

1970s

Diversification of power sources

Due to power shortages caused by the oil crises, as well as the worsening of global environmental issues, we began to diversify our power sources through use of nuclear power, LNG-fired power plants, and large-scale coal-fired power plants.



Shimane Nuclear Power Station Unit 1 (1974) Misumi Power Station (thermal) (1998)



Liberalization of electricity retail market

As the partial liberalization of the electricity retail market in Japan began, Chugoku Electric sought to create services that would contribute to increased comfort and convenience for its customers, and enhance its price competitiveness. In addition, the company began developing a range of group businesses such as telecommunications and gas sales.



Customer equipment diagnostic service



Development of gas sales business

2010s and beyond

Electricity business

In addition to adapting to environmental changes brought about by the full liberalization of the electricity retail market and the legal separation of transmission and distribution departments, we are also engaged in initiatives aimed at a decarbonized society. As such, we are working together as a Group to tackle a variety of management issues.



Establishment of Chugoku Electric Power Transmission & Distribution Co., Inc. (2020)



Carbon Neutral 2050

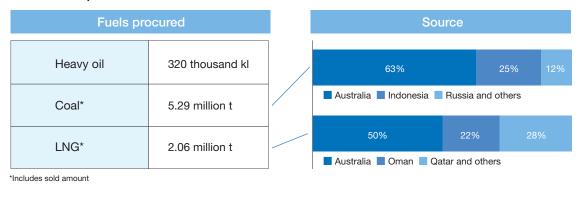
# **Supply Chain Overview**

# Fuel procurement

## Power generation

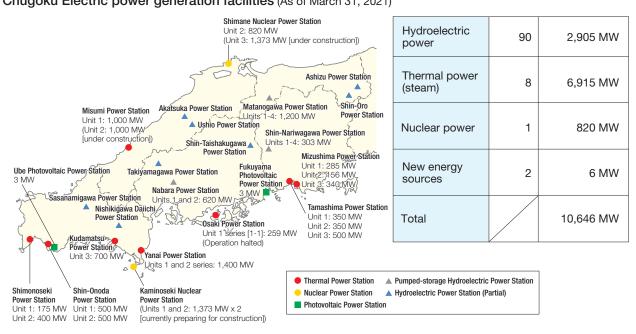
As consumption of thermal power fuels greatly fluctuates due to the suspension of nuclear power plants and increasing use of renewable energy, we undertake flexible procurement based on supply/demand and price trends, and thereby secure fuel supplies in an economical, stable manner.

#### FY2021 fuel procurement



To ensure a stable, inexpensive supply of electricity into the future, it will be necessary to balance a range of energy sources such as nuclear power, coal, LNG, and renewables. We are therefore working to build a composition of power sources that is first and foremost safe, but also one that is stable, economically efficient, and environmentally friendly.

#### Chugoku Electric power generation facilities (As of March 31, 2021)



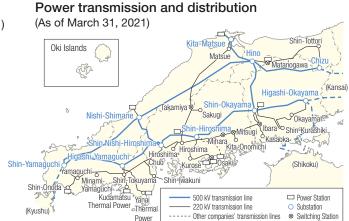
#### Transmission and distribution

#### Sales

To ensure the electricity generated at our power stations is provided to our customers in a stable manner, Chugoku Electric Power Transmission & Distribution maintains and operates transmission, transformation, and distribution facilities.

#### Transmission, transformation, and distribution facilities (As of March 31, 2021)

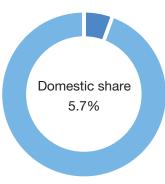
Transmission	Transmission	Overhead	8,046 km
nission	line length	Underground	665 km
Transformation	No. of substations	546	
rmation	Capacity	59.937	million kVA
Distribution	Distribution	Overhead	81,099 km
oution	line length	Underground	3,207 km



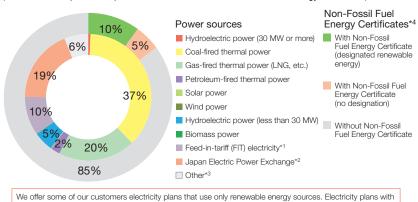
The Chugoku region forms the foundation of our business. To ensure that we continue to be chosen by customers in the region, we work as a Group to offer a range of high value-added services that cater to diverse energy-related needs, be it for the home or for industry.

#### Share of electricity sales (FY2021)

#### Composition of power sources and use of Non-Fossil Fuel Energy Certificates (FY2021) (Inner circle: composition of power sources; outer circle: Non-Fossil Fuel Energy Certificates)







non-specified power source compositions, as well as use of Non-Fossil Fuel Energy Certificates, are as above.

- \*1 Part of our electricity procurement costs are funded by a levy on all electricity users, including non-customers. As a result, CO2 emissions from FIT electricity is regarded as the national average of CO<sub>2</sub> 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.
- \*4 Transactions using Non-FIT Non-Fossil Fuel Energy Certificates began with power generated in April 2020. As such, in the same way as calculations based on the Act on Sophisticated Methods of Energy Supply Structures—which encourages energy providers to use non-fossil energy sources and make effective use of fossil energy materials calculations have been made by multiplying electricity sales by 9/12.

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; Final revision April 1, 2021).

#### **Value Creation Process**

About the Chugoku

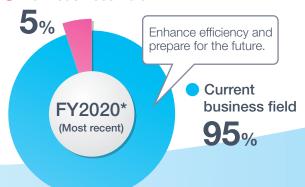
**Electric Power Group** 



# Changes to the Business Environment

- Greater competition after the full liberalization of retail electric power sales
- Segmentation of electric power value resulting from energy policies (creation of new markets)
- Decrease in demand due to factors such as shrinking population and proliferation of energy saving
- Increasing social demands, such as the SDGs
- Decarbonization trends
- Advancement of digital transformations

#### New business field



O Consolidated ordinary income: JPY 39.8 billion

\*The year we formulated our Group Corporate Vision

# **Corporate Vision**

**ENERGIACHANGE 2030** 

# **ENERGIA**CHANGE 2030

Corporate change for actualizing the "ENERGIA" Go beyond, Connect to, and Expand

#### **Mission**

Seek to realize the potential of energy Work toward expanding business fields Inspire employees through our culture

#### **Future Initiatives**

- I Strengthen and improve our existing businesses, with a focus on our energy business
- II Take on the challenge of new business for further growth
- III The further enhancement of work environments for diverse human resources

#### **Business Activities**

Comprehensive energy business (→P25)

Power transmission and distribution business (→P36)

Information and telecommunications business (>P39)

Taking on the challenge of new business (→P41)

Initiatives aimed at reinforcing our competitive strengths (→P43)

# Fulfillment of Basic Reponsibilities

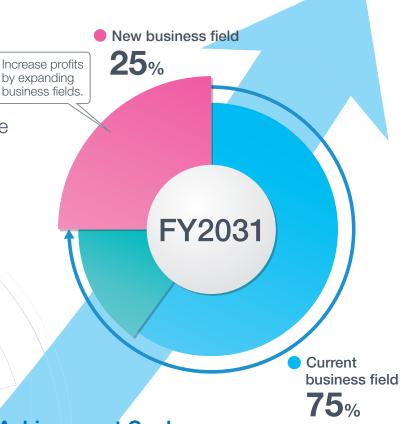
Environment (→P49)

Social (→P64)

Governance (→P77)

#### Carbon Neutral 2050

- Shifting gears as we aim to achieve a decarbonized society
- We proceed with the decarbonization of energy.
- We contribute to the development of local community through striving to be carbon neutral.
- We promote technological development for carbon neutral.



Increase profits by utilizing new power resources.

New business field 10%

FY2026

- Oconsolidated ordinary income: JPY 50 billion or more
- Oconsolidated equity ratio: 20%

# Energia Group Corporate Charter of Conduct (→P47)

## 10 Principles of Conduct

- Enhancement of communication with society
- Provision of products and services useful to society
- Contributions to local community development
- Promotion of environmental management
- Respect for human rights
- Assurance of industrial safety and health
- Formation of a vibrant corporate culture
- Promotion of compliance management
- Rigorous crisis management
- Enhancement of corporate governance

#### **Achievement Goals**

- Oconsolidated ordinary income: JPY 60 billion or more
- Consolidated equity ratio: 25%
  \*ROE (Return on Equity) will be approx. 5% when the profit in FY2031 is achieved.
- The new introduction amount of the renewable energy by FY2031: 300 MW-700 MW
- The further enhancement of work environments for diverse human resources

Current business field

90%

# Our Contribution to the Achievement of the SDGs

We selected four key issues for the Group to tackle in the years leading to 2030, taking reference from the UN's 17 Sustainable Development Goals.

These issues will be incorporated into our vision, which we will work toward as a matter of great importance.

#### Key Issues

Ensure a stable supply of energy











Mitigate climate change











Cooperate and co-create with local communities













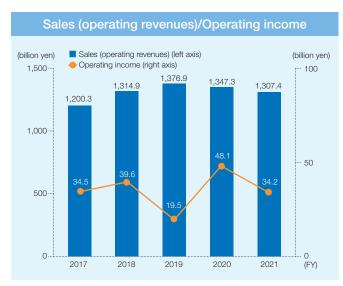
Promote active participation of workers

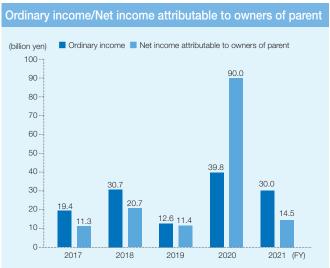


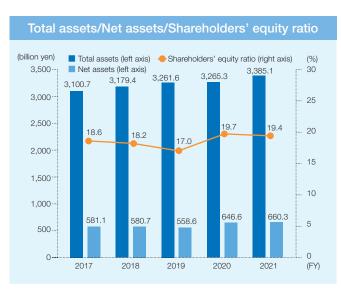


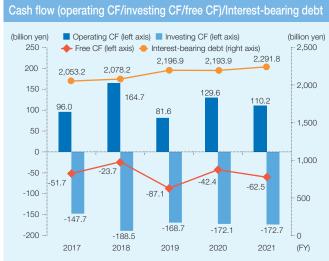


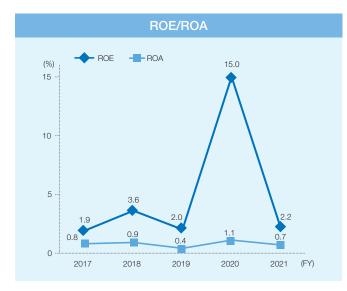
# Financial/Non-financial Highlights



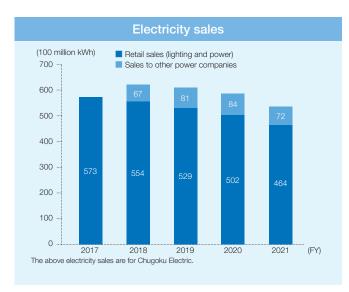


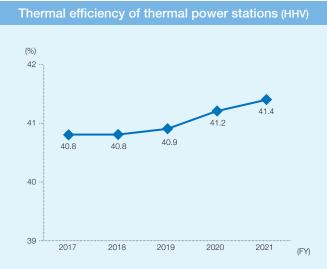


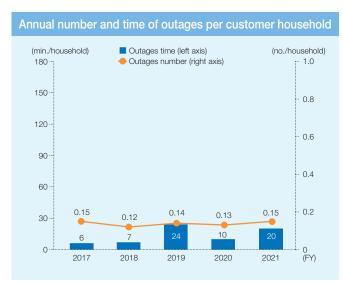


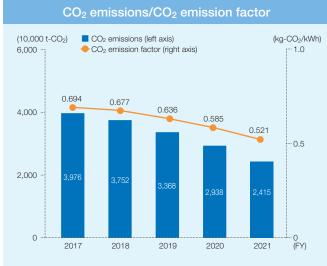


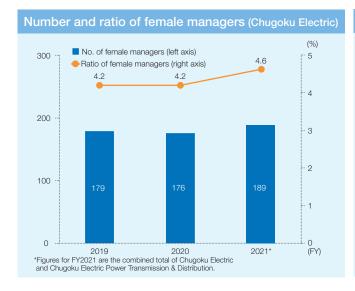


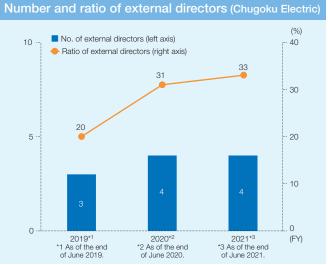














#### **Current Management Environment**

#### Reviews at Shimane Nuclear Power Station

In September of this year, we were granted a license from the Nuclear Regulation Authority to change our reactor installation at Shimane Unit 2. The Nuclear Regulation Authority concluded that our basic policies on safety measures and our basic designs conformed with the new regulatory requirements, and we see this as a huge turning point in our efforts to restart the plant.

Reviews at Shimane Unit 2 have continued for approximately eight years. Looking ahead, we will continue to sincerely respond to reviews as we seek approval for our design and construction plans, and our operational safety programs.

Gaining the trust and understanding of local communities, we believe, is of the utmost importance in the operation of our nuclear power plants. And so, while ensuring sustained efforts to further improve their safety, we will carefully communicate our efforts to our localities.

#### **Increasing Momentum Toward Decarbonization**

In line with global trends aimed at decarbonization, in October of last year the Japanese government announced its plans to become carbon neutral by 2050. In response, efforts by corporations and local governments to achieve decarbonization are accelerating. For example, the number of corporations disclosing climate change-related management strategies to cater to TCFD recommendations, those declaring their participation in the RE100 initiative—a group of companies committed to using only renewable energy in their business activities—and the number of local governments announcing their intention to become zero-carbon cities is rapidly increasing. Further, in April of this year, the government used a backcasting approach in its plans to become carbon neutral by 2050, announcing a highly ambitious target of reducing GHG emissions in FY2031 by 46% compared to FY2014.

At the Chugoku Electric Power Group, we will make maximum efforts on both the supply and demand sides to play our part in achieving this ambitious target. Specifically, we will work toward decarbonization on the supply side, and further examine energy-saving approaches on the demand side, and promote electrification.

#### Chugoku Electric Power Group Carbon Neutral 2050

At the Chugoku Electric Power Group, alongside efforts to develop renewable energy, we have worked to develop and introduce technologies that help to reduce the environmental impact of thermal power plants. We have conducted demonstrations through the Osaki CoolGen Project to separate and capture CO<sub>2</sub>, and as a commercial power generator conducted Japan's first demonstrations of mixed ammonia combustion.

We have also engaged in efforts to mitigate climate change, which we have identified as a key issue in our Group Corporate Vision. Based on changes in domestic and international trends, however, in February of this year we announced our Carbon Neutral 2050 initiatives to further promote groupwide activity. Activity aimed at the year 2030 is a key step toward our ultimate goals in 2050. In this regard, we will promote maximum

introduction of renewable energy, operate our nuclear power plants with safety as a top priority, and work to fade-out our inefficient coal-fired thermal power plants. Elsewhere, we will continue to develop decarbonization technologies through demonstrations at the Osaki CoolGen Project, and utilize ammonia and hydrogen power. To drive initiatives such as these on the supply side, we have created a new role for a Carbon Neutral Promotion Group within the Power Generation Division. Today, even companies outside the energy industry are actively engaged in various decarbonization initiatives, and at the Chugoku Electric Power Group, we too will pour all our efforts into ensuring a decarbonized future.

We understand that customers' awareness and requirements are undergoing huge transformation. Seeing these changes as a business opportunity, we have established a dedicated department within the Energy Sales Division to develop new services. Among others, the department will work to develop new electricity rate plans that use renewable energy and develop solar power PPA services.

Through the above initiatives, by FY2031 we hope to cut  $CO_2$  emissions from our electricity retail business by half compared to FY2014.

#### Group Corporate Vision—ENERGIACHANGE 2030

#### State of Progress

In FY2021, the first year of our Group Corporate Vision, our consolidated financial results were severe, showing a decrease in both income and profit. This was in part caused by a drop in electricity sales brought about by intensifying competition among electricity retailers, and stagnant production activities in the first half of the year caused by the COVID-19 pandemic. Elsewhere, rising fuel and electricity procurement costs caused by tight supply-demand conditions in winter also contributed to these unfavorable results.

Unfortunately, these adverse conditions remain as we approach the second year of working toward our vision. In FY2022, time lags between rises in fuel prices and our fuel cost adjustment



system reactions are expected to lead to further losses, while expenses related to supply-demand adjustments are also set to rise. As such, this year too we foresee a drop in profit.

In addition, we expect electricity business systems to undergo reform in order to further reinforce electricity competition. For these and other reasons, profitability in the electricity business, which is a key business for the Group, is becoming increasingly uncertain.

In this period of great change, to achieve the targets for FY2031 outlined in our Group Corporate Vision, we must return to profitability as soon as possible. In addition to strengthening the competitiveness of our power sources through steady operations at Misumi Unit 2 and Shimane Units 2 and 3, we will work toward thorough cost reductions, and utilize our wisdom and ingenuity to improve profitability.

#### **Toward Further Growth**

At the Chugoku Electric Power Group, not only do we believe that renewable energy is a solution to global environmental issues, we also see it as a growth area. In our Group Corporate Vision, we have therefore set ourselves the target of newly introducing 300–700 MW of renewable energy by FY2031 (compared to FY2020). By the mid 2020s, we expect to have introduced around 300 MW of renewable energy, and we are also proactively moving forward with the development of offshore wind power, which we believe has particular potential for huge growth.

# ENERGIACHANGE 2030

Corporate change for actualizing the "ENERGIA"

# Go beyond, Connect to, and Expand

#### Mission

# Seek to realize the potential of energy

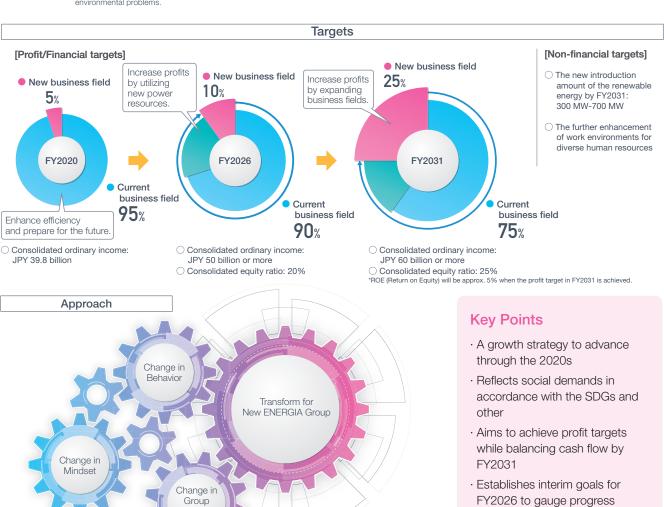
We will utilize our group's technology and experience to achieve a stable supply of electricity and to contribute to solving global environmental problems.

# Work toward expanding business fields

We will find opportunities from a diversifying society and try to expand business fields.

# Inspire employees through our culture

We aim to be an attractive corporate group by inspiring our diverse human resources through an ever-changing culture.



**Management** 

Moreover, without limiting ourselves to specific business fields or regions, we will continue working to generate new growth areas in a wide range of business domains.

Overseas, while we have previously focused on developing our power generation business, moving ahead we plan to engage in a comprehensive range of electricity businesses. Last fiscal year, we invested in a Fijian power company engaged in power generation, transmission and distribution, and retail. Through overseas initiatives like the above, we will look to acquire a range of expertise and knowhow, and link our findings to new energy businesses both in Japan and abroad.

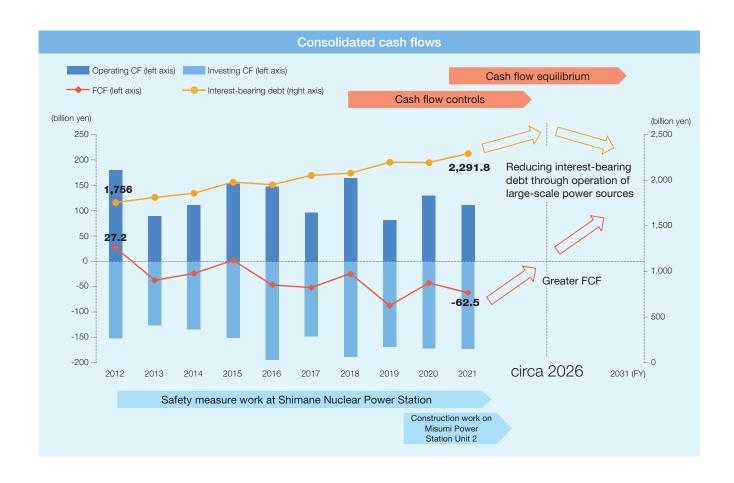
In our domestic businesses, aiming to create a new future for our regions and a new future for electricity, we are investing in startups at our Energia Creative Lab, and last fiscal year, we invested in six different projects. In addition to continued investment in promising companies, we will introduce our investments to our communities and provide them with new services, and by offering solutions to social and industrial issues, we will work to contribute to our local regions. Moreover, to further sophisticate and diversify our services, we will look to expand into collaborations with our investees, for example by working with predominantly energy-related startups to develop new services. As part of our R&D strategy, we have set ourselves three strategic areas of innovation: innovation in electricity systems

using digital technology, innovation in energy and environmental technology for lower carbon emissions, and creation of new services integrated with regional communities and other industries. We are currently accelerating efforts in this area.

#### Use of Cash

Regarding our distribution of cash, we will seek to ensure well-balanced cash flow in the ten years leading up to FY2031, and invest in new and existing domains while balancing these investments with shareholder returns.

Due to negative financial results brought about by impacts from the COVID-19 pandemic, while we are concentrating our investments on large-scale power sources—such as safety work at Shimane Units 2 and 3 and the construction of Misumi Unit 2—operating cash flow decreased more than initially expected. In response, we will strive to minimize outgoing cashflow through groupwide efforts to enhance efficiency, and at the same time, work to secure cash by developing new high value-added services that can put an end to declining electricity sales. Meanwhile, to enhance our profitability over the medium to long term, we must continue investing in growth fields. And so, following thorough, advance examinations of business risks and profitability, we will proactively invest in projects that meet our criteria for potential levels of profitability.



#### Shareholder Returns

Regarding shareholder returns, while focusing on stable dividends, we will take into account not only fiscal year results, but a comprehensive range of medium- to long-term factors, too.

Based on this approach, we will continue to discuss shareholder returns based on the Group's financial structure and growth in line with our Group Corporate Vision.

#### Together with Our Stakeholders

#### Upon Chugoku Electric's 70th Anniversary

In May of this year we reached our 70th anniversary, a major turning point for the company. Since our establishment in 1951, the fact that we have been able to fulfill our mission of ensuring a stable supply of electricity over the long term is testament to the warm trust and support of our stakeholders. We cannot thank you enough.

In the ten years following the Great East Japan Earthquake, numerous questions have been asked of electricity businesses. There have been calls for heightened safety at nuclear power plants, reformed electricity systems, and the acceleration of the spread of renewable energy. It has been a period to reaffirm the importance of S + 3E (Safety + Energy Security, Economic Efficiency and Environment).

As we move into a new stage, we will continue to pursue our mission as an electricity provider through our business activities, and seek growth through the creation of social value. This determination has been embodied in our 70th anniversary slogan—A New Future is Just Beginning.

#### Go Beyond, Connect to, and Expand

The COVID-19 pandemic has instantaneously diversified workstyles, which had already been progressing alongside digitalization, and society itself has seen major change.

To advance through this period of great change and create a new future for the Group, we must ascertain the needs of our stakeholders and respond to their expectations.

Symbolizing the course of action for Group growth, "Go Beyond, Connect to, and Expand" is the slogan we have set for our Group Corporate Vision. We hope that each employee can shake off any existing concepts in their respective roles, and go beyond the frameworks of electricity to freely come up with new ideas. We hope to connect with a range of people, regions, and corporations, and link them to our range of products and services to create new value. Finally, we hope that these activities will further expand the possibilities for growth.

Both our management environment and society are transforming at an unimaginable pace. With the above slogan at the forefront of our minds, we must quickly pick up on new requirements that arise from this change, and believe that a new future will open up through our solutions. I hope to proceed through the next ten years while utilizing the diverse mindsets of our each and every

one of our employees.

To all our stakeholders, we look forward to your continued support as we go about our business activities.



Feature Carbon Neutral Initiatives and Information Disclosure Based on TCFD Recommendations

# **Chugoku Electric Power Group Carbon Neutral 2050**

# -Shifting gears as we aim to achieve a decarbonized society

In February 2021, the Chugoku Electric Power Group announced that it would work toward becoming carbon neutral by the year 2050.

To respond to the expectations of our stakeholders, at the Chugoku Electric Power Group we are currently engaged in efforts to reduce our environmental impact based on the S + 3E policy (Safety + Energy Security, Economic Efficiency, Environment). Elsewhere, we are working to mitigate climate change, which is a key issue in our Group Corporate Vision.

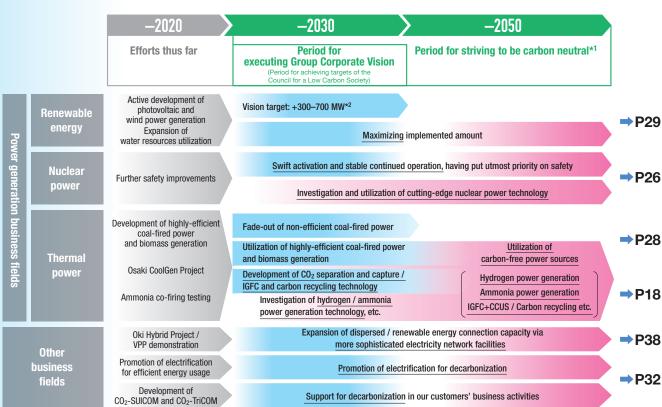
As Japan makes moves toward becoming carbon neutral by the year 2050, we will work together as a Group toward the same goal, and in turn endeavor to achieve sustainability for our future society.

Further, as a business with firm roots in the Chugoku region, we will collaborate with our communities to achieve carbon neutrality in local areas.

#### **Targets**

## We will strive to be carbon neutral by 2050

- We proceed with the decarbonization of energy.
- We contribute to the development of local community through striving to be carbon neutral.
- We promote technological development for carbon neutral.
- We proceed with the decarbonization of energy.
- O As we aim to become carbon neutral by 2050, we will actively make use of decarbonized power sources, including renewable energy, and drive the decarbonization of our energy business.
- We contribute to the development of local community through striving to be carbon neutral.
- O Carbon neutrality by 2050 is a common goal for the whole of society. We will thus engage in various initiatives with local governments and businesses in the Chugoku region.
- O Through our efforts to become carbon neutral, in addition to providing services in diverse sectors, such as energy supply/use and information and telecommunications, we will collaborate with local governments and businesses who are engaged in their own efforts to contribute to regional development.
- We promote technological development for carbon neutral.
- O Innovative technological development will be essential in achieving carbon neutrality.
- O To date, we have pioneered the adoption of new technologies to help solve environmental issues and other social problems. Looking ahead, we will work not only as a Group, but look to collaborate with different industries and sectors through corporate alliances, joint research with universities, and more.



- \*1 We will sequentially utilize those items deemed to be commercially feasible based on cost reductions and the progress of technology development and the like. We will utilize carbon offset technology and the like for the CO<sub>2</sub> emitted from power stations as of 2050. 
  \*2 Aiming to achieve this through efforts throughout the Group both in Japan and overseas.

#### Renewable Energy

- Among other efforts, through development of bottom-mounted offshore wind power and the acquisition and replacement of mega solar power plants after the feed-in-tariff scheme ends, we will aim to newly introduce 300-700 MW of renewable energy by 2030, which is one of the targets set out in our vision. We will also make efforts to introduce extra amounts of renewable energy.
- Furthermore, in anticipation of 2050, we are engaged in efforts to introduce floating offshore wind power. Technological development is currently underway on floating offshore wind power, which is thought to have higher potential than bottom-mounted offshore wind power.
- The Chugoku Electric Power Group's pumped storage hydroelectric power plants have a higher generation capacity than those of other companies. Using this characteristic, we will use surplus power from renewable energy sources to operate these pumped storage hydroelectric power plants, and in turn further increase the amount of renewable energy used.

#### Nuclear Power

- Nuclear power is an already practical option that can drive decarbonization. With safety as our foremost priority, we will focus our efforts on early launch and continued, stable operation.
- Working toward carbon neutrality in 2050, we will undertake development on our new location in Kaminoseki.

#### Thermal Power

Alongside launching operations at the state-of-the-art Unit 2 of our Misumi Power Station, we will look to start operations at Units 2 and 3 at our Shimane Nuclear Power Station, and gradually shut down our

- aging thermal power plants. On the operational side, we will proactively work to reduce CO<sub>2</sub> through mixed-fuel combustion using biomass and other means. Elsewhere, through demonstrations as part of the Osaki CoolGen Project, we will steadily undertake technological development for an IGFC with CO<sub>2</sub> separation and capture functions, as well as carbon recycling technologies.
- Ahead of 2050, in addition to hydrogen and ammonia power, we will look to combine carbon capture, utilization, and storage (CCUS) technologies with carbon recycling technologies, and make maximum efforts to mobilize all of our technological options.
- Elsewhere, as part of our efforts to create zero-emission thermal power, in principle, other than projects which have already commenced, we will refrain from new development of conventional coal-fired thermal power plants.

#### Other Business Fields

- In anticipation of further implementation of renewable energy, we will work to enhance our electricity network facilities, as well as the introduction of mechanisms that make effective use of existing
- Through a range of different activities, we will aim to further promote electrification, which has been positioned by the government as a promising means of decarbonization. These include our all-electric home recommendations, our partnerships with car manufacturers to popularize electric vehicles, and our proposals to upgrade to high-efficiency electric equipment.
- Through new services that use renewable energy, such as zero-CO<sub>2</sub> emission electricity plans and power purchase agreements for solar power self-consumption, we will support customers' efforts aimed at decarbonization.

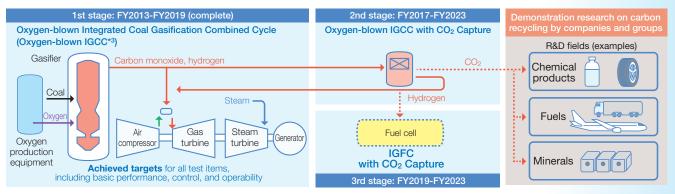
# Main Initiatives Aimed at Carbon Neutrality

#### Promotion of the Osaki CoolGen Project

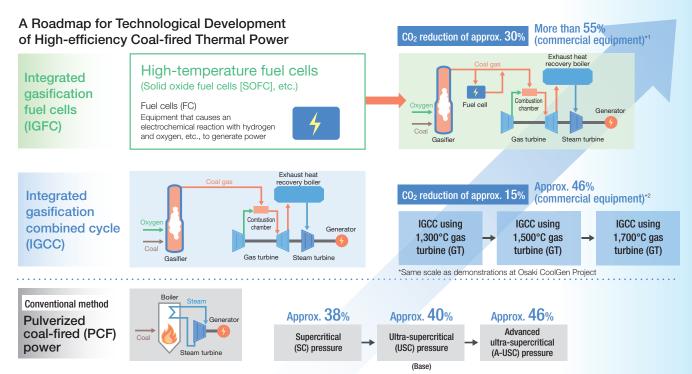
Through Osaki CoolGen Corporation, established jointly with Electric Power Development Co., Ltd., we are conducting demonstration tests to realize innovative low-carbon coal-fired thermal power combining an integrated coal gasification fuel cell combined cycle (IGFC\*1) with CO2 separation and capture.

Compared to conventional ultra-supercritical coal-fired thermal power plants, this power generation technology drastically improves power generation efficiency, and can reduce CO2 emission volumes by approximately 30% from the moment of application. Further, as the technology can efficiently separate and capture CO<sub>2</sub> from the fuel gas prior to combustion, it can contribute to huge CO<sub>2</sub> reductions when combined with CCUS and carbon recycling technologies.\*2 As a result, it is predicted to become an excellent option for achieving carbon neutrality.

Also, the Ministry of Economy, Trade and Industry (METI) has designated Osakikamijima in Hiroshima Prefecture as a base for demonstrations and research on carbon recycling, and Osaki CoolGen Corporation is planning to supply the separated and captured CO2 to companies and groups conducting research on carbon recycling. As part of this initiative, we will undertake two R&D projects on carbon recycling: R&D on concrete that makes effective use of CO<sub>2</sub>, and development of a gas-to-lipid bioprocess.



\*1 Technology that combines fuel cells (FC) with IGCC to further improve generating efficiency. \*2 Technologies to utilize separated and captured CO<sub>2</sub> and store it underground, etc. \*3 Technology whereby oxygen is used to gasify coal, yielding a product gas with H<sub>2</sub> and CO as its main constituents, which is used to drive gas turbines alongside steam turbines in combined cycle generation.



Figures represent power generation efficiency (Power transmission end/Higher heating value [HHV] standard)

\*1 Approx. 67% for power generation end \*2 Approx. 53% for power generation end
Created based on the Technology Source Document, Next-generation Thermal Power Road Map, Ministry of Economy, Trade and Industry

#### Experimental Research on Carbon Recycling (1) — R&D on concrete that makes effective use of CO<sub>2</sub> (CO<sub>2</sub>-SUICOM)

In tandem with Kajima Corporation and Denka Company Limited, at Chugoku Electric we have developed an environmentally friendly concrete, CO<sub>2</sub>-SUICOM.

CO<sub>2</sub>-SUICOM makes use of a special admixture (composed of slaked lime, an industrial waste product), coal ash, and other materials to reduce the amount of cement used. In addition, CO<sub>2</sub>-SUICOM can absorb and solidify CO<sub>2</sub> during the manufacturing stage to drastically reduce CO<sub>2</sub> emissions. In absorbing the maximum amount of CO<sub>2</sub>, CO<sub>2</sub>-SUICOM can lower actual CO<sub>2</sub> emissions derived from the materials to below zero. While CO<sub>2</sub>-SUICOM is already being used for blocks and other factory-produced concrete products, challenges remain in using CO<sub>2</sub>-SUICOM for reinforced concrete and concrete placement work at construction sites.

In anticipation of CO<sub>2</sub>-SUICOM's further use in construction materials, in 2020, Chugoku Electric, Kajima Corporation, and Mitsubishi Corporation were commissioned by the New Energy and Industrial Technology Development Organization (NEDO) and are now conducting joint research and development.

- Winner of the Chairperson's Award (Excellence Award) at the 13th Eco-Products Awards (received in FY2017)
- Winner of the FY2014 Environment Minister's Award for Global Warming Prevention Activities

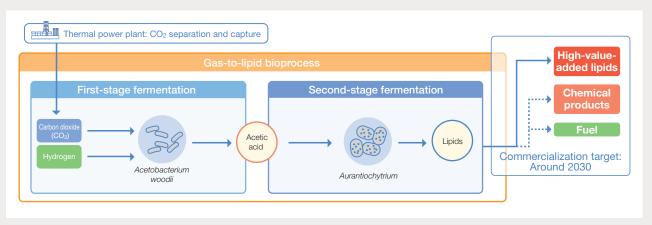


#### Experimental Research on Carbon Recycling (2) — Development of a gas-to-lipid bioprocess

Having been commissioned by NEDO in 2020, we are currently working with Hiroshima University to develop a bioprocess for  $CO_2$  recycling. Taking advantage of the fermentation functions of two microorganisms, the aim is to develop a technology that can use the hydrogen and  $CO_2$  emitted from thermal power plants to produce high-value-added lipids for the manufacture of cosmetics and health products.

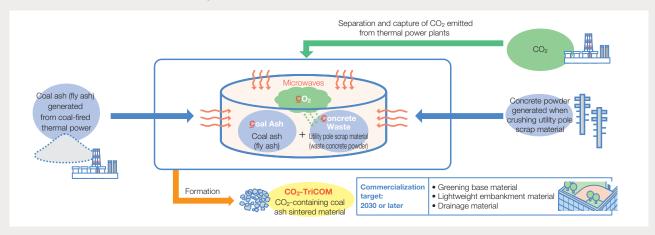
**Formation process** (1) Acetic acid-producing bacteria are fermented to reduce and solidify CO<sub>2</sub> using hydrogen in order to generate acetic acid.

(2) Oleaginous microorganisms are then fermented to generate lipids from the acetic acid in (1).



#### Experimental Research on Carbon Recycling (3) — Development of "Triple C" recycling technology (CO<sub>2</sub>-TriCOM)

Commissioned by NEDO in 2020, we are currently working alongside Hiroshima University and our group company Chugoku Koatsu Concrete Industries Co., Ltd. to develop a "Triple C" recycling technology ( $CO_2$ -TriCOM) to reuse  $CO_2$ , coal ash and other materials for civil engineering.  $CO_2$ -TriCOM is a technology that mixes  $CO_2$ , coal ash and scrap materials from utility poles (a by-product of our electricity business). The mixture is sintered using microwaves, and  $CO_2$  is solidified into the sintered material in the process. This revolutionary carbon recycling technology incorporates  $CO_2$  into waste material to generate an entirely new product. We hope to establish the technology in 2–3 years' time, and are currently working to ensure its early implementation.



#### Examination of Hydrogen and Ammonia Power Generation Technologies

As the country works toward becoming carbon neutral by 2050, hydrogen and ammonia have been attracting attention as fuel sources that do not emit CO<sub>2</sub> when combusted.

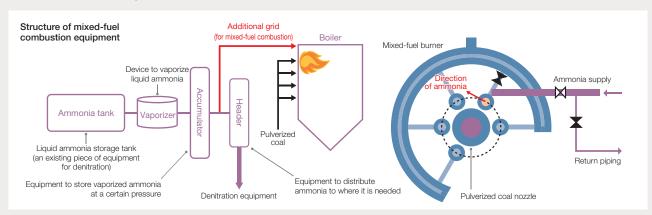
At Chugoku Electric, we will also examine various power generation technologies as we aim to utilize hydrogen and ammonia in our coal-fired thermal power systems and LNG-combined-cycle generation systems.

#### Trials of Ammonia Mixed-fuel Combustion at the Mizushima Power Station

In July 2017, we undertook trials of ammonia mixed-fuel combustion at the coal-fired Unit 2 of our Mizushima Power Station—the first trials in Japan for a business-use power plant. (Mixed-fuel combustion rate: Approx. 0.6% at 155 MW operation; approx. 0.8% at 120 MW operation)

In the mixed-fuel combustion burner, ammonia nozzles were positioned around the circumference of a central pulverized coal nozzle, with the ammonia released in a circular motion. This ensured that the ammonia flames created a spiral shape around the pulverized coal flame, extending the range of combustion, facilitating a longer combustion time, and in turn preventing incomplete combustion.

In addition to verifying the complete combustion of ammonia, we also confirmed that mixed-fuel combustion had no adverse impacts on other existing plants. It was also found that there were no significant differences in nitrogen compound levels compared to coal-fired combustion, thus confirming that ammonia mixed-fuel combustion can be undertaken within environmental standard values.



In line with the creation of international climate change frameworks, increased ESG investment, and other domestic and global trends, in June 2019 we signed on in agreement to the Recommendation of the Task Force on Climate-related Financial Disclosures,\*1 and are working to further enhance our disclosure of information related to climate change.

\*1 The TCFD was set up by the Financial Stability Board (FSB) with the aim of developing methods for voluntary, uniform disclosure of climate-related financial information. TCFD recommendations provide frameworks for disclosure of information related to climate-related risks and opportunities.

#### Governance

At Chugoku Electric, the president bears ultimate responsibility for environmental management, while the head of the Regional Relations Division acts as the companywide environmental management leader. The Companywide Environmental Committee, which is chaired by the companywide environmental management leader, is held in principle twice a year, and is tasked with discussing policies and plans related to climate change and other environmental issues, as well as key matters regarding our environmental initiatives. Levels of implementation and other matters are reported to the president.

The Board of Directors, meanwhile, receives twice yearly reports from the president regarding the levels of implementation and other matters pertaining to the Chugoku Electric Power Group Environmental Action Plan, and oversees execution of environmental management operations.

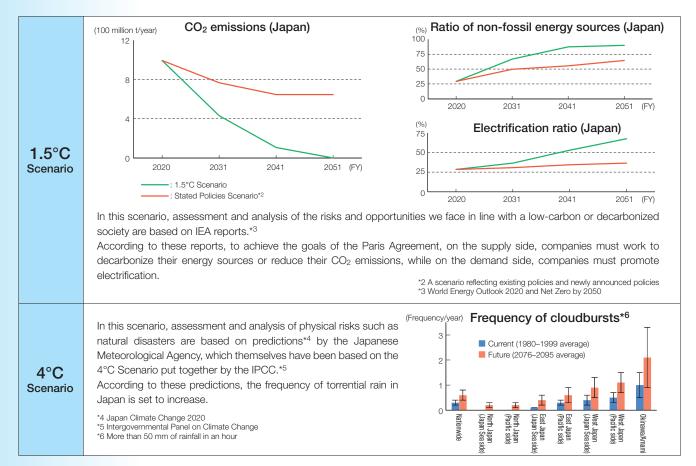
Environmental Management Promotion Organization: See p. 50

#### Strategy

#### **Setting Climate Change-related Scenarios**

At Chugoku Electric, assessing the risks and opportunities associated with climate change, we have set a 1.5°C Scenario (Net Zero by 2050 Scenario) and a 4°C Scenario based on data published by the International Energy Agency (IEA) and other organizations.

In line with Chugoku Electric Power Group Carbon Neutral 2050, we have set the years 2030 (medium term) and 2050 (long term) as terms for scenario analysis.



By setting certain assumptions, these analyses are for the purpose of examining long-term events and countermeasures. They are not intended to predict results.



#### Climate Change Risks and Opportunities

Based on the scenarios outlined on the previous page, we recognize climate change risks and opportunities as seen in the table below.

Considering the development of renewable energy and safety assurance as being of the utmost importance, we are working toward the early start and stable operation of our nuclear power plants, and proactively utilizing high-efficiency coal-fired thermal power and biomass power. Elsewhere, we are also working toward utilizing hydrogen, ammonia, IGFC+CCUS/carbon recycling, and other decarbonized power sources. And so, in addition to climate change response, we are working to build a balanced mix of power sources that can respond to risks other than those brought about by climate change, by considering safety, long-term energy security, and economic efficiency.

We will also proactively promote electrification as a means to achieve decarbonization.

As we move forward with the above initiatives, in line with the uncertainties and risks that accompany technological development, we are creating multiple scenarios that are not limited to any single initiative, and at the same time making progress with our Carbon Neutral 2050 roadmap.

Chugoku Electric Power Group Carbon Neutral 2050: See p. 16

	Changes in business environment			Cyclin violes and apportunities	Major impact on	Timeline								
(	Jilai	iges in busi	ness environment	Group risks and opportunities	business*1	Medium term	Long term							
	Policies  Policies  Policies  Tightening of GHG emission regulations (Act on Rationalizing Energy Use, Act on Sophisticated Methods of Energy Supply Structures, carbon pricing, etc.)  Reputation/market  Technologies  Rapid adoption of renewable energy due to technological advancements  Fromotion of non-fossil fuel energy sources Promotion of low-carbon/decarbonized power sources  Market  Promotion of electrification for decarbonization  Support for decarbonization  Support for decarbonization in our customers' business activities	Policies	(Act on Rationalizing Energy Use, Act on Sophisticated Methods of Energy Supply		0	0	$\circ$							
				Potential impact on market share and fund procurement if our decarbonization initiatives are deemed insufficient and our reputation for reliability and corporate image suffers		0	$\circ$							
		Technologies		◆ Increase in grid countermeasure costs	0	0	$\circ$							
1.5°C Scenario		Proactive adoption of hydro, solar, and wind power	0	0	0									
			Promotion of low-carbon/decarbonized	◆ Use of nuclear power with safety as top priority ② ◆ Examination and utilization of advanced nuclear power technologies	0	0	0							
				Utilization of high-efficiency coal-fired thermal power and biomass power     Utilization of carbon-free power sources     (IGFC+CCUS/Carbon recycling, etc.)	0	0	$\circ$							
		Š	Ö	S	S S	0,	0,				◆ Promotion of electrification, DR*2, solar power PPA*3, etc.	0	0	0
		Market S		◆ Development of carbon recycling technologies (CO₂-TriCOM, CO₂-SUICOM, Gas-to-Lipids)*4		0	$\bigcirc$							
4°C Scenario	Physical ris	Acute	Increasing natural disasters (typhoons, torrential rain, etc.) and changes in rainfall volume		0	0	0							
	Rising average temperatures			◆ Adverse impact on business activities			0							

#### Main Financial Impacts of Climate Change-related Risks and Opportunities

1 Tightened CO<sub>2</sub> emission regulations

Cost increase if we were to purchase 100 million kWh of Non-Fossil Fuel Energy Certificates

130 million yen

Use of nuclear power with safety as top priority

Reduction in raw material costs in line with the relaunch of Shimane Unit 2 (figures from FY2021)

> 500 million yen/1% utilization rate

3 Increase in natural disasters

Damage costs (Impact of the heavy rainfall disaster in July 2018)

3.7 billion yen

4 Changes in rainfall volume

Financial impact on raw materials due to decreasing water flow rates (figures from FY2021)

> 200 million yen/1% water flow rate

<sup>\*1</sup> In addition to evaluating current impact on our business, considerations have also been made based on priority initiatives.

Note that these impact evaluations are not final, and may fluctuate based on external environmental changes such new national policies and energy circumstances.

<sup>\*2</sup> Demand response. A mechanism whereby holders of users' energy resources or third parties control these resources to change power demand patterns.

\*3 Power purchase agreement. A scheme whereby a solar power business installs power generation facilities onto users' roofs or on their grounds. The user then purchases the power generated from the solar power business.

\*4 Technologies that solidify CO<sub>2</sub> so it can be reused in civil engineering materials and concrete (CO<sub>2</sub>-TriCOM and CO<sub>2</sub>-SUICOM) and a technology that uses a bioprocess to generate

high-value-added lipids from CO<sub>2</sub> (Gas-to-Lipids).



#### Risk Management

With a focus on frequency of occurrence and impact on our overall operations, every year, for each division, we identify and assess risks related to climate change and their main line of business, examine preventative and post-risk countermeasures, and reflect the results into our management plans. In this way, we ensure continuous risk management.

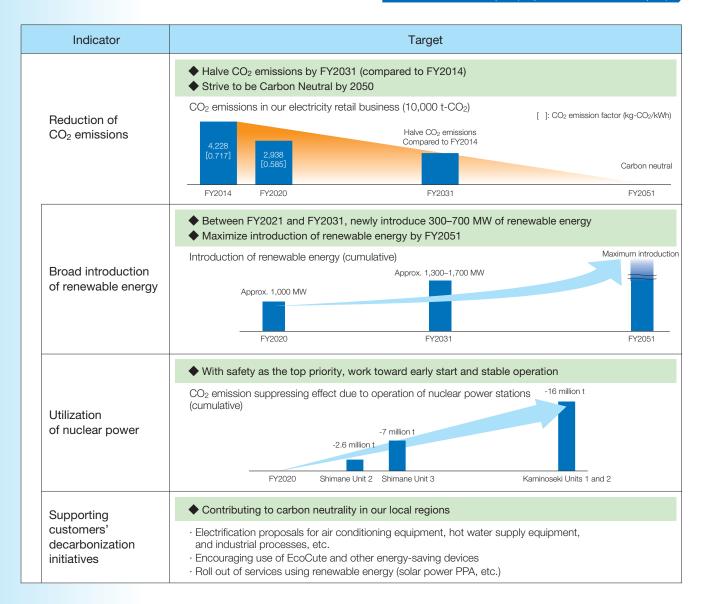
We have also set up a dedicated organization to oversee companywide risk management. In addition to ascertaining risk management conditions in each division, the organization submits information to the Management Committee on companywide risk management conditions, as well as risks which require priority investment of management resources, and reports to the Board of Directors. Among these risks, the organization manages and responds to climate-related risks as those that should be dealt with by management. Information on these risks is outlined in Securities Reports.

Risk Management: See p. 81

#### Indicators and Targets

Through efforts aimed at carbon neutrality, at the Chugoku Electric Power Group we are working to build a sustainable future society. Further, as a business with foundations in the Chugoku region, we will cooperate with individuals in the region to contribute to carbon neutrality in our localities. In response to the risks and opportunities presented by climate change, to reduce CO<sub>2</sub> emissions, we understand that it is essential to, on the supply side, work to decarbonize our energy sources, and on the demand side, promote electrification. As such, we have set the following indicators and targets.

CO<sub>2</sub> Emissions Record: See p. 54 (Scope 1, 2 and 3 emissions: See p. 90)





Business Activities
Performance



**Power** Generation **Business** 

The environment surrounding our power generation business continues to see great change—we are seeing the creation of new markets for trading electricity, and efforts aimed at a decarbonized society are gaining momentum in line with the government's pledge to become carbon neutral by 2050. As a Group, we are working 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.

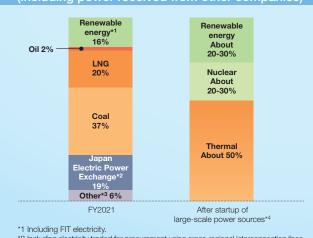
Nuclear power generation is a key element in addressing global warming, and in this area, we are working to resume operation of Unit 2, and begin operation of Unit 3, at the Shimane Nuclear Power Station, provided that we have ensured its safety. We are also developing the Kaminoseki Nuclear Power Station as a vital power source for the future.

In addition, we are building the Misumi Power Station Unit 2 as a replacement for existing thermal power stations, and working to improve efficiency and reduce carbon emissions of coal-fired thermal power generation through our Osaki CoolGen Project.

Furthermore, we are actively working to achieve the targets outlined in our Group Corporate Vision to newly introduce renewable energy.

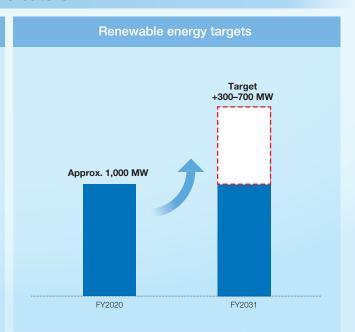
#### **Main Indicators**





- \*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



#### Development of a Balanced Mix of Power Sources

Vision Strengthen and improve our existing businesses, with a focus on our energy business

Taking safety as our highest priority, we will strive for a balanced mix of power sources while taking into account long-term energy security, global warming, and economic and other factors.

#### Nuclear

Early start and stable operation of Shimane Units 2 and 3, provided we have ensured safety

Decommissioning of Shimane Unit 1, and development of the Kaminoseki Nuclear Power Station as a vital power source for the future

#### Thermal

Replacement of aging thermal power facilities following commencement of Misumi Unit 2 and Shimane Units 2 and 3

Efforts to improve efficiency and achieve lower carbon emissions through technology development and introduction of cutting-edge technology

#### Renewable energy

Increased proportion of renewable energy to improve environmental-friendliness, etc.

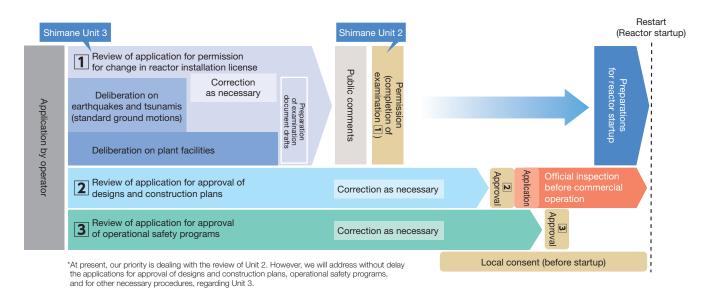
Effective utilization of hydroelectric power through replacement of aging facilities

#### Further Improvement of Safety of Nuclear Power Stations

Vision Strengthen and improve our existing businesses, with a focus on our energy business

#### Response to conformity reviews for new regulatory requirements

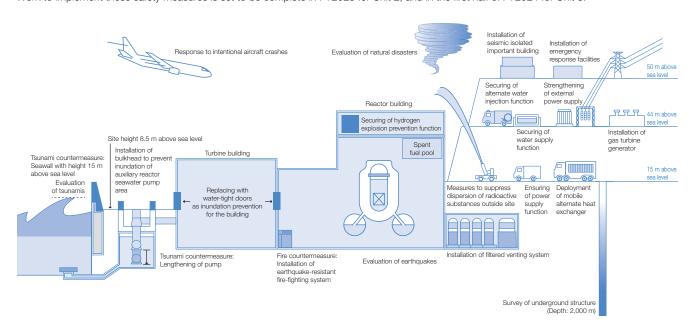
In September 2021, Unit 2 of our Shimane Nuclear Power Station received permission from the Nuclear Regulation Authority to change its reactor installation license. Ahead of its restart, we will continue to seek approval for our designs, construction plans, and operational safety applications, as well as provide thorough explanations as to the nature of our measures to gain the understanding of our local communities. We will also respond to conformity reviews on Unit 3 without delay.



#### Main initiatives to ensure the safety of 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.

Work to implement these safety measures is set to be complete in FY2023 for Unit 2, and in the first half of FY2024 for Unit 3.



#### 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.





Alternative water injection drill

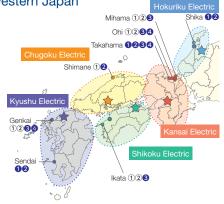


Contamination inspection training

#### Formation of a mutual cooperation system by five power companies in western Japan

In addition to cooperative efforts during nuclear disasters by all major power companies, we have concluded mutual cooperation agreements based on geographical proximity of the five companies, and thereby bolstered measures to prevent escalation of nuclear disasters, and achieve recovery afterward.

Agreement	Specifics of cooperation	Operators
Agreement upon mutual cooperation in the nuclear power business (August 5, 2016)	Cooperation during nuclear disasters     Cooperation in decommissioning     Cooperation in installing equipment to address specified severe accidents, etc.	Hokuriku Electric Power Company The Kansai Electric Power Co., Inc. The Chugoku Electric Power Co., Inc. Shikoku Electric Power Co., Inc. Kyushu Electric Power Co., Inc.



#### Decommissioning of Shimane Nuclear Power Station Unit 1

According to the revised Nuclear Reactor Regulation Law enforced in July 2013, which specifies that in principle a nuclear power station's operational period should be 40 years, Unit 1 of the Shimane Nuclear Power Station was shut down on April 30, 2015.

Our decommissioning plan for the station 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.

	Date of approval of decommissioning plan–FY2022	FY2023-FY2030	FY2031-FY2038	FY2039-FY2046
Decommissioning implementation	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)
breakdown				
	◆ Safe storage	-	Dismantling and removal of reactor body	
		Dismantling and removal of equipment inside ra	diation-controlled area (other than reactor body)	
	Carrying out and	d transfer of fuel		Dismantling and removal of buildings, etc.
Main work	Investigation of contamination situation			
		ontamination		
		Dismantling and removal of equipment outside the radiation-controlled area		
		Treatment and dispose	al of radioactive waste	



# Higher Efficiency and Lower Carbon Emissions in Thermal Power Generation

Vision Strengthen and improve our existing businesses, with a focus on our energy business

Coal-fired thermal power has excellent advantages in terms of fuel supply stability and economy, however its CO<sub>2</sub> emissions are a major issue. To reduce these CO<sub>2</sub> emissions, we are working to introduce cutting-edge technology and expand use of mixed-fuel combustion using biomass.

#### Construction of Misumi Power Station Unit 2

At the coal-fired Unit 2 of our Misumi Power Station, which is currently under construction, we are installing equipment that achieves outstanding economic performance and environmental protection by using the best available power generation system. We are also working to improve operational reliability by applying knowledge acquired from the operational track record of Unit 1. We will also work to further curb CO<sub>2</sub> emissions through mixed-fuel combustion with biomass.



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	

Construction at Misumi Power Station Unit 2

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

#### Expansion of biomass mixed-fuel combustion at Units 1 and 2 of the Shin-Onoda Power Station

At the coal-fired Shin-Onoda Power Station, following trials of mixed-fuel combustion using wood chip biomass in FY2005, full-scale power generation using wood chips began in FY2008. After improvements to facilities in anticipation of further expansion using wood pellet biomass, in August 2020 we began efforts to expand use of biomass mixed-fuel combustion.



Biomass fuel storage facility



Wood pellets

Biomass fuel unloading facility

Vision Take on the challenge of new business for further growth

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).

We expect to be able to newly introduce approximately 300 MW of renewable energy by the mid 2020s. Looking ahead, we will continue working to introduce extra amounts of renewable energy through the development of domestic offshore wind power, etc.

#### Main current initiatives

	idii odifore ilidativos				
	Development of mega solar power [Fukuyama Photovoltaic: December 2011] [Ution Solar	· Development of mega solar power [Fukuyama Photovoltaic: December 2011] [Ube Photovoltaic: December 2014]			
Domestic	Solar	· Community-benefitting mega solar business with Hiroshima Prefecture [Shobara: October 2013; and 6 other locations]			
Domestic	Wind	· Development of wind power [Ama Wind: February 2018]			
	Biomass	· Biomass power businesses with Air Water Inc. [Hofu City, Yamaguchi Prefecture: July 2019]			
Overseas	Hydro	· Indonesia hydroelectric power generation project [Investment participation: March 2019]			
	Biomass	Mixed fuel generation with woody biomass [Shin-Onoda Units 1 and 2: Expansion of mixed-fuel combustion from August 2020 onward]			
		· Biomass power business with Hiroshima Gas Co., Ltd. [Kaita-cho, Aki-gun, Hiroshima Prefecture: April 2021]			
Domestic		· Biomass power businesses with Air Water Inc. [Iwaki City, Fukushima Prefecture: April 2021]			
Domestic	Hydro	· Repowering of existing hydroelectric power [Takiyamagawa: April 2021]			
	Biomass	· Mixed fuel generation with woody biomass [Misumi Unit 2: Scheduled for November 2022]			
	Hydro	· Repowering of existing hydroelectric power [Kitahara: Scheduled for March 2024; and 5 other power plants]			
Overseas	Wind	· Taiwan offshore wind power generation project [Start of commercial operations: Scheduled for 2022]			
Overseas	Hydro	· Taiwan hydroelectric power generation project [Start of commercial operations: Scheduled for 2024]			

<sup>:</sup> New projects introduced in the past year :: Projects scheduled for commercial operation in the future

#### Effective use of hydroelectric power

Hydroelectric power is renewable, natural energy. By continuously engaging in initiatives such as repowering existing facilities, we are working to promote and ensure effective use of water resources.

#### Repowering existing hydroelectric power



#### Improvement work on the Kitahara Power Station

Since June 2020, we have been replacing turbines and generators and engaging in rebuilding work, with the aim of starting commercial operations in March 2024.



Output (pre-improvement)	17,700 kW (15,600 kW)
Location	Kisuki-cho, Unnan City, Shimane Prefecture

<sup>\*</sup>For joint developments, facility capacity has been calculated based on our investment ratio; for biomass mixed-fuel combustion, capacity has been calculated based on the mixed-combustion ratio

#### Initiatives in the biomass power generation business

We have established companies with Air Water Inc. and Hiroshima Gas Co., Ltd., and are constructing and operating biomass power stations. At these businesses, 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.

Company name	Air Water & Energia Power Yamaguchi Corporation	Air Water & Energia Power Onahama Corporation	Kaita Biomass Power Co., Ltd.
Location	Hofu City, Yamaguchi Prefecture	Iwaki City, Fukushima Prefecture	Kaita-cho, Aki-gun, Hiroshima Prefecture
Power station name Hofu Biomass-Coal Mixed Firing Power S		Onahama Biomass Power Station	Kaita Power Station
Generation Biomass mixed-fuel combustion system (Mixed-fuel combustion rate: 50%)		Biomass combustion	Biomass mixed-fuel combustion (Mixed-fuel combustion rate: 80%)
Output	112 MW	75 MW	112 MW
Our investment ratio	49%	49%	50%
Start of operations	July 2019	April 2021	April 2021

#### Start of commercial operations at biomass power plants

In April 2021, Kaita Power Station, which we constructed with Kaita Biomass Power Co., Ltd. (a company we jointly established with Hiroshima Gas Co., Ltd.) and Onahama Biomass Power Station, which has been built with Air Water & Energia Power Onahama Corporation (a company we jointly established with Air Water Inc.) both began commercial operations.



Kaita Power Station



Onahama Biomass Power Station

#### Efforts to develop mega solar power generation

We operate mega solar power stations (totaling 6 MW) in Fukuyama City, Hiroshima Prefecture, and Ube City, Yamaguchi Prefecture.

Our group company Energia Solution & Service Co., Inc. (ESS) also operates photovoltaic power stations (10 facilities, totaling about 18 MW, as of the end of March 2021).



Fukuyama Photovoltaic Power Station

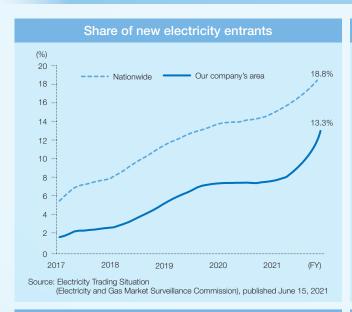


There is currently a falling trend in electricity sales, resulting from factors such as increased switching to other electricity retailers due to greater competition, and the spread of the COVID-19 pandemic. To ensure profitability going forward, it will be crucial to strengthen the competitiveness of our power sources, and maintain and grow our electricity sales.

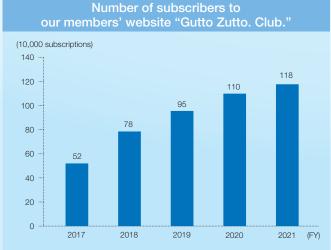
In order that customers continue to select the Chugoku Electric Power Group as their electricity provider, we are working to adapt and expand our range of rate plans and services to suit their diversifying lifestyles, enhanced awareness of environmental management, and other changing needs. In addition to our efforts to secure demand through the promotion of electrification and to increase electricity sales in the Tokyo metropolitan and Kansai areas, we are using a range of other markets to grow our electricity sales.

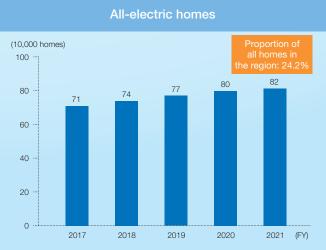
Furthermore, we will work to increase earnings through fuel sales to city gas companies and industrial customers in the Chugoku region.

#### **Main Indicators**









#### Offering a Rate Plan and Services to Suit Customer Needs

Vision Strengthen and improve our existing businesses, with a focus on our energy business

In response to the full liberalization of retail electric power sales started in April 2016, we developed "Gutto Zutto. Plan," a new rate plan that customers can select to match their lifestyles, and "Gutto Zutto. Club" members' website. Many customers have chosen our rate plans and services. As of the end of FY2021, there were 1.33 million accounts for our new rate plans, and 1.18 million accounts for our members' website—both exceeding the 1 million account mark.

#### A service that discounts rates on specific dates and times

For "Gutto Zutto. Club" members and "Gutto Zutto. Plan" customers, we have launched the "Gutto Zutto. Time Service," a unique service that discounts electricity rates on specific dates and times. We apply this discount in times when electricity demand is low to ensure that customers can feel the benefits of our rates.



#### Renewable energy rate plans and services

To play our part in the achievement of a decarbonized society, we are moving forward with the development of new electricity rate plans and services that utilize renewable energy.

#### Renewable energy electricity rate plans

At Chugoku Electric we have launched a range of electricity rate plans that utilize renewable energy from our hydroelectric and solar power plants. In selecting one of the plans as an optional extra on their existing electricity rate plans, customers make sure that the electricity they use is carbon neutral.

#### Plans for high-voltage and extra-high-voltage customers Special Renewable Energy Plan ecial Renewa Energy Plan **Energia** Electricity produced at renewable energy power plants Electricity + 中国雷力 ronmental values Customers Premium Special Renewable Energy Plan\*1 Special Renewable Electricity produced Energia Energy Plan Premium at renewable energy power plants 中国電力 Including electricity purchas Flectricity Non-fossil Fuel Energy Certificates with Tracking Information Customers Environmenta

🔷 "Gutto Zutto. Renewable Energy Green Plan"



- \*1 The plan utilizes Non-fossil Fuel Energy Certificates with Tracking Information-including information on renewable energy sources and power station location. This enables customers to use the electricity in their RE100\*2 initiatives.
- \*2 Renewable Energy 100%—An international environmental initiative that aims to reduce the environmental impact of companies business activities.

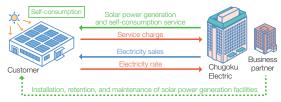
#### Solar power PPA service\*3

In March 2021, we launched a solar power PPA service for high-voltage and extra-high-voltage customers, such as those managing buildings and factories. This service enables customers to use solar power-derived electricity with zero initial investment costs.

values

Service	Overview
On-site service	Solar power generation facilities are installed on customers' buildings or grounds, enabling them to use their own solar power-derived electricity through a monthly service charge with zero initial investment costs.
Resilience service	Storage batteries are installed alongside customers' on-site power generation facilities, enabling them to use and store solar power-derived electricity at the same time. The service also contributes to enhanced BCPs as customers can use both the solar power and stored electricity in emergency situations that cause power stoppages.
Off-site service	Without using the FIT scheme, we use dedicated solar power generation facilities for each customer, providing them with solar power-derived energy over the long term.

#### On-site service



\*3 Power Purchase Agreement - A contract in which the customer offers their buildings or grounds to the seller of electricity, and the seller installs, retains, and maintains the solar power generation facilities. The customer uses the solar power-derived electricity and pays a service charge depending on the amount of electricity consumed.

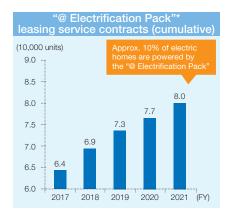
# Making Electrification Proposals to Help Conserve **Energy and Reduce Costs**

Strengthen and improve our existing businesses, with a focus on our energy business

For our corporate customers, we offer an Energy Diagnosis Service using our proprietary energy diagnosis tools. We use these tools to examine and measure the energy consumption of their facilities and propose operational improvement measures. We also propose electrification measures for air conditioning, hot water supply, and other aspects of their factory manufacturing processes. In these and other ways, we are supporting customers' energy-saving and cost-cutting efforts, as well as their decarbonization initiatives.

For homes, we are moving forward with the expansion of EcoCute and other high-efficiency electrical equipment with outstanding energy-saving performance. We are also offering a leasing service to limit our customers' costs, and working in other ways to improve overall electrification rates.

#### EcoCute dissemination (cumulative) (10,000 units) 70 66.7 63.0 60 55.2 50 40 2017 2018 2019 2020 2021 (FY)



#### "Gutto Zutto, Biz" —A website for our corporate customers

In March 2021, we launched "Gutto Zutto. Biz," a website for our corporate customers.

Through the website, we are offering services that cater to energy-related social needs, such as decarbonization and decentralized power sources, as well as services that are beneficial to our customers' businesses.

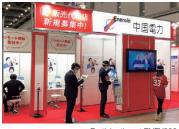


\*An electrical equipment leasing service offered by our group company, Energia Solution & Service Co., Inc.

## Electricity Sales in Other Areas of Japan

Strengthen and improve our existing businesses, with a focus on our energy business

We will strengthen our sales activities through alliances, focusing on the Tokyo metropolitan and Kansai areas, and strive to actively use new markets for electricity.



Participation at ENEX2021

#### Gas Sales

Vision Strengthen and improve our existing businesses, with a focus on our energy business

Through our group company, Energia Solution & Service Co., Inc., 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 hard to increase sales through a groupwide team effort in our sales activities.





#### **Performance**



To achieve the profit/financial targets indicated in our Group Corporate Vision, we must grow our international businesses so that they can contribute to the Group's profits. As such, in addition to discovering and acquiring conventional power generation businesses and other electricity-related projects, we will also participate in new energy businesses.

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 worldwide trends aimed at decarbonization, we have determined not to newly participate in any conventional thermal power projects. As such, we will look to create a portfolio centered on renewable energy and gas-fired thermal power, and expand opportunities for business participation while maintaining our balance between advanced and developing countries.

#### **Main Indicators**

# Equity ownership in electricity output in overseas power generation projects



#### Investment projects

	Project	Start of commercial operations	Ownership in electricity output
US	Connecticut natural gas-fired thermal power generation project	2011	100 MW
03	Ohio natural gas-fired thermal power generation project	Scheduled 2021	118.2 MW
China	Comprehensive energy project	2007	219 MW
Taiwan	Offshore wind power generation project	Scheduled 2022	21.6 MW
Talwan	Hydroelectric power generation project	Scheduled 2024	4.6 MW
Malaysia	Malaysia Coal-fired thermal power generation project		300 MW
Indonesi	Hydroelectric power generation project	2016	4.5 MW
Myanma	Natural gas-fired thermal power generation project		34.5 MW
Fiji	Comprehensive energy project (power generation/transmission and distribution/retail)	1966	145 MW

#### Overseas power generation projects and manned overseas offices · US (Connecticut) natural gas-fired power China generation project Comprehensive energy project Asia Hydroelectric power generation project · Myanmar natural Taiwan gas-fired power offshore wind powe generation project generation project America Comprehensive energy project (power generation/transmission and distribution/retail) · US (Ohio) natural gas-fired power generation project Overseas office (New York) as office (Singapore) · Malaysia ultra supercritical coal-fired power generation project Indonesia hydroelectric power generation project

Vision Take on the challenge of new business for further growth

Feature

#### Taiwan hydroelectric power generation project

In March 2021, we participated in investment in a hydroelectric power generation project in Taiwan (currently under construction; scheduled to begin operations in 2024).

Name	Feng Ping Xi Hydropower Station Units 1 and 2
Location	Hualien County, Taiwan
Output	37.1 MW
Our Group's* ownership in electricity output (investment ratio)	9.3 MW (25%)
Start of commercial operations	Scheduled 2024
Off-taker	Taiwan Power Company



Fengping River

#### Fiji comprehensive energy project

In March 2021, we participated in investment in Energy Fiji Limited (EFL), a power company in Fiji.

EFL is a vertical integration power company that undertakes power generation, transmission and distribution, and retail, and is our first investment in an overseas power company.

The Fijian government has outlined its plans to use only renewable energy by the year 2036, and so alongside EFL, we are proactively engaged in the development of renewable energy sources, including hydroelectric power and solar power.

Power company name	Energy Fiji Limited
Year of establishment	1966
Head office location	Suva City (Viti Levu), Fiji
Power output*	Internal combustion: 181 MW (10 locations) Hydroelectric power: 138 MW (6 locations) Wind power: 10 MW (1 location)
Our company's ownership in electricity output (investment ratio)	145 MW (44%)
Power transmission/ distribution equipment*	Line length: 10,899 km
Annual electricity sales*	980 GWh



Energy Fiji Limited

\* As of December 2020

#### Cape Verde hybrid power generation system implementation project

In March 2021, alongside Kyuden International Corporation, we received a joint consulting contract from the Japan International Cooperation Agency (JICA) for a renewable energy implementation project in the West African island country of Cape Verde.

The majority of Cape Verde's power supply comes from diesel power generation. The country has set itself the target of increasing renewable energy usage to 50% by 2030.

Using the experience, expertise and technological prowess we have accumulated through our Oki Islands Hybrid Project and others, we will look to propose the optimal operational methods for a hybrid power generation system, and support Cape Verde's implementation of renewable energy.

<sup>\*</sup>Investment through C&C Investment Corporation, jointly established by Chugoku Electric and Chudenko Corporation. Investment ratio 50:50.

# **Performance**

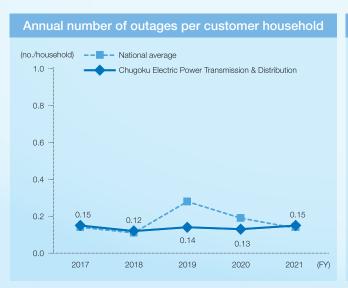
Power **Transmission** and **Distribution Business** 

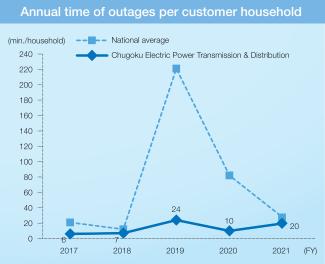
A wide range of changes are impacting operations in our power transmission and distribution business, including the increasing frequency and severity of natural disasters, the tight situation surrounding power supply and demand last winter, and the increasing usage volumes of renewable energy.

To ensure a low-cost, stable supply of power, Chugoku Electric Power Transmission & Distribution Co., Inc.-which is in charge of the power transmission and distribution business-is working to enhance the efficiency and sophistication of its facility maintenance, while reinforcing its resilience by taking measures to prevent accidents and accelerate recovery when accidents occur.

Elsewhere, in addition to building equipment and ensuring flexible operations in response to diversifying forms of electricity network use, the company will engage in the development of new services that make use of its existing equipment, data and expertise.

## **Main Indicators**



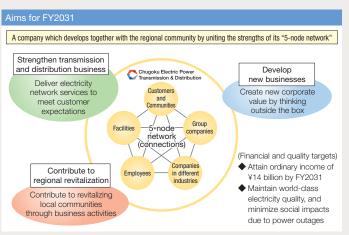


# Corporate Vision of Chugoku Electric Power Transmission & Distribution

Due to the legal separation of power transmission and distribution sectors, since April 2020, our wholly owned subsidiary Chugoku Electric Power Transmission & Distribution has been operating the power transmission and distribution business.

Chugoku Electric Power Transmission & Distribution has formulated a long-term vision for FY2031 comprising three main areas-strengthening the transmission and distribution business, developing new businesses, and contributing to regional revitalization. Furthermore, the company will work to develop together with its regional community while uniting the strengths of its five networks: customers/regions, employees, facilities, group companies, and companies in other industries.

Chugoku Electric Power Transmission https://www.energia.co.jp/
& Distribution, Corporate Vision nw/company/guide/identity/



# Measures to Address Aging of Equipment

Vision Strengthen and improve our existing businesses, with a focus on our energy business

A large number of electricity network facilities built in the period of high economic growth are approaching time for renewal. As part of their renewal, for each facility we will look at the levels of impact and probability of breakdown and ascertain levels of risk, work volumes, and other constraints. Using asset management methods, these will form our judgement criteria as we move forward with the upgrading and streamlining of our capital investments.

# of impact Level of risk Probability of breakdown (%)

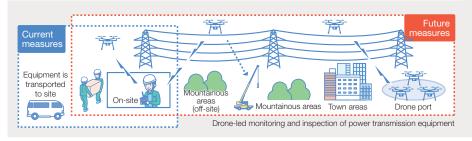
Level

# Improved Efficiency and Sophistication of Facility Maintenance

Vision Strengthen and improve our existing businesses, with a focus on our energy business

In order to fulfill our mission of delivering stable electricity to customers at low cost, Chugoku Electric Power Transmission & Distribution makes planned improvements in line with deterioration levels of facilities, and works hard to achieve efficient improvement through efforts such as unification of specifications with other power companies, expanding the scope of competition, and securing installation capability through standardization of work, etc.

We are also working to achieve more sophisticated facility maintenance by using Al, IoT and other advanced technologies.



# Drone-led monitoring and inspection of power transmission equipment

Chugoku Electric Power Transmission & Distribution is using drones to inspect its power transmission towers and other facilities.

In October 2020, the company was the first in Japan to succeed in demonstrations of beyond visual line of sight/autonomous drone flights (level 3) aimed at monitoring and inspecting power equipment. Further, in April 2021, the company deployed drones in all of its business sites so that it could quickly ascertain damage in the event of a disaster. In these and other ways, the company is moving forward with drone implementation.

# Strengthening Resilience

Vision Strengthen and improve our existing businesses, with a focus on our energy business

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, with the establishment of the Safety and Disaster Preparedness Division in April 2021, the company is also moving forward with organizational reinforcement. The division is tasked with integrated control of disaster preparedness, operational safety, and prevention of human error.

# Dissemination of information

In the event of a power outage, the company communicates easy-to-understand information on power outage areas and recovery schedules through a dedicated app, website, and other means.

Information is provided via a power outage app



Push notifications

Maps of individual municipalities schedule and prefectures

# Facility countermeasures

We are taking step-by-step measures to prevent inundation in light of the heavy rainfall disaster in July 2018.



Watertight measures to prevent substation inundation

# Collaborative disaster plan

To achieve early recovery after a power outage due to a disaster, we have a plan in place for collaboration among general electricity transmission and distribution utilities, and collaboration between general electricity transmission and distribution utilities and related organizations, which has been submitted to the Minister of Economy, Trade and Industry.

Main points of collaboration

- Cooperative disaster response among general electricity transmission and distribution utilities (speeding up support for neighboring power companies [sending proactive support], etc.)
- Unification of recovery methods, facility specifications, etc.
- Implementation of joint emergency training

# Response to Diversifying Forms of Electricity Network Use

Vision Strengthen and improve our existing businesses, with a focus on our energy business

# Measures to expand introduction of renewable energy

Since the start of the feed-in-tariff scheme for renewable energy in July 2012, there has been a dramatic increase in introduction of renewable energy generation in the Chugoku region, focused mainly on solar power generation, and the cumulative total of renewable energy connections made to the grid has reached 9.68 million kW (as of the end of March 2021).

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 generation applications and information on available grid capacity, and measures are being taken to enable the grid to handle increased introduction.

In addition, to effectively utilize existing grid facilities amidst increasing amounts of renewable energy, we have begun taking orders for non-firm connections.\*

\*A way to use available capacity that arises depending on operation of power source and fluctuations in dema presuming that output is limited when the grid is congested.

# Renewable energy applications within the company's service area (as of March 31, 2021)

Units: 10,000 kW

	Solar	Wind	Biomass	Hydro (excl. pumped storage)	Geothermal	Total
Applications for connection review	429	487	226	6	0	1,148
Applications for connection contract (including those accepted)	172 [67]	111 [80]	181	7	0	471 [147]
Connections completed	564 [35]	36 [0]	267	101	0	968 [35]
Total	1,165	633	675	114	0	2,587

Note 1: Totals may not match the sum of individual amounts due to rounding

Note 2: Figures in square brackets [] are the portion subject to output limitations under specific rules Note 3: Includes non-FIT portion and our company's portion. Excludes portion for remote islands

Note 4: Even if there is a record of connection, in some cases the figure is 0 (x 10,000 kW) due to rounding

# Rollout of New Services

Vision Take on the challenge of new business for further growth

Aiming to increase its earnings in new business fields, Chugoku Electric Power Transmission & Distribution is engaged in efforts to roll out new services using its existing equipment, data, and expertise.

# A security camera installation service

In May 2020, led by Denryoku Support Chugoku Co., Inc.a wholly owned subsidiary-Chugoku Electric Power Transmission & Distribution began offering a security camera installation service using utility poles. The service aims to promote safe and secure local town development, and looking ahead, the company plans to gradually expand the area that the service covers.

#### Hiroshima City, Kure City, Mihara City, Service areas\* Fukuyama City, Higashi-Hiroshima City, Hatsukaichi City Purpose Prevention of crime Local governments, neighborhood associations, Target customers

shopping street associations and other local public bodies

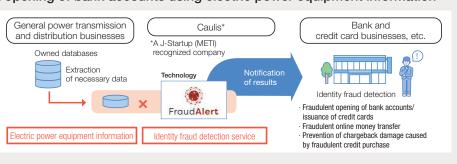
Filmed locations Public spaces such as public roads

\*As of March 31, 2021

Service overview

#### A service to prevent fraudulent opening of bank accounts using electric power equipment information

In April 2021, Chugoku Electric Power Transmission & Distribution, Hokkaido Electric Power Network, Inc. and Chubu Electric Power Grid Co., Inc. joined a project to prevent the fraudulent opening of bank accounts using electric power equipment information, jointly hosted by Caulis Inc. and Kansai Transmission and Distribution, Inc.

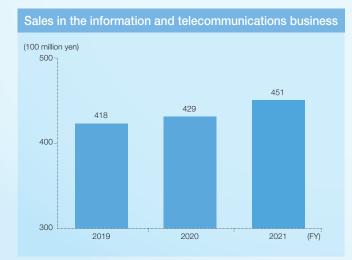


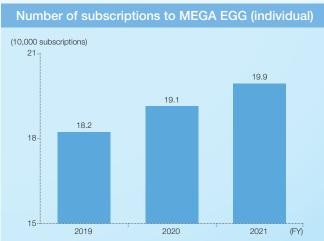
Information and **Telecommunications Business** 

> Today, there are growing opportunities to use information and communications technology in all areas of business and life due to progress in fields such as Al, IoT, and 5G, and the COVID-19 crisis has once again underlined its importance. 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, Energia Communications, Inc. (referred to hereafter as "Enecom") is engaged in information and telecommunications business. In addition to building high-quality, high-reliability communications networks, Enecom provides total solutions that incorporate data centers, the cloud, and other elements. In this way, to support the lifestyles and businesses of its customers, Enecom will utilize state-of-the-art ICT to provide solutions to regional issues and generate added value.

# **Main Indicators**





# Efforts to Strengthen and Expand Our Information and Telecommunications Business

Vision Strengthen and improve our existing businesses, with a focus on our energy business

# Internet connection service MEGA EGG

As Internet connection services, Enecom offers MEGA EGG for individuals and MEGA EGG Business for small- and medium-sized companies.



In addition to providing secure, speedy Internet connections, Enecom offers excellent communication environments through services such as MEGA EGG COLLECT, which includes

video distribution and other options that subscribers can select based on their lifestyles; and Wi-Fi6 (mesh compatible) routers, which facilitate a next-generation connection standard ideally suited to teleworking and online learning, demand for both of which has grown due to an increasing number of people staying at home. MEGA EGG Business, meanwhile, is a service that contributes to both enhanced operational efficiency and reduced communication costs. The number of subscribers for both MEGA EGG and MEGA EGG Business is gradually increasing.

# EneWings\* solution service for corporate customers

For corporate customers, Enecom offers total solutions that include communications network services for connecting customer's business sites and other locations, management and maintenance services for network devices and servers, etc., data center services, and cloud services

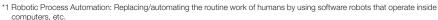
At the EneWings Hiroshima Data Center, efforts are being made to further increase sales by providing a variety of services, an outstanding location in central Hiroshima City, safe and worry-free facilities, and robust security.

Enecom also offers ICT solutions—such as the creation of information security environments—and will continue to work toward increasing demand while identifying customer needs.

\*A total solution brand offered by Enecom, Inc.

# Rolling out services for creating new value

For corporations, local governments, and other organizations struggling with labor shortages and long working hours, Enecom offers the RPA\*1 services EneRobo and UiPath, as well as other Al-based solutions. Through automation of routine work, telephone response, and administrative work, Enecom is rolling out businesses that support the digital transformation\*2 of offices. Going forward, Enecom will continue efforts to further strengthen and expand its field of business, through approaches such as solving regional issues and creating new added value using cutting-edge information and communications technology.



<sup>\*2</sup> In addition to creating new services and business models through digitalization and digital mechanisms, digital transformation seeks to cut costs and enhance productivity in all aspects of business (such as through workstyle reforms), and contribute to a wide range of other measures.



Hiroshima Data Center



# Hiroshima City adopts Enecom's RPA services

Since FY2021, the Hiroshima City government office and eight ward offices have been moving forward with the adoption of Enecom's RPA (EneRobo) and OCR\* services.

Hiroshima City is also looking at developing personnel who can further expand the number of compatible work processes, and in the future, create, maintain, and manage robots themselves. In anticipation of these needs, Enecom is not only selling RPA licenses, but actively offering consulting services to customers regarding its RPA solutions.

\*Optical character recognition: After scanning text or other documents and transforming them into image files, OCR software can convert the printed or handwritten text into digital data.

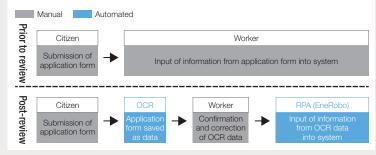
# Enhanced efficiency in service desk operations

Work to register information on medical payment application form

Work details: Inputting information from application forms into system

#### Issues prior to review

- $\cdot$  Manual inputting of information on application forms took too much time.
- · Work frequently had to be redone due to interruptions, such as visitors or telephone calls.



# Launch of business using VR technology

Enecom is moving forward with an online-based business service using VR technology.

For high-school students from Shobara City in Hiroshima who are looking for information on which local companies to apply to, Enecom has built a joint-company briefing system using an online VR space in which the students' avatars can move around freely.



#### Overview

- · Participants can move freely around the virtual venues using their avatars
- When participants approach booths they are interested in, they can see company introduction videos, and ask questions regarding the company via a chat function



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.

The Energia Creative Lab, which we established in April 2019, aims to secure new profit based on two concepts: creating the future of the region and creating the future of electricity.

Our R&D strategy establishes the direction of R&D for our entire Group, and we have established specific strategic innovation areas to meet challenges not only in our electricity business, but in new businesses, too.

# Efforts at the Energia Creative Lab

Vision Take on the challenge of new business for further growth

# Creating the future of the region

We are actively investing in startups—for which we expect an early listing—with unique technologies and services that can contribute to regional revitalization, the resolution of local issues, and the advancement of our energy business. In doing so, we hope to generate returns on investments that contribute to achieving the profit targets in our Group Corporate Vision.

At the same time, by introducing our regions to our investments and providing various services, we will work to find solutions to regional challenges. We are also partnering with startups predominantly in the energy business to develop new services.

# Past investments (As of the end of March, 2021)

Regional revitalization/	Audiostock Inc.	A startup from the Chugoku region that provides a music distribution service featuring the music of amateur musicians.
resolution of social issues	CoCooking Co., Ltd.	Through the sharing of leftover food products or those with soon-to-expire best-by dates, CoCooking offers a service that aims to reduce food loss.
	XTIA Ltd.	XTIA was the first company in the world to commercialize the Nobel Prize-winning optical frequency comb technology. It has gone on to automate and upgrade inspection systems using this technology.
Resolution of industrial issues	Unirobot Corporation	Unirobot offers an automated voice communication service using its unibo communication robot and AI technologies.
	CO-NECT Co., Ltd.	CO-NECT offers an order placement and receipt system that is both easy to implement and easy to use.
Energy/ environment	LiveSmart KK	LiveSmart provides a service platform for smart controllers and smart homes.

# Creating the future of electricity

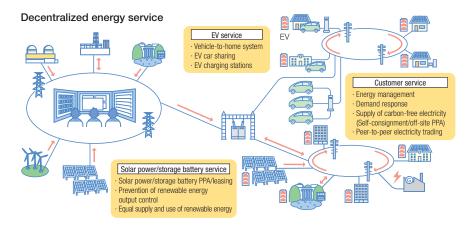
Since the government's carbon neutral declaration, customers' perceptions of energy have transformed drastically. To cater to their needs, and to contribute to carbon neutrality in the Chugoku region, we are working to create a decentralized energy service using solar power, storage batteries, electric vehicles (EVs), and more.

Specifically, using the achievements from our VPP\* demonstrations, as well as through collaborations with and investments in startups with unique technologies, we are working to develop new energy services.

# VPP demonstration

Alongside Mazda Motor Corporation and Meidensha Corporation, we are conducting trials of a virtual power plant that facilitates the reuse of EV batteries and the control of renewable energy and customer facilities.

\*Virtual power plant: A mechanism that provides a power plant-like function through the integration and control of multiple decentralized power sources, including renewable energy, storage batteries, and EVs.

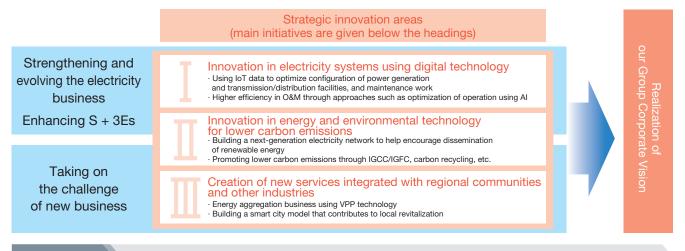


# Measures Related to R&D

Vision Strengthen and improve our existing businesses, with a focus on our energy business

Take on the challenge of new business for further growth

As for the direction of our R&D initiatives, we have established three strategic innovation areas. We will carry out R&D with the aim of innovating in these areas, and connect this with realization of our Group Corporate Vision.



R&D Strategy

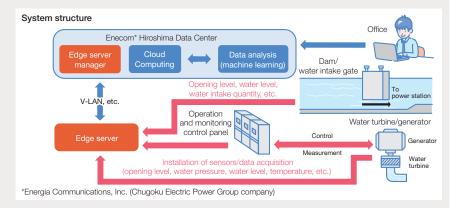
https://www.energia.co.jp/eneso/senryaku/kenkyu/pdf/kenkyu\_kaihatsu\_senryaku.pdf

# R&D on the use of IoT in hydroelectric power generation systems

As we prepare to increase the output of our existing hydroelectric power facilities, we are looking at the use of IoT and other information communication technologies. Specifically, we are working to develop a smart security system that can obtain, store, and analyze various data - such as the operational status of facilities - and undertake maintenance and management.

# Project details

- · Examining ways to enhance utilization rate of power generation facilities, reduce work pertaining to the input of monitoring and inspection data, and establish indicators to easily ascertain the soundness of equipment, etc.
- · Ensuring enhanced operational efficiency and safety by upgrading maintenance and management through maximum use of data



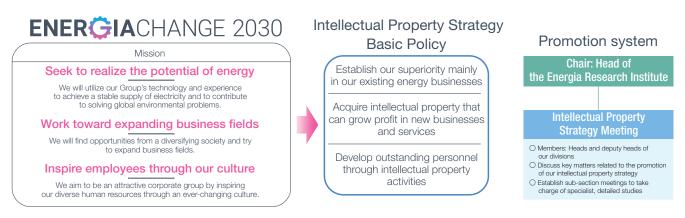
# **Initiatives Aimed at Reinforcing Our Competitive Strengths**

# **Intellectual Property Initiatives**

# Intellectual property strategy

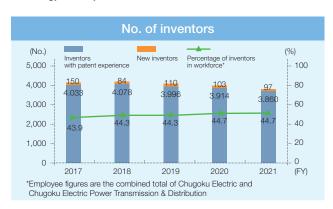
To contribute to enhanced corporate value through our intellectual property strategies, we formulate policies and targets based on the current challenges. Our latest intellectual property strategy policy is designed to contribute to the achievement of ENERGIACHANGE 2030 from an intellectual property standpoint. Specifically, we will continue to engage in personnel development to establish our superiority and maintain our intellectual property foundation mainly in our existing energy businesses. In addition, to maximize the potential of our new businesses and services, the Energia Research Institute will lead efforts to build our intellectual property portfolio.

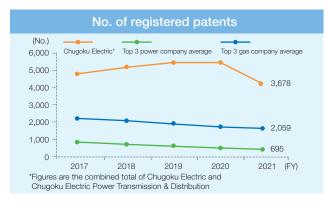
Key matters related to the promotion of our intellectual property strategy will be discussed at Intellectual Property Strategy Meetings, which will be chaired by the head of the Energia Research Institute and comprise the heads and the deputy heads of our divisions.



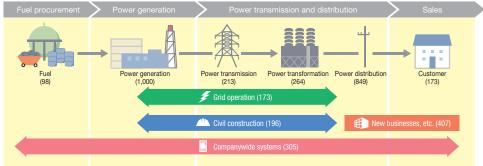
# The foundation of our competitive strengths

As a result of thorough efforts to transform our intellectual assets into intellectual property in all aspects of our business activities, approximately 40% of our workforce can call themselves inventors with experience in patent applications. In FY2021, we undertook careful examination of the cost effectiveness of our patent portfolio, and while the number of our registered patents decreased slightly, we still boast the highest number in the energy industry.





Overview of supply chain and technological foundation

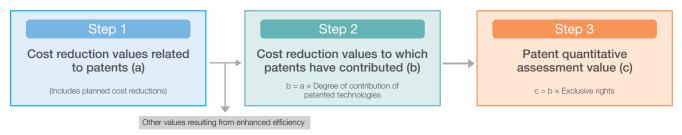


Figures in brackets are the no. of registered patents in the relevant business (as of March 31, 2021)

# Quantitative assessment of patent value

While securing our technological foundation through patents to enable a degree of freedom in our business activities, from a management perspective, it is essential that we ascertain the quantitative contribution of our current patents. Since FY2008 we have engaged in activities to look at the quantitative value of our patents. Quantitatively, the effects of our R&D and creativity can be seen in the level of cost reductions that result from improved efficiency. We therefore calculate the quantitative assessment values of our patents based on the cumulative total of cost reductions in our main patented technologies.

# Quantitative assessment process



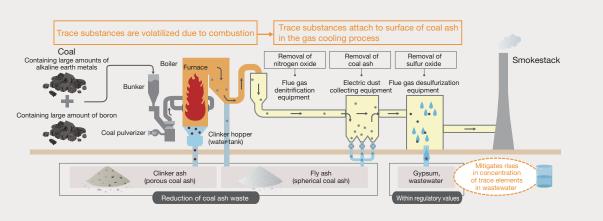
# Patent utilization — Balancing response to global environmental issues with economic efficiency

# Coal-mixing methodology (patent no. 6079939 and others)

Coal contains traces of boron, fluorine, selenium, and other elements, some of which can be discharged alongside coal ash and wastewater post-combustion. We thus undertook to accumulate and analyze data through various coal combustion tests. As a result, we discovered that when combusting coal with large amounts of a certain trace element—such as boron—by mixing in a specific amount of coal with large amounts of alkaline earth metals, for example, we could greatly alleviate the impacts of trace elements in wastewater.

This discovery hugely increased the types of coal that could be used for combustion, and in addition to limiting risk associated with supply shortages, by promoting competition among coal mining companies, it has also contributed to better price negotiations.

Elsewhere, while Indonesian coal has been superior to coal from Australia and other countries for its low ash content, due to its high boron content, its use has been limited. However, thanks to our new discovery, by increasing use of coal from Indonesia, we have been able to reduce the amount of waste coal ash.



# Intellectual Property Report

Since 2008, we have published an annual Intellectual Property Report summarizing our intellectual property strategic activities, leading R&D achievements, and the quantitative assessment values of our patents. For more information on our intellectual property activities, please follow the link below.

Energia Group Intellectual Property Report

https://www.energia.co.jp/eneso/kankoubutsu/chizai/index.html

(Note) In the Intellectual Property Report, data on p. 43 has been totaled based on the calendar year (Jan-Dec).

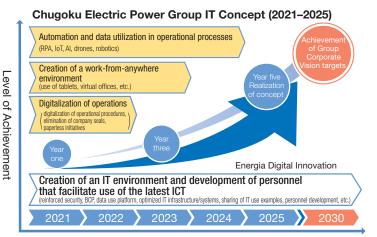


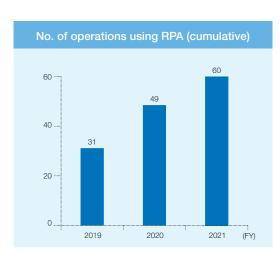
# Our Response to Digital Transformation (DX)

# Formulation of the Chugoku Electric Power Group IT Concept—Energia Digital Innovation

Digital transformation using the latest technologies is essential as corporations seek to reinforce their competitive advantage. At the Chugoku Electric Power Group, we too are working to improve the efficiency of and further sophisticate our operations through use of RPA and Al/IoT technologies.

In April 2021, we formulated Energia Digital Innovation, an IT concept that brings together our vision and key methodology for utilizing IT. Based on this concept, we are actively working to make drastic operational changes through use and application of digital technologies and data. At the same time, we are making efforts to further enhance our productivity, create new value, and build an environment that facilitates flexible workstyles. Elsewhere, through new online classes and coordination with universities and other external institutions, we are engaged in initiatives to develop personnel who can promote IT use.



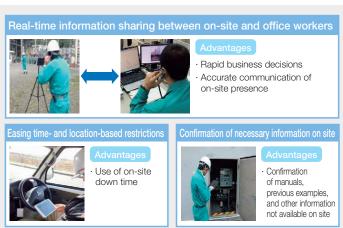


#### Creation of a work-from-anywhere environment

Through maximum use of IT tools, we are working to create an environment that allows employees to work from anywhere.

#### Details

- To ensure rapid work response during disasters and times of normality, we are utilizing smartphones, tablets, and other devices to introduce a system that allows us to confirm positional information
- To ensure efficient operations, we are using work-from-home systems, and video conferencing systems for on-site reporting work with our partner companies
- $\cdot$  We are making use of smart glasses and other wearable devices to enable remote support of on-site work

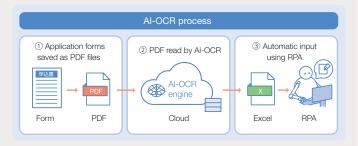


# Automation and data utilization in operational processes

To achieve enhanced productivity through operational automation, we are moving forward with the implementation of RPA and AI-OCR technologies.

#### **Details**

- We are using AI-OCR technology for work that requires the inputting of large volumes of form data, such as application form processing work at our customer center
- Through use of RPA, we are currently examining a system that can automatically input the form data read by AI-OCR technology





- Fulfillment of Basic Responsibilities
  - Environment
- Social
- Governance

# **Promotion of ESG Management**

We are promoting management with a firm focus on environmental, social, and corporate governance to contribute to the creation of a sustainable society and ensure continued improvement of our corporate value.

The Chugoku Electric Power Group's Corporate Philosophy—Key Concept

-Energia: With You, and With the Earth-

Our corporate philosophy is linked to society's needs for sustainability, and we believe that we will be able to meet these needs through our business activities.

The Energia Group Corporate Charter of Conduct, which serves as our guidelines for action, states that our mission is to contribute to the creation of a sustainable society, and as such we are working to solve a wide range of social issues through our business activities.

# **Energia Group Corporate Charter of Conduct**

We at the Energia Group believe it is our mission to create and grow value that is meaningful to society through sound business activities founded on trust from society, and by doing so, contribute to the achievement of a sustainable society. On the basis of such awareness, the executives and employees in the Energia Group will think and act independently based on the following principles of conduct, thus carrying out their responsibilities as members of society and achieving both improved corporate value for our Group as well as continuous growth.

## **Enhancement of Communication with Society**

By proactively, effectively, and fairly publishing our corporate information as well as engaging in dialogue with a wide variety of stakeholders, we will reflect the demands of society and the needs of our customers in our business activities.

#### **Provision of Products and Services Useful to Society**

By making tireless efforts for improved quality and creating new value through innovation, we will safely and stably provide quality products and services that bring our customers satisfaction.

# **Contributions to Local Community Development**

As a corporate group rooted in the Chugoku region, we will participate in efforts aimed at solving social issues through our business activities to contribute to the development of the local community.

# **Promotion of Environmental Management**

We consider environmental problems to be problems shared by all of humanity, and will proactively engage in efforts including the promotion of global warming countermeasures, the formation of a recycling-oriented society, and environmental preservation.

#### **Respect for Human Rights**

With respect for the human rights of all people at the very core of our business activities, we will strive toward the realization of a society in which there is no discrimination whatsoever and human rights are truly respected.

## **Assurance of Industrial Safety and Health**

Placing top priority on assuring safety as well as mental and physical health, which are the foundation of our business activities, we will strive to prevent industrial accidents as well as to maintain and promote health.

#### **Formation of a Vibrant Corporate Culture**

In order to enable diverse human resources to demonstrate their capabilities and create new value, we will engage in training human resources and enabling technology and skills to be passed on to the new generation, as well as promote efforts to create a workplace that is comfortable and provides job satisfaction.

# **Promotion of Compliance Management**

We will strictly abide by laws, regulations, and rules, as well as social norms including the underlying ethics and morals, and will practice three actions (consulting our conscience, speaking honestly, and proactively correcting things).

# **Rigorous Crisis Management**

We will construct a crisis management structure in terms of our organization and our systems and rigorously carry out efforts towards preventing and minimizing risk with regard to natural disasters, cyber attacks, terrorism, and other such threats to the social lives of citizens and our corporate business activities.

#### **Enhancement of Corporate Governance**

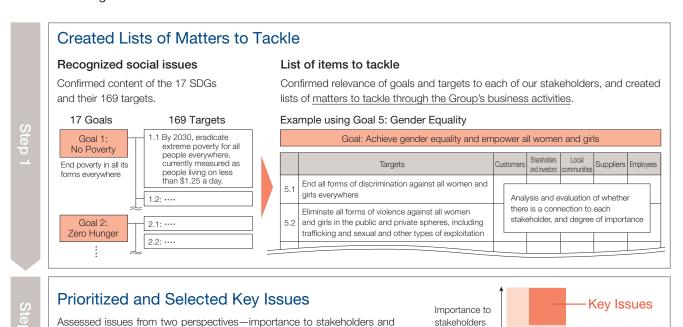
Executives of the Energia Group will construct governance with fairness, transparency, and viability, with an aim to improve the corporate value of the Group and achieve continuous growth. They will also take the lead and become examples to ensure that all employees take action towards achieving this Charter of Conduct.

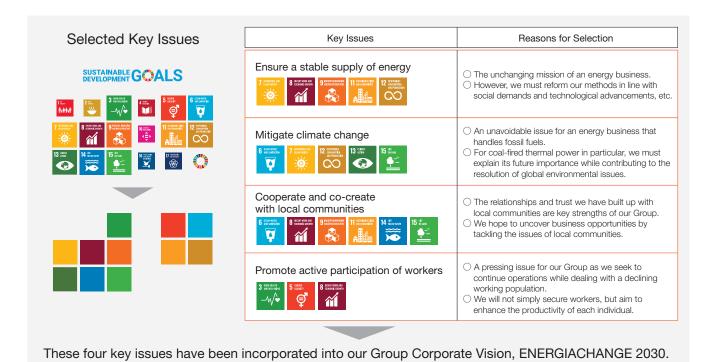
# Our Contribution to the Achievement of the SDGs

importance to the Group's business—and selected four key issues following

discussions by management.

In September 2015, the United Nations General Assembly adopted 17 Sustainable Development Goals addressing key issues such as energy, climate change, and gender equality as guidelines for global action. To contribute to the achievement of these goals, we have selected four key issues to tackle as a Group by FY2031. Moreover, we have incorporated these into our Group Corporate Vision, ENERGIACHANGE 2030, and are working to resolve them in a focused manner.





Importance to the Group's business



At the Chugoku Electric Power Group, we have positioned initiatives aimed at solving environmental issues—which include global warming countermeasures and activities aimed at a recycling-oriented society—as key management issues, and we are proactively engaged in efforts to reduce the environmental impact of our business activities. Specifically, as we work toward the creation of a sustainable society, in addition to steady execution of the Chugoku Electric Power Group Environmental Action Plan, we will drive the decarbonization initiatives outlined in ENERGIACHANGE 2030 and Carbon Neutral 2050.

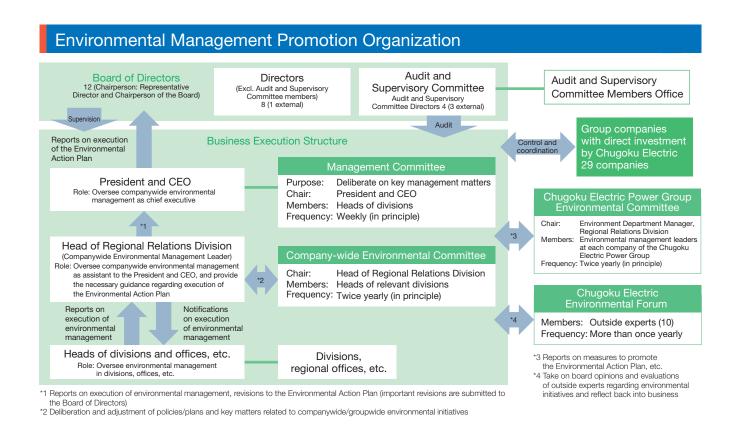
# Chugoku Electric Power Group Environmental Action Plan

# Basic Policy

The Chugoku Electric Power Group will:

- · Contribute to realizing a society that enables sustainable development through simultaneously achieving compatibility with the environment, stable supply of power, and profitability, with our ultimate priority being on ensuring safety as a corporate group handling energy.
- · Always cherish the environment based on the following three policies and aim to be a corporate group trusted by our customers:
- 1. Vigorously approach global warming countermeasures and other important issues such as promoting formation of a recycling-oriented society and promoting local environmental conservation, etc.
- 2. Contribute to building a society in harmony with the environment by providing customers with products and services that are environmentally friendly.
- 3. Actively implement two-way communications with local communities comprising dialog, activities, and other efforts related to environmental conservation.





# Efforts to Realize a Sustainable Society

Global-scale environmental problems are becoming apparent, such as climate change and mass consumption/disposal of resources, and there is a need for integrated efforts to address issues in each area: environment, economy, and society. The Chugoku Electric Power Group Environmental Action Plan sets forth environmental efforts to address these problems. Going forward, we will continue contributing to the realization of a sustainable society. We will do this by keeping a close eye on trends inside and outside Japan—such as demands from society to achieve the Sustainable Development Goals (SDGs), and the growth of ESG (Environment, Society, Governance) investing—and by improving the effectiveness of our Environmental Action Plan.

# Identification and review of key issues

Key issues at our company are determined by the process indicated in the following diagram, and reviews are carried out periodically based on the situation of ongoing initiatives.



## Continual improvement of the Environmental Management System (EMS)

To steadily promote the Chugoku Electric Power Group Environmental Action Plan, our Group is operating an Environmental Management System (EMS), and working to raise the level of our environmental management by implementing environmental management review.

About the Chugoku

Electric Power Group

# Chugoku Electric Power Group Environmental Targets and Results (FY2021)

We achieved targets for 11 of our 14 initiatives for FY2021





Action Plan	Item	SDGs		Target	FY2021 Results	Evaluation
	Curb CO <sub>2</sub> emissions			— (Under review in light of national targets)	0.521 kg-CO <sub>2</sub> /kWh	_
	Use of nuclear power generation, provided safety is ensured		Unit 2, ar	arly operation restart of nd start of operation of Unit 3, imane Nuclear Power Station	Currently responding to conformity reviews for new regulatory requirements	
I.	Use of renewable energy power generation facilities throughout the Group	7 APPROCEED AND 8 DECENT WORK AND DECENT WORK AND DECENT APPROACH CADMITS		Use to the utmost	926 MW (3,423 million kWh)	9
Promotion of global warming counter-	Responding to growing introduction of renewable energy	9 NOSTRY WOUTHIN 12 SEPTIMENT AND PRODUCTION AND PRODUCTION	Introd	duction wherever possible	14.39 GW Connections completed: 9.68 GW Connection applications: 4.71 GW	9
measures	Thermal power station heat efficiency (generating end)	13 ACHON	(lowe	42% or higher er heating value standard)	43.7 %	9
	Introduction of smart meters* Gr		Complete installation of smart meters for all low-voltage customers by the end of FY2024		3.38 million units (Progress: 67%)	9
	Provision of energy-saving products and services to customers*		Active roll out		Total no. of EcoCute units installed 0.67 million units	9
II. Promotion of the formation	Waste recycling rate Gr	12 ASSOCIATION AND PRODUCTION AND PRODUCTION AND PRODUCTION	99% or higher in FY2021 (zero emissions)		98.5 %	
of a recycling- oriented society	Effective utilization rate for coal ash	15 inton		99% or higher	99.8 %	9
Ⅲ. Promotion of local	Proper disposal of PCBs Gr	6 RELAW MATER  11 NOT THE MATERIAL COLLEGE  12 SECRETARIAL COLLEGE  14 BIT OR BASER  ASSET PROSECULAR.	Disposal of full amount by	High-concentration PCB wastes	Disposal completed	9
environmental conservation	Proper disposal of PODS	15 orton	the end of FY2027	Low-concentration PCB wastes	Making steady progress with disposal	9
IV. Promotion of environmental communication	Activities supporting education on energy and the environment for the next generation	12 SCHOOLSE TO THE PARTICULAR SOLD FOR THE COLUMN SOLD FOR THE COL	A	Active implementation	No. of visiting schools, etc. 60 No. of videos 4 on YouTube	9
V.	Percentage of employees participating in environmental education	7 AFFROMME AND 12 DESPONSIBLE AND PRODUCTION AND PRODUCTION		100 %	100 %	9
Implementation of environmental	Reduction rate in use of office electricity Gr	16 PARK ASSISE STRONG S	28% or higher in FY2021 (compared to FY2011)		30.0 %	9
management	Reduction rate in use of office paper	<b>Y</b>	10% or higher in FY2021 (compared to FY2011)		21.6 %	9



Gr : Denotes groupwide initiatives

"Included as part of the "Dissemination and encouragement of energy saving" action plan until FY2021. As of FY2022, "Dissemination and encouragement of energy saving" has been integrated into "Promotion of global warming countermeasures."

# Chugoku Electric Power Group Environmental Targets (FY2022)

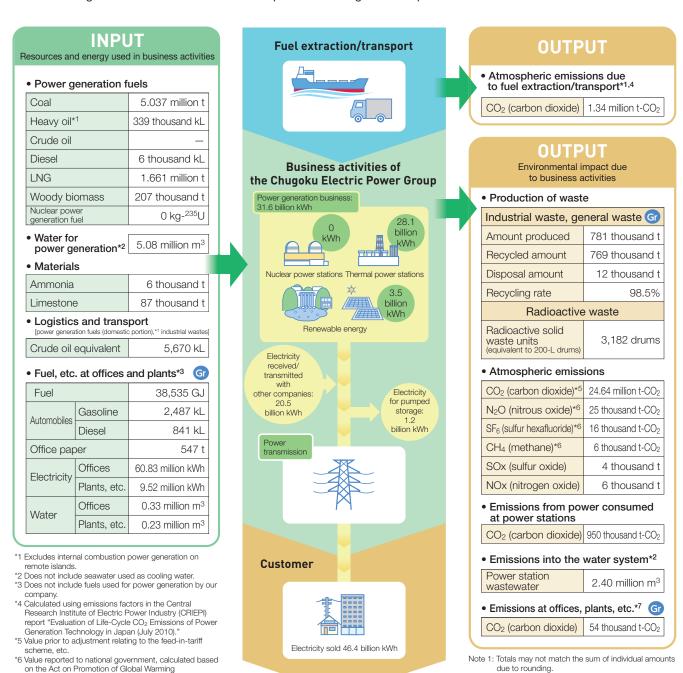
Environmental targets for FY2022 have been set as below based on the Group's current progress and the formulation of ENERGIACHANGE 2030.

Action Plan	Item	SDGs	Target
	Use of nuclear power generation, provided safety is ensured		Early operation restart of Unit 2, and start of operation of Unit 3, at the Shimane Nuclear Power Station
	New introduction amounts of renewable energy		FY2021-FY2031 300-700 MW
I. Promotion	Responding to growing introduction of renewable energy	7 CHARMAGE AND B COCCOST MODES AND COLOR MADE AND C	Introduction wherever possible (Grid connections)
of global warming counter- measures	Thermal power station heat efficiency (generating end)	9 NUMBER MANDERSTREEMS 12 DESCRIPTION AND PRODUCTION AND PRODUCTIO	43% or higher (lower heating value standard)
measures	Introduction of smart meters		Complete installation of smart meters for all low-voltage customers by the end of FY2024
	Provision of energy-saving products and services to customers		Active roll out (no. of EcoCute units installed)
	CO <sub>2</sub> emissions factors		The Electric Power Council for a Low Carbon Society targets FY2031: about 0.37 kg-CO <sub>2</sub> /kWh
II. Promotion of the formation	Effective utilization rate for coal ash	12 REPORTED 14 III BELOW MATER AND M	99% or higher
of a recycling- oriented society	Waste recycling rate (excluding coal ash)	15 in too	95% or higher
III. Promotion of local environmental conservation	Proper disposal of PCBs	12 STOROGET AND THE PROPERTY OF THE PROPERTY O	Disposal of full amount by the end of FY2027
IV. Promotion of environmental communication	Activities supporting education on energy and the environment for the next generation	12 SEPTIONALE AND PROJECTION IN THE OFFICE AND PROJECTION IN THE OFFICE AND PARTY AND	Active implementation
V. Implementation of	Thorough environmental management	7 CHAN PREDI	Implementation of groupwide environmental management measures and thorough compliance with environmental laws and regulations
environmental management	Percentage of employees participating in environmental education	16 MARILANIES AND TRANSPORT	100 %

Gr : Denotes groupwide initiatives

# Business Activities and Environmental Impacts in the Chugoku Electric Power Group (Material Balance)

At the Chugoku Electric Power Group, we conduct our business activities using various resources. We accurately monitor and properly manage environmental impacts such as resource usage and CO<sub>2</sub> emissions due to our business activities, and we are making efforts to address environmental problems throughout our operations.



For environment-related data other than the above, please see the Chugoku Electric Power Group Environmental Data Compilation for 2021

Chugoku Electric Power Group Environmental Data Compilation for 2021

\*7 Calculated by multiplying electricity, water, and fuel usage by the relevant emission factors.

Countermeasures.

https://www.energia.co.jp/energy/energia/kankyou/index.html

Note 2: Between power generation and power sales, power is consumed at power stations and losses occur

during transmission and distribution

# I. Promotion of Global Warming Countermeasures











- (1) Broader use of non-fossil energy Nuclear
  - 1. Use of nuclear power generation while making safety a top priority
  - Developing new nuclear power as a key countermeasure for global warming

#### Renewable energy

- 3. Broader introduction of hydro, solar, wind, biomass, and other forms of renewable energy
- Steps to expand introduction of renewable energy such as hybrid storage battery systems
- (3) Dissemination and encouragement of energy saving
  - 1. Support for customers' energy-saving measures through use of smart meters, etc.
  - Provision of heat pumps and other energy-saving products

# (2) Efficient use of fossil energy

- Use of the economically best available technology (BAT) in developing new thermal power stations. Optimizing operation and maintenance of existing power stations
- Development of advanced technology such as power generation based on an integrated coal gasification fuel cell (IGFC) combined cycle
- 3. International technical support in areas including coal-fired thermal power generation

#### (4) Other measures

- Efficient operation of power transmission/distribution equipment
- 2. Curbing emissions of regulated chlorofluorocarbons to protect the ozone layer

At Chugoku Electric, we recognize the importance of initiatives that address the issue of global warming. Based on the S + 3E policy (Safety + Energy Security, Economic Efficiency and Environment), while aiming for a balanced mix of power sources, we will work to become carbon neutral by 2050 to ensure a sustainable future society. At the same time, we will work to reduce CO<sub>2</sub> emissions, and achieve the levels prescribed by benchmark indicators\*1 based on the Act on Rationalizing Energy Use.

A Carbon Neutral Chugoku Electric Power Group by 2050: See p. 16

Development of a Balanced Mix of Power Sources: See p. 25

# CO<sub>2</sub> Emissions Record

Due to the shutdown of nuclear power stations after the Great East Japan Earthquake, there has been an increase in our company's CO<sub>2</sub> emission factor compared to when our nuclear power stations were operating, but in recent years this factor has been in a declining trend.

In FY2021, CO<sub>2</sub> emissions were 24.15 million t-CO<sub>2</sub>, and CO<sub>2</sub> emission factor was 0.521 kg-CO<sub>2</sub>/kWh, both of which marked a decline from FY2020 due to factors such as increased ratios of renewable energy. (Numerical values are adjusted\*<sup>2</sup>)



<sup>\*1</sup> Benchmark indicators: Standards for energy conservation to be achieved in the medium- to long-term. As the levels to be aimed for, Indicator A (1.00 or higher) and the Indicator B (44.3% or higher) have been established for electricity suppliers.

<sup>\*2</sup> Reflects adjustments relating to feed-in-tariffs (FIT) and deductions from CO<sub>2</sub> emissions credits based on the Act on Promotion of Global Warming Countermeasures, etc. Figures in parentheses indicate values before reflection (emissions and emissions factors before adjustment).

# Broader Use of Non-fossil Energy

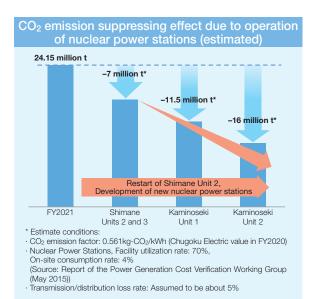
# Use and development of nuclear power

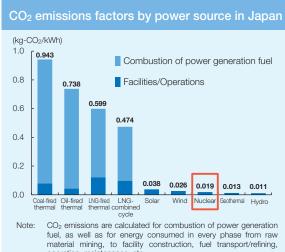
Nuclear power is outstanding in terms of fuel supply stability and economy. It also does not emit CO<sub>2</sub> during operation, and thus is superior for dealing with the issue of global warming.

Therefore, it is important to maintain a certain level of nuclear power in the energy mix. While ensuring that safety is the top priority, we will strive to startup Shimane Units 2 and 3 as early as possible, and develop the Kaminoseki Nuclear Power Station as a vital power source for the future.

Further Improvement of Safety of Nuclear Power Stations: See p. 26







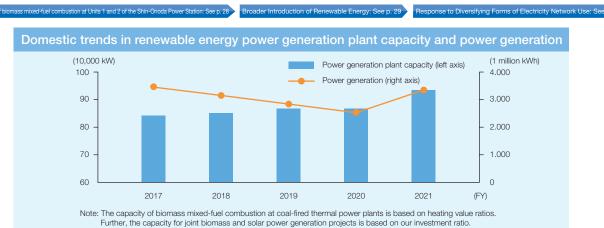
operation, maintenance, etc

Source: Central Research Institute of Electric Power Industry (CRIEPI) Report "Life Cycle CO<sub>2</sub> Emissions Evaluation of Japanese Power Generation Technology (July 2016)"

# Broader introduction of renewable energy

Hydro, solar, wind, and other forms of renewable energy will never run out, and do not produce CO2 when used for power generation. At the Chugoku Electric Power Group, in addition to the development of domestic hydro, solar, and wind power, we are actively contributing to the decarbonization of society through participation in hydro and wind power projects overseas. At the same time, we are purchasing power from renewable energy facilities, and working to increase introduction of renewable energy through maximal use of our existing power networks.

As another direction, biomass is organic material produced from inorganic water and CO2 through photosynthesis by living organisms. This is a sustainable, renewable resource derived from life and the energy of sunlight. At our Shin-Onoda Power Station and Misumi Power Station, we generate power through mixed combustion of woody biomass with coal, and we are promoting other biomass power generation projects throughout our entire Group.



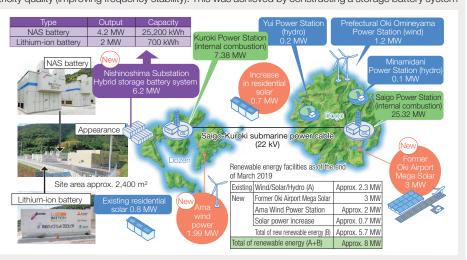
# Oki Islands Hybrid Project

This project for achieving broader introduction of renewable energy on the Oki Islands (Shimane Prefecture) was selected for subsidies by the Ministry of the Environment. A hybrid storage battery system (referred to hereafter as the "storage battery system") was installed at Nishinoshima-cho, Oki-gun, Shimane Prefecture, and demonstration of the system was carried out from September 2015 to March 31, 2019. As a result of this demonstration, we were able to increase, in a short time frame, the introduced amount of renewable energy from about 2.3 MW to about 8 MW, while still maintaining electricity quality (improving frequency stability). This was achieved by constructing a storage battery system

for power system control combining two types of storage batteries.

The results were highly regarded, and the project received the Agency for Natural Resources and Energy Commissioner's prize at the 2019 New Energy Awards sponsored by the New Energy Foundation.

Taking into account the knowledge continue our active efforts like solving technical issues pertaining to introduction of renewable energy.



# Efficient Use of Fossil Energy

In order to curb  $CO_2$  emissions and attain the benchmark indicators of the Act on Rationalizing Energy Use through efficient use of fossil energy, we are working to improve thermal efficiency by using the best available technology (BAT) in developing new thermal power generation facilities, and optimizing operation and maintenance of equipment at existing power stations.

We are implementing the Osaki CoolGen Project with the aim of realizing innovative, low-carbon, coal-fired power generation coupling integrated coal gasification fuel cell (IGFC) combined cycle power generation with CO<sub>2</sub> capture.

Furthermore, through participation in international business, we are working to reduce global-scale environmental impacts by leveraging the technologies, experience, and other capabilities—in fields such as high-efficiency coal-fired thermal and hydroelectric power—that we have previously cultivated in our electricity business.

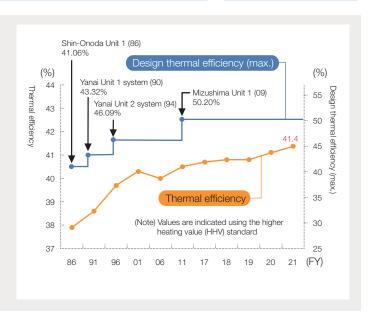
Higher Efficiency and Lower Carbon Emissions in Thermal Power Generation: See p. 28

International Business: See p. 34

#### Thermal power station heat efficiency

The thermal efficiency of our thermal power stations has been improved through introduction of the LNG-combined-cycle generation system, the ultra supercritical generation system, and other approaches. Efficiency in FY2021 was 41.4% (value when converted to the lower heating value standard: 43.7%). If we assume the thermal efficiency of each of our thermal power stations is improved by 1%, then  $\rm CO_2$  emissions will be reduced by approximately 400 thousand t- $\rm CO_2$  every year, and this will save roughly 100 thousand kL of fuel (in heavy oil equivalent).

Target levels were not achieved for the FY2021 benchmark indicators based on the Act on Rationalizing Energy Use, but through planned initiatives such as use of BAT, replacement of aging thermal power facilities, and mixed-fuel combustion with biomass, targets are expected to be attained by FY2031.



# Supporting Energy-saving Activities of Customers and Offering Customers Energy-saving Products

Our Group is working to make efficient use of energy more prevalent through approaches as represented by recommending high-efficiency systems suited to the needs of each customer, and providing information to help people conserve energy. We have also been installing smart meters (approx. 5 million units) as environmental infrastructure that enable more effective energy-saving initiatives. Elsewhere, we offer renewable energy-based electricity rate plans to enable customers to reduce the environmental impact of the energy they use, and we also provide a service whereby customers can use solar power-derived electricity with zero initial investment costs.

Renewable energy rate plans and services: See p. 32

Making Electrification Proposals to Help Conserve Energy and Reduce Costs; See p. 33

# Living support website "Gutto Zutto. Web"

Here we showcase the latest information on energy-saving appliances, and methods/ideas for energy conservation. The site includes features enabling users to easily estimate the effect of economizing.



# "Gutto Zutto. EV Charging"—Blue Switch Plan

For "Gutto Zutto. Club" members who meet certain conditions, this plan offers a maximum of 3,000 Energia loyalty points to customers with Nissan electric vehicles.



# Participation in the Electric Power Council for a Low Carbon Society (ELCS)

We participate in the Electric Power Council for a Low Carbon Society, and are working to achieve FY2031 CO<sub>2</sub> emissions reduction targets for the electricity business as a whole.

EL(S) 電気事業低炭素社会協議会

https://e-lcs.jp/

FY2031 CO<sub>2</sub> emissions reduction targets for the electricity business as a whole

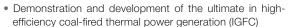
CO<sub>2</sub> emissions factor About 0.37kg-CO<sub>2</sub>/kWh (use end) Maximum potential reduction through steps such as using BAT in developing new thermal power stations, etc.

Approx. 11 million t-CO<sub>2</sub>

**ELCS** website

# Participation in Challenge Zero (Challenge Net Zero Carbon Innovation)

We are a participant in Challenge Zero, an initiative to realize a decarbonized society promoted by the Japan Business Federation (Keidanren), and we have announced the following initiatives as part of those efforts.



- Installation of a hybrid storage battery system on the Oki Islands as an approach to expand introduction of renewable energy
- Development of technologies to produce environmentally friendly concrete in which CO<sub>2</sub> is captured, and promotion of its dissemination
- VPP demonstration project using reuse technology for EV batteries
- $\bullet$  Development of a new bioprocess for recycling  $\text{CO}_2$
- Reuse of coal ash as a civil engineering material through a technology that solidifies CO<sub>2</sub> using microwaves



(Source: Prepared based on a figure posted on the Challenge Zero website)

Challenge Zero https://www.challenge-zero.jp/en/

# II. Promotion of the Formation of a Recycling-oriented Society







- 1. Promoting the 3Rs, that is, reduction, reuse and recycling, putting a primary focus on reducing generation of wastes
- 2. Developing advanced recycling technologies and offering waste-derived products such as products using coal ash to customers

# Promoting the 3Rs

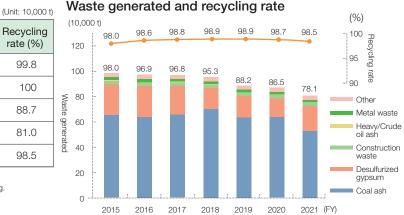
To help build a recycling-oriented society, at the Chugoku Electric Power Group we are proactively engaged in recycling efforts, and in FY2021, we were able to recycle 98.5% of the waste we generated. Our recycling rate of coal ash, a byproduct of our thermal power generation, remained a particularly high 99.8% thanks to our development and utilization of coal ash-based products.

# Waste generated and recycled

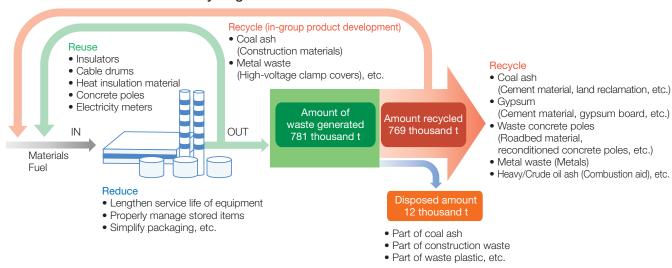
Item		Amount generated	Amount recycled	Amount disposed of	Recycling rate (%)
	Coal ash	54.1	54.1	0.1	99.8
Industrial waste	Desulfurized gypsum	14.4	14.4	0.0	100
	Construction waste, etc.	9.4	8.4	1.1	88.7
General waste		0.2	0.1	0.0	81.0
Total		78.1	76.9	1.2	98.5



Note 2: Totals may not match the sum of individual amounts due to rounding.



#### Flow of waste treatment and recycling



# Developing Advanced Recycling Technologies and Offering Waste-derived Products to Customers

# Development of coal ash products

We are actively developing coal ash products to recycle the coal ash produced by coal-fired thermal power stations. These efforts include developing construction materials exploiting coal ash characteristics, as well as application technologies for such products.

This work has been lauded as revolutionary R&D. In April 2018, for example, an R&D group including researchers from our company received a commendation from the Minister of Education, Culture, Sports, Science and Technology (Science and Technology Award, Development Category) for "Development of a water body bottom improver using Hi-beads, made from granulated coal ash."



# Overview of coal ash products

Coal ash product promotional mascots Haikara Sisters

Coal ash serving as raw material	Fly	Clinker ash	
Product name	Eco-powder	Hi-beads	Light Sand
Product description	Made by sorting and grading fly ash	Made by adding a small amount of cement and water to fly ash, and then granulating	Made by crushing lumps of clinker ash into a sandy form
Tunnel spraying material, fly ash concrete, construction material, etc. of use		Material for environmental remediation of bottom sediments in coastal regions and estuaries, and ground improvement in ports, etc.	Lightweight banking material, retaining wall backfill material, backfill/drainage material around structures (for athletic fields), etc.

## Product manufacturing capacity at each power station E

Manufacturing location	Product manufacturing capacity (annual)		
Misumi Power Station	Hi-beads: Approx. 50 thousand t Light Sand: Approx. 30 thousand t Eco-powder: Approx. 20 thousand t		
Shin-Onoda Power Station	Light Sand: Approx. 30 thousand t Eco-powder: Approx. 40 thousand t		
Mizushima Power Station	Light Sand: Approx. 10 thousand t		

#### Examples of use







Greening material used in the open space around Toranomon Hills (Light Sand)

Effective use of coal ash Information on coal ash products

https://www.energia.co.jp/business/sekitanbai/index.html

# Environmental improvement through use of Hi-beads Restoration of Onomichi asari clams: See p. 72 When scattered across the floor of coastal areas and estuaries, Hi-beads can improve environments in bottom sediment. Further, the minerals in Hi-beads also promote the creation of beds of seaweed, which attract diverse organisms and form ecosystems. CO<sub>2</sub> In addition, these ecosystems can solidify and absorb CO2 and absorbed by tidal flats and and increase blue carbon. Hi-beads effect CO<sub>2</sub> absorbed by seawater Carbon is absorbed Hi-beads covered Formation Carbon is buried sand of seaweed and solidified into sediment

# III. Promotion of Local Environmental Conservation











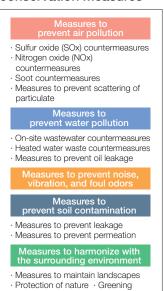
- 1. Reduction of environmental impact on air, water, etc.
- 2. Prevention of noise, vibration, soil contamination, and foul odors, and harmonization with the surrounding landscape
- 3. Proper management of chemical substances such as PCBs and asbestos
- Protection of biodiversity in accordance with local characteristics, through implementation of environmental assessments, etc.

# Reduction of Environmental Impact and Harmonization with the Surrounding Landscape

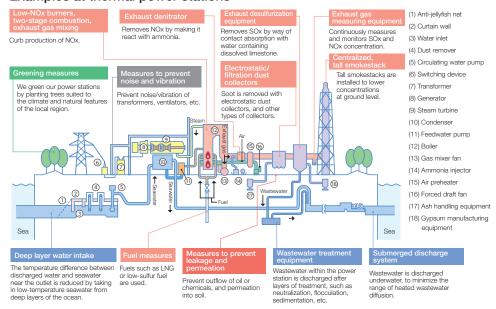
# Environmental conservation measures at power stations

In order to conserve the local environment, we measure and monitor soot, wastewater, and other power station emissions based on laws established by the national and local governments, and environmental conservation agreements with local governments. We are also introducing environmental protection equipment employing state-of-the-art technologies.

# Overview of environmental conservation measures



# Examples at thermal power stations



# **Proper Management of Chemical Substances**

#### Efforts to detoxify PCBs

Our Group is striving to treat 100% of PCB (polychlorinated biphenyl) waste within the statutory time limit.

We are handling items such as fluorescent lamp ballasts that use high-concentration PCBs by contracting with the Kitakyushu PCB Waste Treatment Facility of Japan Environmental Storage & Safety Corporation (JESCO). All treatment was completed by the end-of-FY2021 deadline. Low-concentration PCB waste is detoxified at a certified facility outside our company. This treatment will be done in a planned fashion by the deadline (end of FY2027).

In the event that any waste is newly discovered after the deadline, we will ensure appropriate disposal following consultations with the relevant administrative body and/or JESCO.

High-concentration PCB waste treatment situation (Environmental Data Collection)

https://www.energia.co.jp/energy/energia/kankyou/index.html

## Response to the asbestos issue

Our Group established a policy on response to the asbestos issue in FY2006. We are dealing appropriately with this issue by banning new use of asbestos, and periodically investigating the usage situation.

Efforts to address the asbestos issue

https://www.energia.co.jp/energy/energia/ishiwata/index.html

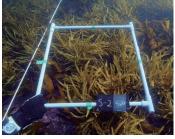
# Protection of Biodiversity in Accordance with Local Characteristics

# Implementation of environmental assessments

When newly constructing or expanding a power station or other facility, we conduct an environmental impact assessment using the latest technology, and based on legal and regulatory requirements.

In an environmental impact assessment, we thoroughly investigate, predict, and evaluate beforehand what sort of effects there will be on the surrounding natural and social environment. We listen to the views of everyone in the local community, and based on that we take appropriate measures to conserve the environment, and thereby minimize environmental impacts on our surroundings.





Aerological observation

Sea area surveys (seaweed)

# Monitoring the surrounding environment after the start of power station operation

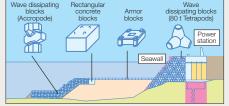
After a power station commences operation, we monitor the condition of the air, sea, and other aspects of the environment surrounding the power station based on arrangements such as environmental conservation agreements concluded with relevant local governments. We report the results to these local governments, and provide disclosure to the general public.

Misumi Power Station Results of environmental monitoring https://www.energia.co.jp/area/shimane/entry/12008.html

Results of investigation on environmental radiation around the Shimane Nuclear Power Station (Shimane Prefecture website) https://www.pref.shimane.lg.jp/bousai\_info/bousai/bousai/genshiryoku/sihannki.html

# Creating a habitat environment for fish and shellfish by installing an artificial reef

By installing an artificial reef (shoal) in the sea area in front of the seawall at Unit 3 of our Shimane Nuclear Power Station, we have reduced the water depth, making it easier for sunlight to reach the seabed. This creates a favorable habitat for the propagation and growth of fish, shellfish, and seaweed species such as *Ecklonia kurome*.

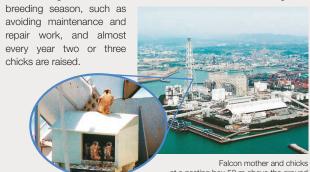


Cross-section of an artificial reef

# Coexistence with peregrine falcons on the premises of one of our coal-fired thermal power stations

In 1992, we discovered a mating pair of peregrine falcons and their chicks breeding on the premises of the Shin-Onoda Power Station, and we installed a nesting box midway up the smokestack.

We take a great deal of care not to disturb the falcons during their



# Management of forests for recharging water resources

To continually secure and utilize the water necessary for hydroelectric power generation, we have roughly 1,530 ha of forest for recharging water resources. These forests are located in the upper reaches of the Yoshii River and Takahashi River in Okayama Prefecture, and the Ota River in Hiroshima Prefecture. Here, we carry out proper management

such as pruning and thinning. These forests have many functions aside from recharging water resources, including absorbing the  $\mathrm{CO}_2$  that causes global warming, preventing soil runoff, and protecting the habitat environments of wild animals and plants.



Planted forest of Japanese cypress (Tomata-gun, Okayama Prefecture)

## Agreement with the Declaration of Biodiversity by Keidanren

We agree with the Declaration of Biodiversity advocated by the Japan Business Federation (Keidanren). This declaration aims to realize a sustainable society through coexistence with nature. As part of this agreement, we have announced the following initiatives:

- O Improving riverbed environments using Hi-beads recycled coal ash products
- Oreating a habitat for fish and shellfish by installing an artificial reef
- Coexisting with peregrine falcons on the premises of one of our coal-fired thermal power stations

Website of the Keidanren biodiversity initiatives

http://www.keidanren.or.jp/ policy/2020/055.html

# **IV. Promotion of Environmental Communication**





#### Two-way communication

1. Proactive information disclosure/distribution and consultation with the public

#### Partnership with society

- 2. Voluntary implementation of environmental conservation activities, and participation in and cooperation with community events
- 3. Promotion of activities to support energy/environmental education for the next generation
- 4. Promotion of technical cooperation with developing countries and international exchange by accepting trainees, etc.

# Proactive Information Disclosure/Distribution and Consultation with the Public

# Response to the CDP Climate Change Questionnaire



At Chugoku Electric we respond to the climate change questionnaire provided by CDP,\* an international NGO working in environmental fields like climate change questionnaire

provided by CDP,\* an international NGO working in environmental fields like climate change. Based on our responses, in 2020 we received a score of A-, which is the highest among companies in the power industry.

\*Formerly the Carbon Disclosure Project, CDP is an international NGO established in 2000. The CDP uses questionnaires to collect and analyze information on the risks and opportunities that climate change and other environmental issues present to companies. The organization uses a common measurement system to disclose this information, and ranks companies based on their scores. In 2020, 9,526 companies (375 in Japan) responded to the CDP's climate change questionnaire.

Response

https://www.energia.co.jp/e/ environment/other/cdp/index.html

# Chugoku Electric Environmental Forum

We have set up the Chugoku Electric Environmental Forum to enable outside experts to assess and provide opinions on the Group's environmental efforts, and we reflect their findings into our business activities.



Environmental forum

# Voluntary Implementation of Environmental Conservation Activities, and Participation in and Cooperation with Community Events

In order to improve environmental awareness of the local community as a whole, our Group holds environmental communication events that place a high value on interaction with customers.

In coordination with Japan's national Environment Month, we designate June of every year as Energia Group Environment Month, and engage in various activities relating to the environment.







Coastal cleaning activities

# Promotion of Activities to Support Energy/Environment Education for the Next Generation

To spark an interest in learning about energy and the environment, we conduct education support activities for the next generation (e.g., visiting schools, electricity seminars). In recent years, we have uploaded videos to YouTube about the SDGs, carbon neutrality, and other themes, and provided online lessons as measures to prevent the spread of COVID-19.

Educational Support Activities: See p. 70



Forest thinning event



YouTube videos

# V. Implementation of Environmental Management







- 1. Compliance with environmental laws, agreements, etc., through approaches such as bolstering environmental education and training for employees
- 2. Continuous improvement of the environmental management system (EMS)
- 3. Reducing electricity use in our own offices, promoting paperless operations using information and communications technology, actively purchasing green products, and otherwise implementing green office activities
- 4. Strengthening in-group collaboration and coordinating with business partners

# Thorough Compliance with Environmental Laws and Agreements through Enhanced Environmental Education and Training

# Bolstering environmental education and training for employees

In addition to providing environmental education at each workplace, our Group has held environmental consultation meetings for environmental education and consultation since FY2017, as part of our efforts to reduce environmental risk and improve environmental awareness of all employees. These meetings are conducted by having employees from the Regional Relations Division (Environment) visit each business site.



Environmental consultation meeting

# PDCA for compliance with environmental laws

At the business offices of our Group, we are working to make risk visible by identifying environmental laws and regulations applicable to work/equipment at each office, and managing compliance according to a list of compliance matters. We periodically check that there are no violations or other issues regarding compliance with environmental laws and regulations, and we work hard to achieve continual improvement by reviewing the lists and other procedures as necessary whenever a violation or other problem is discovered, and going through the PDCA cycle.

We also strive to share information such as examples of improvement to help achieve compliance with environmental laws and regulations at each business office.

# Environmental award system

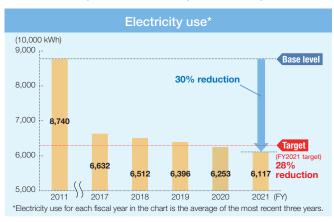
At Chugoku Electric we have run an environmental award system since FY2006. Through this system, we commend employees and business offices that have achieved outstanding results in their efforts to counter environmental issues.

#### Environmental awards FY2019-FY2021

Activity	Commended business office
Saving energy and reducing environmental impact of power plant during planned shutdown	lwakuni Power Station
Disseminating and promoting energy-saving measures in the Energy Sales Division	Energy Sales Division
Reducing CO <sub>2</sub> emissions through woody biomass mixed-fuel combustion	Shin-Onoda Power Station     Power Generation Division

# Implementing Green Office Activities

In our Group, we have established an Action Plan for Green Office Implementation, and we are promoting efforts to save energy such as improving electricity/water use and gasoline fuel efficiency, as well as initiatives relating to resource saving and recycling, including reduction in waste volume, reduction/recycling of office paper, and green purchasing.







**Personnel** and Society

The growth of our Group depends on the diverse experiences and values of each and every one of our employees.

One of the missions set out in our Group Corporate Vision is to "Inspire employees through our culture." In addition, one of our non-financial goals is "The further enhancement of work environments for diverse human resources."

To maximize the capabilities of our diverse workforce and create new value, in addition to implementing thorough employee training and passing on our techniques and skills to future generations, we will strive to create a comfortable, rewarding working environment.

# Utilizing Our Diverse Values and Experiences

Vision The further enhancement of work environments for diverse human resources

To ensure the success of diverse human resources, in addition to hiring mid-career individuals such as experienced personnel from other companies and highly specialized employees, we are also promoting active roles for women and the employment of people with disabilities.

# Promoting active roles for female employees

As a key initiative to bring together the diverse personalities and abilities of our employees and further enhance our organizational strength, we are actively promoting the roles of female employees.

Meanwhile, we are encouraging employees to display their abilities by assigning them a wide range of duties based on our aptitude and development programs. Further, through various workshops and other educational events, we are looking to develop the mindsets of management and female employees.

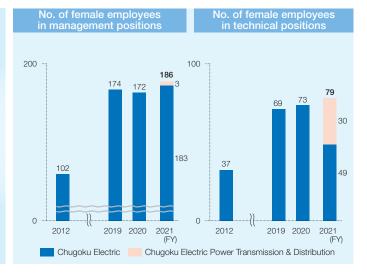
# Target (FY2021-FY2025/beginning of FY2020)

Target 1: Increase the number of female employees in management positions

		Details	Target	FY2021	
Chugoku		Ratio of female employees at section chief or above	More than 2 times the number in FY2020 (more than 3.7%)	1.86%	
Electric	Ratio of female employees in management positions	More than 1.2 times the number in FY2020 (more than 8.7%)	8.14%		
	Chugoku Electric Power Transmission & Distribution	No. of female employees in management positions	More than 1.2 times the number in FY2020 (more than 3)	3	

Target 2: Increase the number of female employees in technical positions

	Details	Target	FY2021
Chugoku Electric	No. of female employees in technical positions	More than 1.2 times the number in FY2020 (more than 59)	49
Chugoku Electric Power Transmission & Distribution	No. of female employees in technical positions	More than 1.2 times the number in FY2020 (more than 30)	30



# Initiatives to promote active roles for women

As one part of our efforts to promote active roles for women, since FY2019 we have held workshops for the managers of female

Further, in FY2021, we created a network for our female employees in technical positions, and to promote awareness of independent career development while considering key life events, we held a meeting to discuss these matters for the first time.



Workshops for managers of female employees



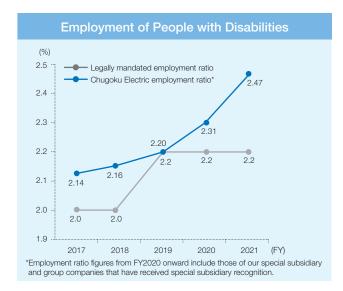
Meeting with female employees in technical positions

See here for general employer action plans based on the Act on Promotion of Women's Participation and Advancement in the Workplace https://positive-ryouritsu.mhlw.go.jp/positivedb/planfile/20200409909222757185\_1.pdf

# Promoting the employment of people with disabilities

We are constantly moving forward with the employment of people with disabilities to play our part as a corporate entity in supporting their independence.

We established our special subsidiary EnerGia Smile Co., Inc. in 2018, and in addition to enhancing our working environments to cater to people with disabilities, we are making further efforts to promote their employment.



# Completion of the EnerGia Smile head office building

In September 2020, construction of the EnerGia Smile head office building was completed in Saka-cho, Aki-gun, Hiroshima Prefecture. In line with barrier-free specifications, the building has been designed to ensure a comfortable working environment for employees with disabilities. The floor is free of any level differences, and to ensure ease of use for those in wheelchairs, corridors and toilets have been made more spacious. Elsewhere, tiered signal lights have been

hearing of any warnings. At the head office building, among others, employees are engaged in the printing of business cards and the sorting of used electricity meters.

inform those with impaired



Employees sorting used electricity meters

# Employment of seniors

To utilize the expertise, techniques, and experiences of senior employees, for those who wish to work past the age of 60, we have established a voluntary reemployment system that enables them to work until the age of 65. In this way, we are responding to the diverse employment needs of employees in their senior years.

# Enhancing Working Environments to Allow Employees to Flourish

Vision The further enhancement of work environments for diverse human resources

To ensure our employees can maintain good health and a high level of productivity, we are engaged in a range of work-life balance initiatives. These include the implementation of a flextime system, a work-interval system, and a system that allows employees to balance both work and childcare/nursing care.

# Promoting diverse workstyles

To promote a diverse range of workstyles, we have recently introduced flextime systems, work-from-home systems, and others. We are also using these as measures to prevent the spread of COVID-19, and looking ahead, we will continue to advance other diverse workstyle initiatives.

## **Recent Examples**

- · Flextime system
- · Work-interval system
- · Work-from-home system

- · Free seating offices (partial)
- · Enhancement of communication means such as chat systems

# Supporting an optimal work-life balance

We have established temporary leave and shortened worktime systems for employees engaged in childcare/nursing care, leave and staggered worktime systems for employees taking care of their sick children or relatives, and a range of other systems to support employees' home lives. Further, we are working to develop a workplace culture that makes it easy for both male and female employees to balance work and life. Thanks to these and other efforts, we have received Kurumin accreditation from the Ministry of Health, Labour and Welfare, showing our active support for parents raising children.



# Targets and Policies (FY2022–FY2025)

#### Promoting diverse workstyles

Target To support an optimal work-life balance, promote use of existing systems.

Policies

- Work to further understanding and awareness of systems introduced the previous term. ascertain degree of utilization, and examine necessary revisions.
- Work to improve environments suited to teleworking.

# Promoting male employees' participation in childcare

Target Develop a workplace culture that encourages and supports active participation by male employees in childcare.

- Continue to further understanding of the significance of male participation in childcare.
- Policies · Through enhancement of information about childcare participation, boost interest among employees, and support male employees interested in utilizing the system.

#### Major initiatives

- · Continuous implementation of childcare questionnaires for male and female employees
- · Creation of a childcare support system handbook for male employees
- · In-house intranet articles featuring employees (and their managers) who have used our childcare support systems

Act on Advancement of Measures to Support Raising Next-Generation Children See here for general employer action plans: https://ryouritsu.mhlw.go.jp/hiroba/planfile/202103301818053328770\_1.pdf

# Systems that support an optimal work-life balance

	•
Childcare leave	Until the child is 2 years old
Shortened worktime for childcare	Worktimes can be shortened by up to 2 hours
Nursing care leave	Up to a total of 1 year
Shortened worktime for nursing care	Worktimes can be shortened by up to 2 hours
Staggered worktimes (due to personal circumstances)	Work start times can be staggered in 30-minute increments
Life support leave*	Caring for sick children, childcare, children's ceremonies and events, nursing care for relatives, childbirths, etc.

<sup>\*</sup>A system unique to Chugoku Electric that flexibly caters to a wide range of lifestyle needs, from employment to retirement.

# 男性社員のための 育児支援制度利用ハンドブック

Childcare Support System Handbook for Male Employees

#### Figures are the combined total for Chugoku Electric and Chugoku Electric Power Transmission & Distribution

System		Utilization			
		FY2019	FY2020	FY2021	
	Female	44	48	43	
Childcare leave (Lower rows denote acquisition rates)		100%	100%	100%	
	Male	6	8	22	
		3.0%	3.8%	11.1%	
Nursing care leave		0	0	0	
Life support leave		2,901	2,790	2,385	

# Appropriate management of working hours

To comply with laws and regulations and to prevent excessive working hours, we strive to appropriately manage employees' working hours.

We have in place a management system which accurately records actual working hours, and through which both managers and employees can check the records' accuracy. Moreover, each site regularly holds labor-management committee meetings to proactively ascertain actual working conditions.

#### Fostering sound labor-management relationships

At Chugoku Electric, we hold collective bargaining meetings with both labor and management on an equal footing to discuss and negotiate working conditions. We also hold timely discussions with labor unions on management policies, management plans, and other major management measures, while we ensure democratic, smooth operations by exchanging opinions on all aspects of our business.

# Personnel evaluations and deployment

We undertake personnel evaluations to promote the development and fair treatment of our employees. Employees are appraised on their achievements, their ability to accomplish tasks, and their aptitude, etc., in a fair and impartial manner.

To heighten the transparency and legitimacy of these evaluations, we disclose a set of evaluation standards that clarify the company's requirements, and give feedback to employees regarding their results. We have also established a self-reporting system through which employees can communicate with their managers. Employees can offer opinions on their duties and workplace, their future goals and leadership aspirations, and their hopes and efforts regarding skills improvement. Moreover, we hold interviews to ensure there is a mutual understanding between employees and their managers.

In addition, results regarding employees' performance and aptitude are utilized in medium- to long-term development programs, as well as to transfer employees to ensure they are in the right place.

Vision The further enhancement of work environments for diverse human resources

To develop human resources that can flexibly and accurately adapt to changing business environments, we have established the Chugoku Electric Human Resources Vision which defines the type of individual required in these changing times. In addition to widely sharing this vision, we are supporting employees' individual self-improvement efforts and enhancing our human resources training programs.

Ideal Human Resources That Are in Demand (Chugoku Electric Human Resources Vision)

# In these changing times, we believe in the concept of "Thinking and acting by ourselves."

- O Thinking by ourselves: we mean focusing our wisdom and creating new value from the perspective of our customers
- O Acting by ourselves: we mean taking on challenges and acting with resolute determination with regard to new and unprecedented issues and tasks

## Human resources development structure

Employees work toward the Chugoku Electric Human Resources Vision through self-improvement, and as a company we support their individual growth. Specifically, superiors begin by accurately ascertaining employees' willingness to improve, their current skillset, and their current effort levels. Based on their willingness to improve, employees are assigned tasks that contribute to their growth, and provided with both on- and off the-job training to ensure effective, systematic development.

# 1. On-the-job training (OJT)

Based on the growth goals that employees independently set at the beginning of the fiscal year, superiors formulate development plans, and guide and educate employees through their everyday work to help them acquire the necessary expertise, techniques, and attitudes

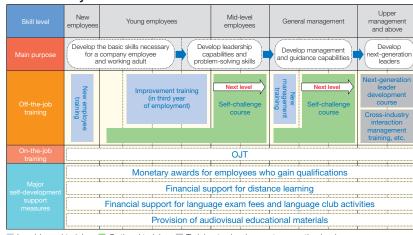
# 2. Off-the-job training

Starting from the time they join the company, all employees undertake training based on their ascending level within the company, while education is provided to equip them with the specialist expertise, techniques, and skills required for their division

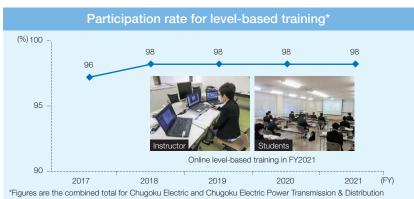
#### 3. Self-development

A system is in place to support self-development and help employees improve the expertise and skills necessary for their work, and support their efforts to gain qualifications

# Education system structure







# Advanced techniques and skills certification system

At Chugoku Electric and Chugoku Electric Power Transmission & Distribution, employees with advanced techniques and skills in specific fields are recognized as Energia Masters. Energia Masters undertake a wide range of activities to pass on our techniques and skills to future generations, such as providing technical guidance on-site, and giving lectures both inside and outside the company. Energia Masters are recognized in eight categories related to, among others, the operation, maintenance, and construction of electric power equipment. In FY2021, nine employees were newly certified as Energia Masters.

# No. of Energia Masters as of the end of FY2021\*

Total: 59

Power distribution	12	Transmission/ transformation	14
Thermal power	15	Civil engineering	5
Nuclear power	8	Construction	2
Hydroelectric power	2	Information	1

<sup>\*</sup>Figures are the combined total for Chugoku Electric and Chugoku Electric Power Transmission & Distribution

# Health and Safety

At Chugoku Electric and Chugoku Electric Power Transmission & Distribution, we believe that prioritizing the health and safety of all individuals concerned with the Chugoku Electric Power Group is fundamental to our business activities. As such, we are both working together to ensure the safety and maintain and improve the physical and mental health of each and every one of our employees. In addition, we are constantly working to eliminate all occupational accidents, including in our contracted and outsourced work. We also regularly hold Health and Safety Promotion Meetings with employees from various divisions to deliberate on key matters pertaining to health and safety promotion and promote relevant measures in a comprehensive manner.

Moreover, each year we formulate a Health and Safety Management Policy which is driven by the thorough safety management of managers and independent workplace action. And, with advance safety initiatives, strict compliance with basic rules, and active communication as central pillars, we are engaged in a variety of activities to create healthy, safe, and vibrant workplaces.

#### Safety initiatives

Aiming to create workplaces with zero occupational accidents, we are involved in various efforts to enhance the safety awareness of each of our employees and ensure that safe work practices become the norm. These include thorough safety management by managers, who form the basis of ensuring safety; hazard prediction activities to enhance employees' awareness of danger; and risk assessment to help employees' implement advance safety measures.

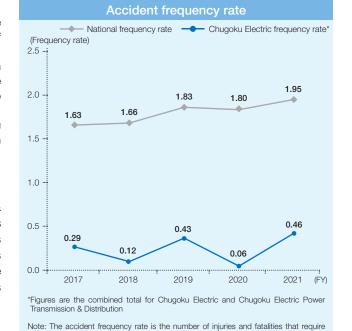
As a result, the accident frequency rate at Chugoku Electric and Chugoku Electric Power Transmission & Distribution continues to be lower than the national standard.

# **Traffic safety measures**

At Chugoku Electric and Chugoku Electric Power Transmission & Distribution, we have established our own certification for drivers of work-related vehicles. Both legal administrators and managers ensure strict safe driving management, and safe driving instructors (who have undergone specialized education and training) provide practical guidance on a daily basis to improve driving skills and etiquette.

# Safety measures for contracted and outsourced work

To fulfill our responsibility as outsourcers, we proactively provide accident prevention guidance and support to our contractors, partner companies, and consignees. We also work together to prevent accidents caused by human error.



more than one day off from work for every one million hours worked.

#### Health initiatives

# Efforts for a healthy body and mind

In line with the THPP\* devised by the Ministry of Health, Labour and Welfare (MHLW), based on employees' medical examination results, we are implementing various initiatives such as health guidance, smoking cessation support, and walking promotion months. In this way, we are continuously assisting employees' independent health promotion efforts.

Moreover, to prevent health problems resulting from overwork, among others, we are reducing working hours and ensuring that consultations with occupational health physicians are thoroughly implemented.

\*Abbreviation for Total Health Promotion Plan. The plan is a set of guidelines from the MHLW that lays down methods of implementing measures that business owners have to take to promote the physical and mental health of workers.

#### Mental health initiatives

We are also promoting the four types of care as defined by the MHLW: self-care, care from managers, care from occupational health staff, and care from external institutions.

Specifically, we are educating all employees and management employees on mental health, conducting stress checks, offering a system through which employees can consult with occupational health staff, and utilizing specialized external institutions to prevent mental health issues and provide appropriate support. We have also launched a system to enable those taking time off work to smoothly return to their workplaces.

# Health and productivity management

Following on from last year, our efforts to ensure a healthy mind and body for our employees were once again recognized at the 2021 Certified Health & Productivity Management Outstanding Organizations Recognition Program in the Large Enterprise category.

Looking ahead, safety and health will be fundamental to our business activities, and we will therefore proactively work to maintain and promote the health of our employees.



# **Human Rights Education**

Respect for each and every individual is a fundamental aspect of our business, and we are making efforts to create a society in which there is no discrimination, and in which human rights are truly protected.

#### Human rights education promotion system

To solve a variety of human rights issues and to fulfill our corporate social responsibility, at Chugoku Electric and Chugoku Electric Power Transmission & Distribution, we have established a Human Rights Education Promotion Committee. So that we can provide human rights education in tandem with labor unions, we hold Labor-management Human Rights Promotion Meetings which are mainly geared towards the exchange of opinions regarding human rights training and other matters.

Further, we have assigned human rights promotion supervisors and officers to each of our offices, and are promoting human rights education through workplace training sessions and other means. In addition, to promote cooperation between the abovementioned officers, we hold Human Rights Promotion Officer Meetings in each prefecture to share and exchange relevant information.

#### Human rights education initiatives

To further understanding of human rights issues associated with discrimination against certain communities and harassment, and to generate action to help solve these issues, we hold yearly workplace training sessions for all our employees, as well as level-based training sessions for new employees, new managers, and others.

No. of participants in workplace training sessions on a companywide unified topic\* (FY2021)

8,547

Total no. of participants in human rights training sessions\* (incl. those on left) (FY2021)

11,200

<sup>\*</sup>Figures are the combined total for Chugoku Electric and Chugoku Electric Power Transmission & Distribution

# Involvement with Local Communities

# ■ 70th Founding Anniversary of Chugoku Electric

On May 1, 2021, we celebrated our 70th founding anniversary. To commemorate the occasion, and to express thanks to our local communities, we held a number of events for children of the next generation based on the three themes of Smiles, Dreams, and the Environment.

Moving forward, we will aim to create beneficial value for society through our business activities, and in doing so, contribute to sustainability and regional development.

Energia 70<sub>th</sub> 次の未来、はじまる

70th anniversary logo

The combination of our EnerGia logo and the text "A New Future Is Just Beginning" expresses our long-term gratitude and determination for the future.

# Employees' social contribution activities

At Chugoku Electric and Chugoku Electric Power Transmission & Distribution, our foundations are firmly rooted in the Chugoku region. To aid in the region's development, our employees actively participate in various social contribution activities. These efforts encompass a range of fields including education, social welfare, and environmental conservation.

In particular, we use our standing as an electric power business to provide energy and environmental education to the next generation, while we also visit senior citizens' homes and social welfare facilities to interact with residents and inspect their electrical equipment.

We also support employees who wish to undertake volunteer work through the establishment of specifically designed leave systems.

FY2021\*

No. of activities

1,004

Total no. of employees participating

5,822

\*Figures are the combined total for Chugoku Electric and Chugoku Electric Power Transmission & Distribution

#### **Educational support activities**

To raise interest in environmental and energy-related matters among the next generation, we hold Wakuwaku E-School activities in various locations, which involve visiting schools and giving classes, and inviting children to visit our facilities.



#### Visiting senior citizens' homes

To support senior citizens' independence and contribute to social welfare, we use our standing as an electric power business to visit homes and social welfare facilities to interact with residents and inspect their electrical equipment.



#### Culture and sport promotion

#### Sports clubs' promotional activities

As sports that symbolize our company, at Chugoku Electric we place particular emphasis on our track and field, women's table tennis, and rugby clubs. To promote sport in local communities, among other activities, each of these clubs holds classes, predominantly for children, to improve the level of sport in those areas.



Energia Running School

# Supporting sports club activities during the pandemic Chugoku Electric project, Making Memories of Sport in the Summer

The spread of the COVID-19 pandemic and the ensuing cancellations of sporting tournaments have taken away opportunities for students to display the results of their hard work. To bring some joy to students through the power of sport and to create a summer that they'll never forget, we are currently engaged in the Chugoku Electric project Making Memories of Sport in the Summer.

In FY2021, athletes from our track and field, women's table tennis, and rugby clubs sent messages of support to students and uploaded videos

of their recommended summer training plans. We also invited students to send in videos of their own summer sporting activities, and received numerous entries. We received many positive comments, too, with students saying they were able to create fond memories from their final days at their clubs.



Recommended summer training plans

In 1994, the Chugoku Electric Power Group established the Energia Culture and Sports Foundation. The foundation helps to promote culture and sport in local communities. The foundation also awards individuals and organizations who have made outstanding achievements and who are making remarkable progress in the fields of art, music, traditional culture, and sport in the Chugoku region.

Culture and sport support cases (Cumulative total to FY2021)

Total no. of cases: 3,826 Total donations: ¥782.99 million



Awards ceremony

# Solving local issues/supporting local revitalization

The Chugoku region forms the foundation of our business. To contribute to the region's sustainable development and to ensure the continued growth of the Chugoku Electric Power Group, we are engaged in various cooperative and co-creation initiatives with our local communities.

# **Major Initiatives**

- · Solving local issues through comprehensive cooperative research with Hiroshima University, and partnerships with universities, local governments, and think tanks
- Distributing information to revitalize local communities through publications such as Aoi Kaze, the Chugoku Region White Paper, and the Chugoku Region Financial Overview
- Supporting local industries and regional revitalization through surveys and research in tandem with the Chugoku Economic Federation and the Chugoku Regional Innovation Research Center and subsidies from the Electric Technology Research Foundation of Chugoku (est. 1991)

Technological research support cases (Cumulative total to FY2021)

Total no. of cases: 1,593 Total donations: 41,226.26 million

#### Aoi Kaze

Aoi Kaze is a regional publication first published in August 1992. The 100th issue of Aoi Kaze was published in November 2020.



# Contributing to the community through management of Hiroshima Airport

Alongside other local corporations, we have been participating in the private management of Hiroshima Airport since July 2021.

"We will grow together with the community" is a key element of our management philosophy. Through this project, we will seek to promote the revitalization of Hiroshima Airport and its surrounding areas, and by enhancing interaction between locals and visitors, continue contributing to the development of the Chugoku region.



#### Restoration of Onomichi asari clams

#### -Memorandum of understanding with Onomichi City and others for the demonstration of Hi-beads

In September 2020, Chugoku Electric, Onomichi City, Hiroshima University, and the Matsunaga Bay Fisheries Association signed a memorandum of understanding for demonstrations aimed at the restoration of mainly asari clam ecosystems. For the demonstration, we will lay our Hi-beads coal ash product across 100 m<sup>2</sup> of tidal flats in the Onomichi area of Matsunaga Bay, and study the growth of asari clams until March 2022. Hi-beads boast a microporous structure that promotes the build-up of microalgae on their surface, which in turn improves feeding environments for asari clams. Hi-beads can also prevent damage to asari clams from natural enemies such as rays. Expectations are high for their overall ability to purify sludge and promote the restoration of asari clam ecosystems and others.



Workers laying the Hi-beads



Representatives and the memorandum of understanding

## "Gutto Zutto. Community Support Project"

At Chugoku Electric, we launched the "Gutto Zutto. Community Support Project" in April 2018 to communicate the charms of local regions and in turn promote their revitalization. We have appointed the services of the all-girl pop group STU48, who are active mainly in the Setouchi region, as project supporters.

The project itself involves events that help to bring excitement to local regions, as well as prizes packed full of local charms.



### Events helping to bring excitement to local regions

In FY2021, in line with COVID-19 restrictions and countermeasures, members of the STU48 pop group visited regional festivals and events to add some extra excitement.





Hagi no Umi Wanpaku Hagi City, Yamaguchi Prefecture



Nagato Toy Museum Nagato City, Yamaguchi Prefecture



Kumano Virtual Fudematsuri Aki-gun, Hiroshima Prefecture



Bitchu-Matsuyama Castle Takahashi City, Okayama Prefecture



Kazenokuni Onsen Resort Gotsu City, Shimane Prefecture

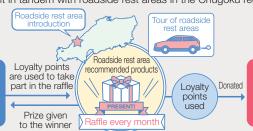
#### Prize-giving events at roadside rest areas in the Chugoku region

Since FY2022, we have held a new raffle-based prize-giving event in tandem with roadside rest areas in the Chugoku region. One rest area

from the region's five prefectures is chosen every month, and in addition to showcasing the charms of its surrounding areas, we give away some of the local specialties on sale at each rest area through a prize raffle.

The Energia loyalty points that customers use to take part in the raffle are donated to local funds and other organizations.





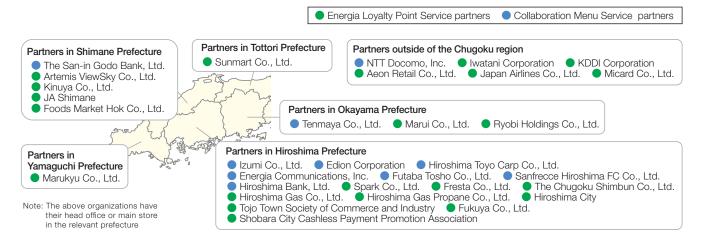


# Collaborating with local regions through our businesses

### Collaborating with local corporations through the Energia Loyalty Point Service

For members of the "Gutto Zutto. Club" website, we offer the Energia Loyalty Point Service, through which customers can exchange their points for an array of products and services depending on their electricity usage, and the Collaboration Menu Service, which offers customers the services of our partner companies at discounted rates.

Not only do these services help to enhance customer satisfaction, they also aim to contribute to regional revitalization. As of the end of FY2021, we have partnered with 32 corporations and local governments mainly with foundations in the Chugoku region.

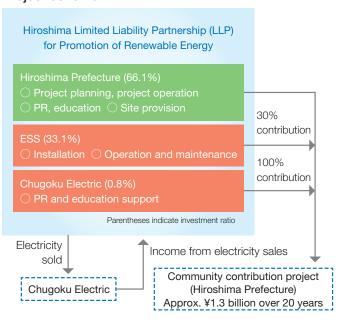


#### Community-benefitting mega solar business

Working jointly with Hiroshima Prefecture and our group company Energia Solution & Service Co., Inc. (ESS), we have been engaged in our community-benefitting mega solar business since 2013.

This was the first mega solar project in Japan operated jointly by a local government and power company. By using the profits obtained through this power generation business in community contribution projects, we are working to both contribute to the community and promote introduction of renewable energy.

#### Project scheme



# Overview of power stations

Category	Name	Panel capacity (kW)
	Shobara Photovoltaic	2,500
Phase 1	Takehara Photovoltaic	800
(Prefecture- owned land)	Fukutomi No. 1 Photovoltaic	1,000
	Fukutomi No. 2 Photovoltaic	2,300
	Subtotal	6,600
	Ono Photovoltaic	2,200
Phase 2	Oasa Photovoltaic	1,000
(Municipally- owned land)	Nika Photovoltaic	600
	Subtotal	3,800
	10,400	

# Disaster Preparedness Initiatives

#### Reinforcing our disaster response system

In the case of a typhoon, earthquake, or other disaster, at Chugoku Electric and Chugoku Electric Power Transmission & Distribution we respond to disasters in an integrated manner while striving to ensure a stable supply of electricity.

#### Disaster preparedness drills

In anticipation of any disaster that may occur, we have specified our emergency contact lines and restoration plans in various manuals, made preparations for our materials and equipment, and are taking various other measures to reinforce our disaster response system.

Moreover, each year at Chugoku Electric and Chugoku Electric Power Transmission and Distribution we jointly hold comprehensive companywide disaster preparedness drills. This allows us to verify whether communication, restoration, and other disaster response measures set forth in our manuals are carried out safely and quickly.



Comprehensive companywide disaster preparedness drill

#### **Disaster Action Plan**

The prime minister has specified Chugoku Electric and Chugoku Electric Power Transmission & Distribution as designated public institutions, and we are both working together to formulate a joint Disaster Action Plan.

Based on this plan, we are building a system in tandem with other electric power companies, our partner companies, and the Organization for Cross-regional Coordination of Transmission Operators to share power, personnel, materials, and more in times of disaster.

#### **Stockpiles**

At the Chugoku Electric Power Group, to ensure we can carry out continuous recovery work in times of disaster based on our business continuity plan, we have prepared stockpiles of necessary food, drink, and other products.

We regularly check the expiry date of these stockpiles, and before they are due to expire, donate them to food bank organizations, social welfare councils, local governments, and other institutions.



Donating stockpiles to the non-profit organization Food Bank Yamaguchi (July 2020)

# Reinforcing partnerships with external institutions and local governments

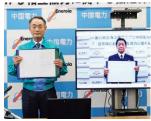
To ensure smooth, mutual cooperation in the event of a disaster, not only have we concluded cooperative agreements with external institutions and local governments, we are building strong face-to-face relationships with them through regular emergency drills and meetings.



Signing an agreement on cooperation in times of disaster with Tottori Prefecture (January 2020)



Joint training with the 6th Regional Japan Coast Guard Headquarters (July 2020)



Signing a mutual cooperation agreement in times of disaster with the 8th Regional Japan Coast Guard Headquarters (February 2021)

Partners	Main partnership details				
Ground and Maritime Self-Defense Forces (SDF)	Removal of obstacles on top of roads     Transportation of materials, equipment, and personnel by aircraft, ship, and other means to help with restoration				
Japan Coast Guard Headquarters	· Transportation of materials, equipment, and personnel by patrol boat and other means to help with restoration				
West Nippon Expressway Co., Ltd.	· Emergency passage on highways for vehicles heading to disaster areas				
Prefectures and Municipalities	Dispatch of local liaisons     Provision of activity hubs for power restoration work     Removal of fallen trees and other obstacles on top of roads that prevent power restoration work     Managing and sharing lists that detail important social facilities requiring priority restoration				
Izumi Co., Ltd., Lawson, Inc., AEON Co., Ltd.	· Provision of water, food, etc.				

### Communication with Stakeholders

At the Chugoku Electric Power Group, we strive to communicate corporate information in a proactive, effective, and fair manner. Moreover, we make every effort to meet the requirements of society and our customers by communicating with our wide range of stakeholders, including our customers, local communities, shareholders, investors, suppliers, and employees.

Stakeholders	Main communication tools and opportunities for interaction							
Customers	· Business offices, etc. · Websites	<ul><li>Customer centers</li><li>Social media</li></ul>	· Pamphlets, incl. corporate brochures					
Local communities	· Advisor meetings · Social contribution activities							
Shareholders and investors	· General Meeting of Shareholders · Analyst and institutional investor briefings · Integrated reports							
Suppliers	· Supplier briefings							
Employees	· Workplace/employee awarene	ess surveys · In-house newslette	ers · Intranet · Business office visits by management					

### Use of our customer feedback system

The daily interactions we have with customers, as well as contact by phone or via our website, provide us with a wealth of feedback and requests. These are recorded in our Customer Feedback System and quickly communicated to the relevant departments. We are also striving to put them to use to improve our work processes and offer customers even better service.

Further, to raise employees' awareness of what concerns customers have and what customers expect of the company, we select examples from among the feedback that could contribute to business improvements, as well as other opinions from our customers, and post them daily on our intranet homepage. In this and other ways, we are establishing multiple opportunities for employees to come into contact with customer feedback.

### Improvements made as a result of customer feedback

Customer feedback

When typhoons or other incidents cause power outages, it's difficult to get through to the call center and find out when power might be restored.



Improvement (Chugoku Electric Power Transmission & Distribution) In addition to existing telephone operator response, website information, power outage app information, and other means of communication, we have utilized an Al-based voice recognition technology to launch a service that provides automated responses to power outage inquiries over the telephone.



Customer communicates address

Automated voice response (power outage information, restoration schedules, etc.



#### Use of social media

We use Facebook, Twitter, Instagram, and other social media outlets to communicate a range of information in an easy-to-read format. This includes information on our business activities, our work progress in times of emergency, the activities of our major sports clubs, lifestyle information, and more.



Chugoku Electric's official Facebook page



Chugoku Electric's official Instagram account

## Online video content: People-friendly Energy

At Chugoku Electric, realizing that an increasing number of young people are using YouTube, we are proactively engaged in publicity activities using online videos.

People-friendly Energy, a video we released in February 2021, is a casual yet heartwarming story about a father's thoughts and his daughter's growing up. The story communicates our desire to provide people-friendly energy that supports families and upholds the irreplaceable day-to-day lives of our regional customers.

As of April 2021, the video has recorded around 1.06 million views.



#### Advisor system

Local opinion leaders, including representatives of other corporations, local governments, and various organizations take on the role of advisors for Chugoku Electric and Chugoku Electric Power Transmission & Distribution. We disclose our business activities through advisor meetings, facility tours, and visitations, and use feedback from advisors to improve our business.



Advisor meeting

#### Communication with shareholders and investors

In addition to company briefings held in the second quarter and after our full-year financial results announcement, Chugoku Electric executives, including the president, proactively engage in dialogue with institutional investors and securities analysts, such as through regular roundtable discussions. One company briefing was held in FY2021, and a total of 79 institutional investors and other individuals attended.

Moreover, we disclose quarterly financial overviews, account summaries, and other financial information, as well as integrated reports and company presentation materials on our website in an easy to understand manner. In doing so, we are working to improve the convenience of our communicative tools for our shareholders and investors.

Basic IR Policy

https://www.energia.co.jp/e/ir/info/policy.html

#### Supplier briefings

Each year, we hold briefings for our major suppliers. In line with our Basic Procurement Policy, we proactively disclose and share information while endeavoring to enhance the quality of our communication.

In FY2021, to prevent the spread of COVID-19, we provided briefing documents to 397 of our suppliers.

### **Basic Procurement Policy (overview)**

Chugoku Electric aims to become a "company trusted and selected by society," through its acceptance of its duties as a public utility bearing the lifeline of a region. We believe even in procuring activities it is important for us to fulfill social responsibilities demanded of a corporation in addition to securing quality and reducing costs. Based on this understanding, procurement at our company will proceed according to the following basic policies.

Adherence to legal regulations and social standards of conduct Securing of safety and health Active efforts toward environmental problems Management and protection of information Provision of fair participation opportunities
Careful selection of suppliers
Establishment of mutual trust with suppliers
Contribution to local societies

Basic Procurement

https://www.energia.co.jp/e/business/intro/policy.html

#### In-house communication through the use of in-house newsletters and other methods

We use our monthly in-house newsletter *Energia* and the company intranet to provide our employees with important information on our business plans and finances, as well as to share news on the initiatives of each of our business and other workplace activities. In this way we are enhancing employees' knowledge and motivation, and revitalizing in-house communication.



In-house newsletter EnerGia



Governance

# **Basic Approach to Corporate Governance**

At the Chugoku Electric Power Group, we are striving to enhance our corporate value and ensure sustainable growth by accurately responding to the increasingly complex and diverse demands of society. To do so, it is paramount that we maintain and improve our management transparency and fairness, and a build a structure that allows us to quickly and resolutely make decisions pertaining to changes in our business environment. As such, we have formulated the basic policy below, which we will continuously work to enhance and strengthen.

# **Basic Policy**

# (1) Guaranteeing the rights and equal treatment of our shareholders

At Chugoku Electric, we take appropriate measures to guarantee the rights of our shareholders, and are constantly working to create an environment in which our shareholders are able to exercise those rights.

# (2) Cooperating appropriately with stakeholders other than our shareholders

Based on a solid relationship of trust with society, the Chugoku Electric Power Group's mission is to create beneficial social value through sound business activities, achieve corporate growth, and in turn contribute to the achievement of a sustainable society.

To do so, we will ensure appropriate cooperation with our wide-ranging stakeholders.

# (3) Appropriately disclosing information and ensuring transparency

To ensure management transparency, we will strive to disclose not only financial information, but also non-financial information including that related to our management strategies, issues, risks, and governance in a timely and accurate manner.

#### (4) Responsibilities of the Board of Directors

To discharge its fiduciary responsibility and accountability to shareholders, and to achieve sustainable growth and improve corporate value in the medium to long term, while incorporating outside perspectives from external directors, the Board of Directors formulates and implements management strategies, supervises management by improving and operating internal control systems, and appropriately manages risks.

#### (5) Maintaining dialogue with shareholders

Chugoku Electric considers its shareholders and investors as key partners in improving corporate value and developing the business. As such, in addition to timely, accurate disclosure of information pertaining to our business environment, financial conditions, and future management strategies, we will strive to promote mutual communication.

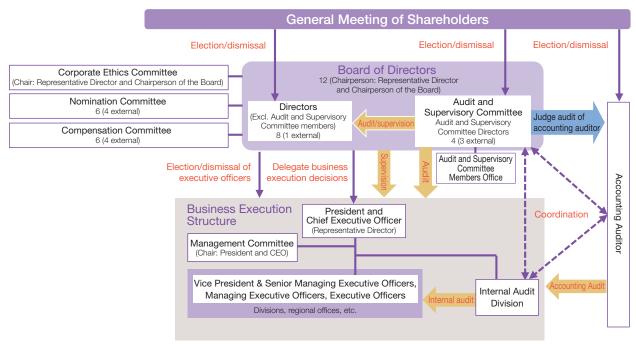
# Efforts to Enhance and Reinforce Our Corporate Governance

At Chugoku Electric, we have continued to enhance and reinforce our corporate governance in line with the changing times. Looking ahead, in line with revisions to the Corporate Governance Code, etc., we will continue working to strengthen our corporate governance structure.

FY	Main Activities
2008	Reduced the number of directors (25 or fewer → 15 or fewer)  Shortened term of directors (2 years → 1 year)  Adopted executive officer system
2009	Established Compensation Committee as an internal committee of the Board of Directors
2017	Switched from a company with a board of auditors to a company with an audit and supervisory committee Established Nomination Committee and Compensation Committee as advisory committees to the Board of Directors

# Corporate Governance System

To ensure that we can flexibly and quickly respond to any changes in our business environment, we have adopted a structure with an audit and supervisory committee.



As of June 25, 2021

#### **Board of Directors**

The Board of Directors consists of 12 directors, of which four (two female) are external directors. Usually, the board meets once a month to make decisions on basic management policies and plans, as well as on the execution of important business matters. In addition, the board receives reports from directors regarding the execution of business, and monitors the execution of their duties.

#### Audit and Supervisory Committee

of which three (two female) are external directors.

Audit and Supervisory Committee members attend management and other important committees, listen to reports from directors regarding the execution of duties, and inspect important decision-making documents. Through these and other measures, committee members oversee the manner in which company directors execute their duties.

The Audit and Supervisory Committee consists of 4 directors,

Moreover, using their right to express opinions at the General Meeting of Shareholders regarding the election and compensation of directors (excluding Audit and Supervisory Committee directors), committee members are also responsible for supervising the work of executives. Note that the Audit and Supervisory Committee has been directly assigned 10 dedicated staff to assist committee members with their work.

### Corporate Ethics Committee

→ See "Compliance" on page 83.

# Nomination Committee and Compensation Committee

Both the Nomination Committee and Compensation Committee consist of directors, including external directors, and as advisory committees to the Board of Directors, they enhance objectivity and transparency in decision-making processes pertaining to the election, dismissal, and compensation of directors.

#### Management Committee

Management Committee meetings are attended by the President and CEO and heads of divisions. To ensure thorough deliberation of key management matters such as those related to the Board of Directors, in principle these meetings are held every week. On occasion, the representative director and chairperson of the board, as well as audit and supervisory committee directors, may attend Management Committee meetings.

#### Internal Audit Division

As an organization independent from the company's lines of business execution, the Internal Audit Division conducts internal audits, inspects the appropriateness and effectiveness of the internal control system, and proposes system improvements.

#### Evaluating the effectiveness of the Board of Directors

Each year, Chugoku Electric conducts questionnaires with each of its directors. Based on the responses, the effectiveness of the Board of Directors is evaluated at a roundtable discussion involving the representative director and Audit and Supervisory Committee members.

The evaluation results of this discussion are reported to the Board of Directors and shared with all members.

#### Questionnaire content/Evaluation results (FY2022)

Subject	Questionnaire content
Directors	Questions regarding operation of the Board of Directors, discussion materials, Board of Directors' support structure, etc.
External directors	Self-evaluation questions

The results of this year's questionnaire were evaluated at a roundtable discussion involving the representative director and Audit and Supervisory Committee members in April 2021. It was confirmed that the entire Board of Directors is functioning effectively and that its efficacy is being properly maintained.

#### Other major matters confirmed following evaluation

- · Owing to business execution reports and visiting audits by the Audit and Supervisory Committee, advice and supervisory information is appropriately being provided to external directors
- · As a result, the Board of Directors is able to engage in active, constructive dialogue
- · Following on from a certain level of success in the enhancement of meeting materials, one challenge from the previous fiscal year, we will continue with improvement activities
- · In addition to providing platforms where external directors can share information on all aspects of our energy policies, to supplement Board of Directors' meetings, we will work to make effective use of other platforms for opinion exchange

#### Election and dismissal of directors, etc.

#### Electing director candidates, etc.

#### Policy

- · Candidates for director (including for Audit and Supervisory Committee director) are elected based on their ability to accurately and strategically guide the Chugoku Electric Power Group's development and enhance its management capabilities, as well as their ability to enhance supervision of management. Any decisions also take into account the balance and scale of the Board of Directors.
- · Candidates upper executive officer are not only elected based on their ability to become key members of operating departments, but also their viewpoints as managers and their ability to quickly and resolutely respond to various management issues.

#### **Procedures**

- · The Board of Directors consults with the Nomination Committee, whose members include external directors, prior to making decisions on candidates for director (excluding for Audit and Supervisory Committee director).
- · Decisions on candidates for Audit and Supervisory Committee director are made by the Board of Directors following approval from the Audit and Supervisory Committee.

#### Dismissing directors, etc.

#### **Policy**

Directors (excluding Audit and Supervisory Committee directors) will be dismissed in the case of illegal or inappropriate behavior with respect to the execution of their duties, in the case of largely insufficient work and results in the execution of their duties, or when it is clear that they lack the qualities required of a director of the company.

#### **Procedures**

- · When proposing director dismissals (excluding Audit and Supervisory Committee directors) to the General Meeting of Shareholders, the Board of Directors consults with the Nomination Committee, whose members include external directors, prior to making decisions.
- The Board of Directors consults with the Nomination Committee, whose members include external directors, prior to making decisions on dismissals of the representative director or upper executive officers.

#### Executive compensation

#### **Policy**

(A) Basic policy

- · Executive compensation shall be within the scope set and approved at the General Meeting of Shareholders, and at an appropriate level in line with the social and economic climate.
- To respond to the trust placed in us by our shareholders and to achieve sustainable growth, decisions on compensation shall take into account both short-term performance as well as medium- to long-term performance.
- Director compensation (excluding that for external directors and Audit and Supervisory Committee directors) shall comprise basic remuneration and performance-linked remuneration (both monetary). Compensation for external directors and Audit and Supervisory Committee directors shall take into consideration their duties and comprise only of basic remuneration.
- The ratio of basic remuneration and performance-linked remuneration for directors (excluding that for Audit and Supervisory Committee directors and external directors) shall be set by taking into account our management and business environment, and trends in corporations in similar industries.
- (B) Basic remuneration
  - · For their basic remuneration, directors shall be paid a fixed monthly remuneration. Monthly remuneration for directors (excluding that for Audit and Supervisory Committee directors) shall paid according to the company's business environment and results, and the individual's role, responsibility, and previous fiscal year's performance.
- (C) Performance-linked remuneration
  - · To clarify directors' responsibility with respect to the company's business results, and as an incentive for them to improve results, directors may be paid bonuses at a specified time each year as performance-linked remuneration in line with the company's management environment and consolidated ordinary income. Bonuses shall be paid according to the individual's performance.
- (D) Decisions on individual director compensation
  - Decisions on the amount of monthly remuneration, as well as the amount for bonuses, for directors (excluding Audit and Supervisory Committee directors) shall be determined by the chairperson based on a resolution by the Board of Directors. To ensure the chairperson appropriately exercises his decision-making authority, the Board of Directors shall consult with the Compensation Committee regarding remuneration levels, etc., and the chairperson must make his decisions while respecting the results of the Compensation Committee proceedings.

#### Directors

#### (excluding Audit and Supervisory Committee directors)

Monthly remuneration: Up to 45 million yen

Bonus: To clarify directors' responsibility with respect to business results, and as an incentive for them to improve results, directors (excluding Audit and Supervisory Committee directors) may be paid bonuses of up to 120 million yen in addition to their monthly remuneration. Specific bonus amounts will be determined by the Board of Directors in line with the company's business results.

**Audit and Supervisory Committee directors** 

Monthly remuneration: Up to 10 million yen

#### **Procedures**

- The Board of Directors consults with the Compensation Committee, whose members include external directors, prior to making decisions pertaining to the compensation of directors (excluding for Audit and Supervisory Committee directors).
- · Decisions pertaining to the compensation of Audit and Supervisory Committee directors shall be made by the Audit and Supervisory Committee.

# Cross Shareholding

Excluding cases where it might benefit the maintained and improved corporate value of the Chugoku Electric Power Group over the medium to long term, in principle, we do not hold any cross shareholdings. We examine the significance of such shares every year, and sell them off if deemed unnecessary.

### Cross shareholding trends (market value)

March 31, 2015 (prior to adoption of the Corporate Governance Code)

31.9 billion yen (24 companies)

✓March 31, 2021

14.2 billion yen (17 companies)

#### Basic approach to risk management

In line with its Basic Risk Management Policy, which outlines the company's basic approach to risk management, Chugoku Electric has built a companywide risk management system that enables it to appropriately implement countermeasures as and when necessary. With our group companies engaged in similar measures, we are promoting risk management across the Group in a unified manner.

#### **Basic Risk Management Policy Overview**

#### Definition of Risk

· Future uncertainties that could induce economic losses and factors that could lead to a loss of trust from our local communities

#### Response to Risk

- · Each division identifies and assesses risks related to its main line of business, formulates and implements preand post-risk countermeasures, and independently undertakes a range of other risk management measures.
- · The Compliance Promotion Division supervises overall risk management. Among other duties, it makes companywide adjustments and system improvements to the risk countermeasures of each division.
- · For risks that can be identified in advance, priority will be placed on preventative activities.
- · For risks that are difficult to foresee, priority will be placed on management activities that minimize any potential damage.
- · With compliance our foremost priority, specific measures against risks will be prioritized according to the potential impact of each risk, the frequency of said risk, and the cost effectiveness of the measure.

#### Dedicated risk management organization

A dedicated risk management organization has been set up within the Compliance Promotion Division to promote and support risk management across the entire Group.

### Risk Management Regulations

We have formulated a set of Risk Management Regulations to help us work toward achieving our business targets, and ensure a robust earnings foundation and a stable asset/debt structure, as well as to earn the trust of local communities.

These regulations outline our business risk management system and procedures, as well as basic matters regarding the management of derivative transactions.

#### Crisis Management Regulations

We have formulated a set of Crisis Management Regulations that outline basic matters regarding our crisis management system and its operation, and which enable us to quickly and smoothly implement policies and measures to deal with crises in a transparent, objective manner.

These regulations set forth a crisis management supervisor to assist the chief crisis management officer (the President) and oversee each organization within the company in the case of a crisis. The regulations also detail a reporting system that collects and centralizes information pertaining to business risks.

Information can also be found on Risk Strategy Meetings, which deliberate over management's crisis response measures, and the Emergency Reponse Headquarters, which examines and implements specific measures during crises.



# Business and other risks

Major risks that could severely impact our Group's performance are outlined below.

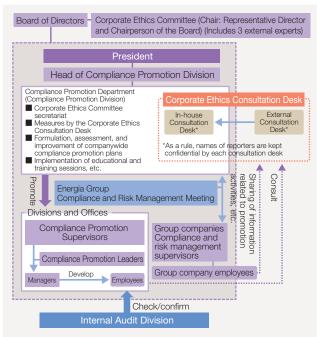
Note that matters related to the future detailed below are based on judgements made at the end of FY2021 under review.

Revisions to Regulations and Systems Pertaining to Nuclear Power Generation	In line with the accident that occurred at the Fukushima No.1 Nuclear Power Plant, and to correspond to new regulatory requirements enacted in July 2013, we have implemented earthquake and tsunami countermeasures, measures to ensure the reliability of external power sources, and a range of severe accident measures, such as the installation of vent equipment with filters. Although we are constantly pursuing safety in a range of other ways, changes to nuclear power policies and revisions to laws, regulations and standards could adversely impact our Group's business performance.  Regarding the back-end of nuclear power businesses, despite the uncertainties due to it being an extremely long-term endeavor, measures by the national government have reduced the risk for nuclear power operators. However, future revisions to systems and changes in estimates for future costs, as well as changes in the operational status of our reprocessing plants, could adversely impact our Group's business performance.
Revisions to Policies and Systems Pertaining to Electric Power Businesses	Due to insufficient competition among electricity retailers, a transitional measure to regulate electricity prices has not been removed across all parts of Japan, and additional measures to enhance competition are under consideration. As a result, regulations to enhance the equal treatment of in-house electricity retail divisions of former general electricity retailers like us and other electricity retailers may be tightened, and depending on these developments, our competitive ability and business environment could be adversely affected.
Environmental Regulations	Since pledging to become carbon neutral by 2050, the government is putting all its energy into achieving a decarbonized society. In line with this momentum, it is expected that energy policies will see huge revisions and that environmental regulations concerning GHG emissions will be tightened. As a result, the Group's business performance could be adversely impacted by the corresponding expenses, reputational damage if our initiatives are deemed inadequate, and other factors.
Compliance	Compliance is a fundamental aspect of our management and the foremost priority in all aspects of the Group's operations. We therefore implement a range of stringent compliance initiatives, and quickly introduce corrective measures should any compliance violations occur. A serious violation, however, could see the Group lose society's trust, and adversely affect our ability to undertake smooth business operations.  In April 2021, Chugoku Electric was subject to an on-site inspection by the Japan Fair Trade Commission due to suspicions that it was collaborating with others to limit the acquisition of new customers in the Chubu, Kansai, and Chugoku regions in its extra-high-voltage and high-voltage power supply business. We will continue to ensure appropriate responses to their investigations.
Disasters and Other Incidents	Electric power is the core business of our Group, and so we possess a large number of power supply and other facilities. Devastating natural disasters such as large-scale earthquakes and typhoons, terrorist attacks and other illegal actions, the spread of severe infectious diseases such as COVID-19, challenging situations surrounding power supply and demand, and a range of other incidents could cause serious damage to our facilities, our operational systems, and our employees, and greatly increase our procurement costs. The following results that may ensue have the potential to adversely affect the Group's performance: unavoidable increases in costs such as those needed to repair equipment, procure substitute thermal fuel sources, and procure power from other markets; inevitable decreases in sales; damage to the Group's brand image or a loss of trust from society resulting from prolonged outages; decreases in sales due to less electricity usage resulting from stagnation of economic activity; rises and falls in costs due to problems with construction and the procurement of materials and equipment; and rises and falls in imbalance charges.
Fluctuations in Financial Markets	As of the end of March 2021, the interest-bearing debt balance of our Group stands at 2,291.8 billion yen. Fluctuations in market interest rates and changes in credit ratings could lead to increasing/decreasing interest expenses brought on by fluctuating procurement interest rates. Factors such as these could adversely impact our Group's business performance. However, the majority of our interest-bearing debt has been procured from fixed-rate long-term funds (corporate bonds and long-term loans), and so any impact is expected to be limited.  Further, as of the end of March 2021, the projected benefit obligation of our Group stands at 242.8 billion yen, while our pension assets stand at 240.9 billion yen. Retirement benefit costs have been calculated based on conditions predetermined by discount rates and other actuarial methods, as well as the long-term expected rate of return on pension assets. Fluctuating interest rates and stock prices could lead to changes in discount rates and yield on investments, and therefore fluctuations in retirement benefit costs. Factors such as these could adversely impact our Group's business performance. However, our Group's pension assets are managed under a minimum-risk asset structure, and so any impact is expected to be limited.
Fluctuations in Fuel Prices	The major types of fuel for our thermal power business are coal, liquified natural gas, and heavy oil. As such, fluctuations in the prices of these fuels and foreign exchange rates could adversely impact our Group's business performance. However, fluctuations in fuel prices are reflected in electricity prices under the fuel cost adjustment system, and so any impact is expected to be limited.
Changes in Competitive Environments	Intensifying competition in the electric power market could lead to an increasing number of customers switching from our services to other electricity retailers, and adversely impact our Group's business performance.
Information Management	In addition to customer information from our electric power business, our Group holds a large amount of other business-related information. Information leakages caused by increasingly advanced cyber-attacks or other means could cause severe damage to our social reputation and adversely impact our Group's business performance.

# Compliance

### Promotion system

Under the direction and supervision of the chairperson and president, compliance initiatives at Chugoku Electric are led by the head of the Compliance Promotion Division. This dedicated division formulates, assesses, and improves companywide compliance promotion plans, and implements compliance training sessions together with a range of other compliance measures.



# Compliance Promotion Supervisors/Leaders

Heads of divisions and offices act as compliance promotion supervisors to lead compliance initiatives in their respective organizations. Compliance promotion leaders assist compliance promotion supervisors, and lead activities such as workplace training.

#### **Corporate Ethics Committee**

As an advisory committee to the Board of Directors, the Corporate Ethics Committee discusses compliance-related matters and makes proposals and gives opinions as necessary. To accurately grasp the social demands of our customers and local communities, the Corporate Ethics Committee includes three external experts.

In principle, the committee meets quarterly and publicizes an outline of their proceedings.

#### Corporate Ethics Consultation Desk

As an internal reporting system, we have set up corporate ethics consultation desks within our Compliance Promotion Division (internal) and an affiliated law firm (external). We thus have a system in place to receive reports and consultations regarding compliance violations and other matters pertaining to corporate ethics from all individuals associated with the Group.

# Energia Group Compliance and Risk Management Meeting

In principle, the Energia Group Compliance and Risk Management Meeting is held twice a year. It acts as a platform to share information related to compliance and risk management between Chugoku Electric and its group companies, and to enhance groupwide compliance promotion and risk management systems.

Chugoku Electric also provides compliance education and training support to its group companies.

#### Compliance promotion initiatives

Compliance is the foremost priority of the Chugoku Electric Power Group. To maximize awareness of compliance throughout our workforce, from management to each individual employee, in addition to holding compliance training sessions, we have designated November as our "compliance-strengthening month." During this period in particular, we seek to effectively raise awareness of compliance by implementing various measures in a focused manner. Moreover, we have held workplace and employee awareness surveys regarding compliance for all employees since FY2008. The results from these surveys are used to assess and improve training and other compliance promotion measures, while they are also fed back to each department to examine and implement measures to create better workplaces.

#### **Compliance Training Content (FY2021)**

Subjects	Content			
Upper management*	Invited instructors from outside			
Compliance promotion supervisors, etc.	the company to hold lectures on supervisors' roles in promoting compliance			
Managers* with subordinates	Invited instructors from outside the company to hold discussion-based training sessions relating to managers' roles			
New and existing managers	Held training sessions regarding the roles and considerations of managers			
All employees	Held discussions regarding the awareness and behavior of employees and their workplaces based on compliance case studies			
, p. 17	Carried out e-learning courses and video and case study-based training sessions			

\*Including those from group companies.

No. of serious compliance violations\* (FY2021)

1

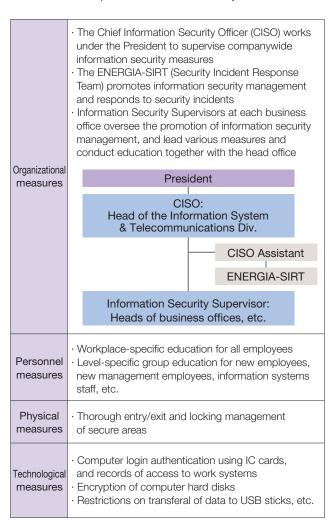
\*Cases where a press release was issued by Chugoku Electric or Chugoku Electric Power Transmission & Distribution.

# Information Security

Realizing that protecting our information assets is one of our key corporate responsibilities, we have established various rules and management systems to respond to today's increasingly sophisticated cyber-attacks, and are engaged in thorough information security management.

#### Information security initiatives

In addition to raising employees' awareness on the risks of, for example, information leakage due to cyber-attacks, we are making various efforts to improve our information security.



# **Personal Information Protection**

Chugoku Electric holds a large amount of personal information, including customer information, through its business activities. In line with the Act on the Protection of Personal Information, we have formulated a Personal Information Protection Policy and established rules and promotion systems to ensure appropriate handling and careful protection of personal information. We also ensure our employees are thoroughly educated on matters pertaining to personal information protection.

#### Promotion system

The head of the Compliance Promotion Division oversees companywide promotion activities as the general supervisor of personal information protection. Moreover, heads of business offices, etc., act as personal information protection supervisors, and cooperate with personal information protection officers and other managers to promote thorough protection of personal information at each business office and worksite.

### Personal information protection initiatives

#### Establishing rules

To ensure thorough, appropriate information management, in April 2003 we formulated a Basic Policy on Information Management. This policy defines the basic matters pertaining to all aspects of information management, including personal information management. In line with the Act on the Protection of Personal Information, in April 2005 we formulated a Personal Information Protection Policy. In January 2016 we revised this policy to conform with the Act on the Use of Numbers to Identify a Specific Individual in Administrative Procedures. We also have in place a range of other rules and regulations related to personal information protection.

#### Personal information protection training

Each year we hold personal information protection training sessions for all company employees. Through these sessions, we are aiming to increase recognition among employees of the fact that we are looking after customer's valuable personal information.

#### Inspection/Internal audits

To prevent the leakage and loss of personal information, managers regularly inspect the management status of personal information at their worksite, while the Internal Audit Division conducts internal audits to verify the effectiveness of our personal information protection systems.

No. of serious information security incidents\* (FY2021)



\*Cases where a press release was issued by Chugoku Electric or Chugoku Electric Power Transmission & Distribution regarding electronic information incidents.

No. of serious personal information leakage incidents\* (FY2021)

1

\*Cases where a press release was issued by Chugoku Electric or Chugoku Electric Power Transmission & Distribution.

# Company Directors (As of June 25, 2021)



Tomohide Karita Representative Director and Chairperson of the Board



Mareshige Shimizu Representative Director President & Chief Executive Officer



Shigeru

April 1972 June 2005 June 2006 February 2007

June 2011

Joined Chuaoku Flectric Director and General Manager of Corporate Planning Division Managing Director and Head of Corporate Planning Division Managing Director and Head of Corporate Planning Division, and Head of EnerGia Revitalization Project

Managing Director and Head of Corporate Planning Division Managing Director and Head of Group Management Division Director, Executive Vice President, Supervisor of Human June 2008 June 2010

Resources Development, Head of Internal Audit Division, and Head of Nuclear Power Reinforcement Project Director, President, and Head of Kaminoseki Nuclear Power

Plant Siting Project June 2013 Director and President April 2016 Director and Chairperson of the Board

Representative Director and Chairperson of the Board June 2016

April 1974 Joined Chugoku Flectric June 2009 Managing Director and Deputy Head of Power Generation Division, and Head of Shimane Nuclear Power Headquarters Director, Executive Vice President, Head of Compliance June 2011 Promotion Division, and Head of Energia Research Institute Director, Executive Vice President, Supervisor of Human June 2012 Resources Development, Head of Internal Audit Division, and Head of Nuclear Power Reinforcement Project

Director, Executive Vice President, and Head of Power June 2013 Generation Division

April 2016 Director and President

Representative Director and President & Chief Executive June 2016

Officer (incumbent)

Ashitani Representative Director Vice President & Senior Managing **Executive Officer** 

April 1979 June 2013 June 2016

June 2020

Joined Chugoku Flectric

Executive Officer, Head of Tottori Regional Office, and Deputy Head of Shimane Nuclear Power Headquarters Managing Executive Officer, and Deputy Head of Power

Generation Division

Director, Managing Executive Officer, and Deputy Head of June 2017

Power Generation Division

June 2018 Director, Managing Executive Officer, Deputy Head of Power Generation Division, and Head of International Business

Representative Director, Vice President & Senior Managing Executive Officer, Head of Power Generation Division, and Head of Information System & Telecommunications Division

As Chairperson of the Board Tomohide Karita plays a lead role in reaching decisions on management policies and plans. With an acute perspective backed up by a wealth of experience. Mr. Karita comprehensively oversees the execution of business, and in addition to enhancing the company's governance structure, he is expected to contribute to the further enhancement of corporate value

With an extensive knowledge of and a flexible approach to management. Mareshige Shimizu oversees the execution of business as President and Chief Executive Officer. Mr. Shimizu is firmly implementing measures to strengthen the profitability of our international business, etc., and is expected to use his strong leadership skills to guide management of the company forward.

Shigery Ashitani is demonstrating his management skills in enhancing the profitability of our international business, strengthening our business system, and utilizing our characteristics to improve our competitive advantage in the power generation industry. Mr. Ashitani excels in taking a forward-looking approach to improving organizational strength, and is expected to contribute to further enhancing our corporate value



Takafumi Shigetoh Representative Director Vice President & Senior Managing Executive Officer

April 1979 Joined Chugoku Electric

Division

June 2016

June 2017

Executive Officer and Head of Tokyo Regional Office Managing Executive Officer, Head of Compliance Promotion Division, and Head of Property Management Division
Director, Managing Executive Officer, Head of Compliance Promotion Division, and Head of Property Management

October 2017 Director, Managing Executive Officer, Head of Compliance Promotion Division, Head of Internal Audit Division, and Head of Property Management Division

Director, Managing Executive Officer, and Head of Regional June 2019 Relations Division June 2020

Representative Director, Vice President & Senior Managing Executive Officer, Supervisor of Human Resources
Development, Head of Corporate Finance and Procurement Division, and Head of Nuclear Power Reinforcement Project (incumbent)

Joined Chugoku Electric

June 2017 Managing Executive Officer and Head of Corporate Planning

Division June 2018 Director, Managing Executive Officer and Head of Corporate Planning Division

June 2019 Director, Managing Executive Officer and Head of Energy Sales Division

June 2020 Executive Officer, and Head of Energy Sales Division (incumbent)



Tatsuo Kitano Director Managing Executive Officer

April 1981 June 2012

Executive Officer and General Manager of Corporate Planning

Natsuhiko

**Takimoto** 

Director

Representative

Vice President &

Senior Managing

**Executive Officer** 

Representative Director, Vice President & Senior Managing

April 1983 Joined Chugoku Electric June 2014

Executive Officer, Head of Shimane Nuclear Power Station, and Head of Shimane Nuclear Power Plant Construction Managing Executive Officer, Deputy Head of Power Generation

June 2017 Division, and General Manager of Power Generation Division Director, Managing Executive Officer, Deputy Head of Power June 2020 Generation Division, and Head of Shimane Nuclear Power Headquarters (incumbent)

In addition to thorough efforts to earn the trust of and contribute to local communities, through honest, detailed business operations, Takafumi Shigetoh plays a central role in ensuring effective procurement of funding, materials and equipment, and the development of a nuclear safety culture. Utilizing his outstanding achievements and expertise, he is expected to contribute to the further enhancement of corporate value.

Among others, Natsuhiko Takimoto is engaged in efforts to capture demand for electricity and gas, and develop new services related to electricity sales. Utilizing the versatile, highly responsive thinking and analytical capabilities he gained in his wide-ranging work in sales and corporate planning, Mr. Takimoto is expected to contribute to further enhancing our corporate value.

With vast experience and knowledge in nuclear power, Tatsuo Kitano is successfully overseeing management of our efforts to resume nuclear power plant operations and gaining understanding of activities. Mr. Kitano is expected to contribute to appropriate business operations through his composed yet strong executional skills.



Toshio Takaba Director Managing Executive Officer

April 1981 Joined Chugoku Flectric June 2015

Executive Officer and General Manager of Compliance Promotion Division

June 2018 Managing Executive Officer and Head of Human Resources

Development Division

June 2020 Director, Managing Executive Officer and Head of Human Resources Development Division (incumbent)

Makoto **Furuse** Director (External)

June 2007

Representative Director and President of The San-in Godo

Chairman of Shimane Employers' Association (Resigned: May May 2010

November 2010 President of the Matsue Chamber of Commerce and Industry

(Resigned: October 2019)

President of the Shimane Chamber of Commerce and November 2010 Industry Association (Resigned: October 2019)

June 2011 Representative Director and Chairman of The San-in Godo

Special Advisor to The San-in Godo Bank, Ltd. (Resigned: June 2015

June 2020)

External Director of Chugoku Flectric (incumbent) June 2020



Norimasa Tamura Director Audit and Supervisory Committee Member

April 1980 June 2011

Joined Chugoku Flectric

Executive Officer and General Manager of Group Management

June 2016 Executive Officer and Head of Tokyo Regional Office June 2018 Managing Executive Officer and Head of Tokyo Office June 2020 Director and Full-time Audit and Supervisory Committee

Member (incumbent)

Utilizing his abundant experience in the personnel and labor division. Toshio Takaba is achieving success in labor productivity enhancement and human resources development. Mr. Takaba is expected to contribute to precise business operations utilizing his eye for detail and coordination skills

With wide-ranging knowledge and experience in management outside the company, such as at The San-in Godo Bank, Ltd., Makoto Furuse is expected to use his abundant experience and insight to contribute to management of the company from an objective standpoint. Further, as a member of the Nomination Committee and Compensation Committee, he is also expected to contribute to discussions regarding director nomination and compensation from an objective, fair, and neutral standpoint.

Norimasa Tamura has extensive experience in the accounting department, and thus has expert knowledge in the fields of finance and accounting. With detailed analytical skills and logical thinking capabilities, Mr. Tamura is expected to utilize his experience to accurately audit and supervise the company's operations.



Kunio Uchiyamada Director Audit and Supervisory Committee Member (External)

August 2002 June 2003 January 2006 February 2007 March 2008 April 2008 June 2015

Chief Inspector General of National Police Agency Director of Hiroshima Prefectural Police Headquarters Director of Kanto Regional Police Bureau President of National Police Academy Resigned from National Police Agency Standing Advisor to Kobe Steel, Ltd. External Director of Eiken Chemical Co., Ltd. (Resigned: June

April 2016 June 2016

Advisor to Kobe Steel, Ltd. (Resigned: October 2016) External Director and Audit and Supervisory Committee Member of Chugoku Electric (incumbent) Managing Executive Officer of Kobe Steel, Ltd. (Resigned:

April 2018 March 2020)



April 1987 June 2012 June 2016

Registered Member of Hiroshima Bar Association (incumbent) External Auditor of Chugoku Electric External Director and Audit and Supervisory Committee

Ftsuko

Director

Audit and

Supervisory

Committee Member (External)

Nosohara

Member of Chugoku Electric (incumbent)



Noriko Otani Director Audit and Supervisory Committee Member (External)

April 1992 April 2001

Professor at Faculty of Humanities, Yamaguchi University Professor at the Graduate School of East Asian Studies,

Yamaguchi University

April 2005 Dean of the Graduate School of East Asian Studies. Yamaguchi University

April 2010

June 2020

Professor Emeritus at Yamaguchi University (incumbent)
External Director and Audit and Supervisory Committee

Member of Chugoku Electric (incumbent)

With extensive experience outside the company and specialized knowledge of risk management, Kunio Uchiyamada conducts accurate audits in an objective, fair, and neutral manner, and offers valuable opinions on the company's management. Looking ahead, Mr. Uchiyamada is expected to fairly and accurately audit and supervise the company's management. Further, as a member of the Nomination Committee and Compensation Committee, he is also expected to contribute to discussions regarding director nomination and compensation from an objective, fair, and neutral standpoint

Utilizing her wealth of experience and impressive track record as a lawyer, Etsuko Nosohara conducts accurate audits from an objective, fair, and neutral standpoint, and utilizes her specialized knowledge to offer valuable opinions on the company's management. Looking ahead, Ms. Nosohara is expected to fairly and accurately audit and supervise the company's management. Further, as a member of the Nomination Committee and Compensation Committee, he is also expected to contribute to discussions regarding director nomination and compensation from an objective, fair, and neutral standpoint

As a specialist in sociology, Noriko Otani has advanced knowledge of the conditions of local societies as well as corporate social contribution activities. With her wealth of experience and impressive track record, Ms. Otani is expected to utilize her specialized knowledge to fairly and accurately audit and supervise the company's management from an objective, neutral standpoint. Further, as a member of the Nomination Committee and Compensation Committee, he is also expected to contribute to discussions regarding director nomination and compensation from an objective, fair, and neutral standpoint

# Main Financial Data

# ■ Consolidated

	Units	FY2017	FY2018	FY2019	FY2020	FY2021
Sales (operating revenues)	¥1 million	1,200,379	1,314,967	1,376,979	1,347,352	1,307,498
Operating income	¥1 million	34,520	39,626	19,530	48,170	34,283
Ordinary income	¥1 million	19,489	30,701	12,685	39,848	30,092
Net income attributable to owners of parent	¥1 million	11,341	20,707	11,446	90,056	14,564
Shareholders' equity	¥1 million	577,370	577,117	555,507	643,317	657,194
Total assets	¥1 million	3,100,754	3,179,442	3,261,665	3,265,374	3,385,169
Free cash flows	¥1 million	(51,775)	(23,755)	(87,109)	(42,456)	(62,533)
Cash flow from operating activities	¥1 million	96,003	164,794	81,635	129,654	110,228
Cash flow from investing activities	¥1 million	(147,779)	(188,549)	(168,744)	(172,111)	(172,762)
Cash flow from financing activities	¥1 million	58,630	4,483	97,510	(1,451)	75,241
Ratio of ordinary income to sales	%	1.6	2.3	0.9	3.0	2.3
Capital investment	¥1 million	164,184	218,507	179,158	179,207	190,617
Depreciation	¥1 million	105,690	104,106	104,779	81,263	83,418
Number of employees	People	13,570	13,485	13,418	13,163	13,050

### ■ Non-consolidated

	Units	FY2017	FY2018	FY2019	FY2020	FY2021
Sales (operating revenues)	¥1 million	1,121,789	1,227,470	1,280,501	1,243,742	1,147,753
Operating income	¥1 million	28,816	32,475	11,284	40,468	(12,711)
Ordinary income	¥1 million	16,193	24,086	6,908	35,103	(10,968)
Net income	¥1 million	14,669	16,445	8,510	87,707	(5,300)
Paid-in capital	¥1 million	185,527	185,527	185,527	197,024	197,024
Number of shares issued	Shares	371,055,259	371,055,259	371,055,259	387,154,692	387,154,692
Shareholders' equity	¥1 million	418,779	418,582	403,735	494,496	474,178
Total assets	¥1 million	2,875,781	2,939,983	3,085,124	3,092,832	3,094,988
Ratio of ordinary income to sales	%	1.4	2.0	0.5	2.8	(1.0)
Capital investment	¥1 million	152,946	204,908	169,869	168,348	116,949
Deprecation	¥1 million	92,421	90,956	91,789	67,842	29,263

Note 1: In FY2020, the depreciation method for tangible fixed assets was changed from the declining balance method to the straight-line method.

Note 2: The number of employees excludes loan employees and those on administrative leave.

Note 3: Following corporate separation on April 1, 2020, our general power transmission and distribution business was transferred from Chugoku Electric to Chugoku Electric Power Transmission & Distribution.

# **Main Financial Indicators**

# ■ Consolidated

	Units	FY2017	FY2018	FY2019	FY2020	FY2021
Interest-bearing debt	¥1 million	2,053,281	2,078,239	2,196,903	2,193,979	2,291,881
Shareholders' equity ratio	%	18.6	18.2	17.0	19.7	19.4
Return on equity (ROE)	%	1.9	3.6	2.0	15.0	2.2
Return on assets (ROA)	%	0.8	0.9	0.4	1.1	0.7
Book-value per share (BPS)	Yen	1,677.09	1,676.42	1,613.71	1,785.36	1,824.17
Earnings per share (EPS)	Yen	31.84	60.15	33.25	258.59	40.42
Price book-value ratio (PBR)	Multiple	0.7	0.8	0.9	0.8	0.7
Price earnings ratio (PER)	Multiple	38.7	21.3	41.5	5.8	33.6
EBITDA	¥1 million	140,210	143,732	124,309	129,433	117,701
Debt equity ratio (D/E ratio)	Multiple	3.6	3.6	4.0	3.4	3.5

# ■ Non-consolidated

	Units	FY2017	FY2018	FY2019	FY2020	FY2021
Interest-bearing debt	¥1 million	2,015,264	2,029,475	2,200,286	2,199,654	2,298,919
Shareholders' equity ratio	%	14.6	14.2	13.1	16.0	15.3
Return on equity (ROE)	%	3.4	3.9	2.1	19.5	(1.1)
Return on assets (ROA)	%	0.7	0.8	0.3	0.9	_
Dividends per share	Yen	50.00	50.00	50.00	50.00	50.00
Book-value per share (BPS)	Yen	1,215.50	1,214.98	1,171.93	1,371.34	1,315.21
Earnings per share (EPS)	Yen	41.15	47.73	24.70	251.65	(14.70)
Price book-value ratio (PBR)	Multiple	1.0	1.1	1.2	1.1	1.0
Price earnings ratio (PER)	Multiple	29.9	26.9	55.9	6.0	_
EBITDA	¥1 million	121,237	123,431	103,073	108,310	16,552
Debt equity ratio (D/E ratio)	Multiple	4.8	4.8	5.4	4.4	4.8
Payout ratio	%	121.5	104.8	202.4	19.9	_
Dividend yield	%	4.1	3.9	3.6	3.3	3.7

Note 1: Return on assets (ROA) is calculated using the normal effective statutory tax rate.

Note 2: The price book-value ratio (PBR), price earnings ratio (PER), and dividend yield are calculated using the stock price at the end of the fiscal year.

Note 3: EBITDA is calculated by adding depreciation to operating income.

Note 4: Following corporate separation on April 1, 2020, our general power transmission and distribution business was transferred from Chugoku Electric to Chugoku Electric Power Transmission & Distribution.

# Key Data on Our Electricity Business (Non-consolidated)

# ■ Electricity sales results

		Units	FY2017	FY2018	FY2019	FY2020	FY2021
Retail sales	Lighting	1 million kWh	18,184	18,562	17,488	16,813	16,822
	Power	1 million kWh	39,070	36,870	35,456	33,395	29,568
	Total	1 million kWh	57,254	55,432	52,944	50,208	46,391
Sales to other pow	er companies	1 million kWh		6,650	8,105	8,411	7,166

# ■ Power generated and received

			Units	FY2017	FY2018	FY2019	FY2020	FY2021
Power	Own facilities	Hydroelectric	1 million kWh	3,878	3,784	3,299	2,943	3,483
generated		Thermal	1 million kWh	35,867	33,643	32,039	29,975	28,059
received		Nuclear	1 million kWh	_	_	_	_	_
		New energy sources	1 million kWh	8	8	8	7	8
	Transmitted/received with other power companies		1 million kWh	23,212	23,490	23,055	22,516	20,528
	Pumping at pumped storage		1 million kWh	(750)	(940)	(858)	(866)	(1,177)
		Total	1 million kWh	62,216	59,986	57,543	54,575	50,901
Water flow rate		%	116.2	105.9	92.4	81.3	96.5	
Thermal efficiency (generator output)			%	40.8	40.8	40.9	41.2	41.4
Utilization rate of nuclear power facilities			%	_	_	_	_	_

<sup>(</sup>Note) Transmitted/received with other power companies gives the value obtained by deducting power transmitted from power received. Figures indicate power amounts as understood on the date of publication.

# ■ Own power generation facilities

		Units	FY2017	FY2018	FY2019	FY2020	FY2021
Hydroelectric		1 MW	2,910	2,910	2,909	2,905	2,905
Thermal	Steam	1 MW	7,765	7,765	7,765	7,765	6,915
	Internal combustion	1 MW	36	37	37	36	_
	Total	1 MW	7,801	7,802	7,802	7,801	6,915
Nuclear		1 MW	820	820	820	820	820
New energy sources		1 MW	6	6	6	6	6
Total		1 MW	11,536	11,538	11,538	11,532	10,646

(Note) Facility capacities are indicated for the end of the fiscal year.

# Non-financial (ESG) Data

#### ■ Environment

			FY2019	FY2020	FY2021
Promotion of glo	bal warming o	countermeasures			
(Note) Figures are for	Chugoku Electric				
CO <sub>2</sub> emission	n factor*1 (adju	ısted*2)	0.636kg-CO <sub>2</sub> /kWh	0.585kg-CO <sub>2</sub> /kWh	0.521kg-CO <sub>2</sub> /kWh
CO <sub>2</sub> emission	ns (adjusted*²)		33.68 million t-CO <sub>2</sub>	29.38 million t-CO <sub>2</sub>	24.15 million t-CO <sub>2</sub>
(Note) Figures for FY20	019 and FY2020 are fo	or Chugoku Electric. Figures	for FY2021 are the combined total of C	hugoku Electric and Chugoku Electric	Power Transmission & Distribution
	Scope 1*3		20.34 million t-CO <sub>2</sub>	19.11 million t-CO <sub>2</sub>	17.39 million t-CO <sub>2</sub>
Supply	Scope 2*4		40 t-CO <sub>2</sub>	50 t-CO <sub>2</sub>	30 t-CO <sub>2</sub>
greenhouse		Category 3	14.3 million t-CO <sub>2</sub>	11.53 million t-CO <sub>2</sub>	10.71 million t-CO <sub>2</sub>
gas emissions	Scope 3*5	Category 2, 5, 6, 7 related	0.64 million t-CO <sub>2</sub>	0.63 million t-CO <sub>2</sub>	0.68 million t-CO <sub>2</sub>
SF <sub>6</sub> emission	S		0.7 t	0.9 t	1.0 t
CF	wata	At checking	99.4%	99.4%	98.9%
Sr <sub>6</sub> recovery	SF <sub>6</sub> recovery rate		99.4%	99.4%	99.5%
(Note) Figures are for t	he whole Chugoku Ele	ectric Power Group			
Emissions of	specified chlore	ofluorocarbon, etc.	1.4 t	1.1 t	1.6 t
Promotion of the	e formation of	a recycling-oriente	ed society (Note) Figures are for	the whole Chugoku Electric Power Gr	oup
Waste*6 gene	erated		882 thousand t	865 thousand t	781 thousand t
Coal ash	Coal ash generated		633 thousand t	638 thousand t	541 thousand t
Waste*6 recycling rate			98.9%	98.7%	98.5%
Coal ash recycling rate			99.9%	99.8%	99.8%
Promotion of loc	Promotion of local environmental conservation (				
SOx emission	SOx emission intensity			0.15g/kWh	0.13g/kWh
NOx emission intensity			0.27g/kWh	0.25g/kWh	0.23g/kWh

<sup>\*1</sup> CO<sub>2</sub> emission factor for FY2021 is a provisional value, and the official value will be announced by the government

For environmental data other than the above, please see the Chugoku Electric Power Group Environmental Data Compilation for 2021.

Chugoku Electric Power Group Environmental Data Compilation for 2021

https://www.energia.co.jp/energy/energia/kankyou/index.html

<sup>\*2</sup> Reflects adjustments relating to feed-in-tariffs (FIT) and deductions from CO2 emissions credits based on the Act on Promotion of Global Warming Countermeasures, etc.

<sup>\*3</sup> Direct emissions of greenhouse gases by the business operator (fuel consumption, and emissions of N2O, SF6 and CH4 subject to reporting in line with the Act on Promotion of Global Warming Countermeasures, etc.)

<sup>\*4</sup> Indirect emissions due to use of electricity supplied from other companies

<sup>\*5</sup> Other indirect emissions. The applicable scope of each category is as follows

Category 2: Emissions from construction, manufacturing, and transport of capital goods purchased or acquired during the period
 Category 3: Emissions from fuel and energy related activities not included in Scope 1 and 2

<sup>·</sup> Category 5: Emissions relating to disposal and treatment outside the company of wastes (excluding valuable wastes) generated due to the company's business activities

<sup>·</sup> Category 6: Emissions due to fuel/electricity consumption in transportation used by employees for traveling during work Category 7: Emissions due to fuel/electricity consumption in transportation used by employees for traveling du
 Category 8: Emissions due to fuel/electricity consumption in transportation used by employees for commuting
 Wastes also include valuables

# Social

		FY2019	FY2020	FY2021
tilizing our diverse values and	experiences*1	(Note) Figures for FY2019 and FY202 for Chugoku Electric and lower	0 are for Chugoku Electric. For FY2021, r rows indicate figures for Chugoku Elect	upper rows indicate figures ric Power Transmission & Distribution
No. of employees		9,021	8.735	4,807
, , , , , , , , , , , , , , , , , , ,		9,021	6,733	3,777
Male		7,912	7,666	3,763
		7,6.2	,,,,,,	3,747
Female		1,109	1,069	1,044
				2,257
No. of management position	ns	4,307	4,196	1,884
				2,071
Male		4,128	4,020	1,881
Female				186
1 citiale		179	176	3
No. hired		000	0.40	139
TVO. TIII CU		296	242	100
Male		213	194	94
Wale		210	194	95
Female		83	48	45
			10	
Average age		43.5	43.4	42.8
				44.0
Male		44.1	43.9	44.1
				39.9
Female		39.9	39.6	28.2
				22.0
Average years of service		23.5	23.2	24.5
Mala				23.1
Male		24.3	24.0	24.6
Female		47.0	17.0	17.7
remale		17.8	17.6	7.3
No. of persons employed ba		28	15	4
on the voluntary reemploym				6
Hiring rate of persons with o		2.20%	2.31%	2.47%
hancing working environment			or FY2019 and FY2020 are for Chugoku Ened total of Chugoku Electric and Chugoku	
Total hours worked (per person)		1,877.2 hours	1,840.1 hours	1,874.6 hours
Annual paid leave taken (pe	· · · · · · · · · · · · · · · · · · ·	18.2 days	17.9 days	17.8 days
No. of users of childcare leave	Female	44	48	43
No. of users of nursing care leave		6	0	22
No. of cases of using life support leave		2.901	2,790	2,385
eveloping human resources/p		,	· ·	
Participation rate for level-b		98%	ned total of Chugoku Electric and Chugoku 98%	Electric Power Transmission & Distribu
No. of persons certified with advan-		52	57	59
of the end of fiscal year.	22.2.2.2			

<sup>\*1</sup> As of the end of fiscal year.
\*2 From FY2020 onward, hiring rate figures include those of our special subsidiary and associated companies that have received special subsidiary recognition.

# ■ Social (continued)

			FY2019	FY2020	FY2021
Health and safe			hugoku Electric. Figures for FY2021 are nd Chugoku Electric Power Transmission	a & Distribution	
Accident free	quency rate*1		0.43%	0.06%	0.46%
No. of occup	ational	Employees*2	35 cases	29 cases	32 cases
accidents		Contractors*1	23 cases	31 cases	31 cases
No. of occup	No. of occupational Employee fatalities Contractor		0 cases	0 cases	0 cases
fatalities			0 cases	0 cases	1 case
Human rights e	ducation (Not		20 are for Chugoku Electric. Figures for f ku Electric and Chugoku Electric Power		
Total no. of pe	Total no. of persons who took human rights training		12,697	11,415	11,200
Regional contrib	outions (Not		20 are for Chugoku Electric. Figures for f ku Electric and Chugoku Electric Power		
Social	No. of activity	ties	1,918	1,835	1,004
contribution activities	Total no. of employees participating		10,657	10,626	5,822
Support for t	Support for technical research in the region*3		35 cases (¥23.9 million)	33 cases (¥23.15 million)	20 cases (¥21.7 million)
Support to promote culture and sports in the region*4		173 cases (¥27.55 million)	166 cases (¥25.3 million)	99 cases (¥16.85 million)	

### ■ Governance

	FY2019	FY2020	FY2021
Corporate governance (Note) Figures are for Chugoku Electr	ic		
No. of directors	15*1	13*2	12*3
Female directors	1*1	2*2	2*3
External directors	3*1	4*2	4*3
Independent directors	3*1	4*2	4*3
No. of meetings of the Board of Directors	13	12	12
Attendance rate of all directors	100%	99%	99%
Attendance rate of external directors	100%	100%	98%
Total compensation for directors (except Audit and Supervisory Committee	¥471 million	¥450 million	¥364 million
directors and external directors)	(paid to 12 directors)*4	(paid to 13 directors)*5	(paid to 11 directors)*6
Total compensation for Audit and Supervisory Committee directors	¥37 million	¥35 million	¥36 million
(except external directors)	(paid to 1 director)	(paid to 1 director)	(paid to 2 directors)*6
Total componentian for outernal directors	¥36 million	¥36 million	¥45 million
Total compensation for external directors	(paid to 3 directors)	(paid to 3 directors)	(paid to 5 directors)*6
Compliance (Note) Figures for FY2019 and FY2020 are for Chugok the combined total of Chugoku Electric and Ch	u Electric. Figures for FY2021 are ugoku Electric Power Transmission & Dist	tribution	
No. of consultations with consultation desks	48 cases	56 cases	65 cases
No. of serious compliance violations*7	1 case	2 cases	1 case
Information security, personal information protect	tion (Note) Figures for FY2019 and the combined total of Ch	FY2020 are for Chugoku Electric. Figures nugoku Electric and Chugoku Electric Po	s for FY2021 are wer Transmission & Distribution
No. of serious information security incidents*7, 8	0 cases	0 cases	0 cases
No. of serious personal information leakage incidents*7	0 cases	0 cases	1 case

<sup>\*1</sup> Excludes accidents with no loss of work days. \*2 Accidents in the course of work (including accidents with no loss of work days).
\*3 Subsidies from the Electric Technology Research Foundation of Chugoku. \*4 Subsidies from the Energia Culture and Sports Foundation.

<sup>\*1</sup> As of the end of June 2019. \*2 As of the end of June 2020. \*3 As of the end of June 2021.
\*4 Includes one director who retired as of the close of the 94th annual General Meeting of Shareholders held on June 27, 2018.
\*5 Includes two directors who retired as of the close of the 95th annual General Meeting of Shareholders held on June 26, 2019.
\*6 Includes five directors who retired as of the close of the 96th annual General Meeting of Shareholders held on June 25, 2020.
\*7 Cases where a press release was issued. \*8 Refers to no. of incidents involving electronic information.

# Corporate Data (as of April 1, 2021)

Corporate name	The Chugoku Electric Power Company, Incorporated	
Head office	4-33 Komachi, Naka-ku, Hiroshima-shi, Hiroshima 730-8701 Japan	
Representatives	Tomohide Karita, Representative Director, Chairperson of the Board Mareshige Shimizu, Representative Director, President & Chief Executive Officer	
Date of establishment	May 1, 1951	
Paid-in capital	¥197,024 million	

# **Group Companies** (consolidated subsidiaries and affiliated companies accounted for by the equity method) (as of June 30, 2021)

- O Consolidated subsidiaries (20 companies) Affiliated companies accounted for by the equity method (12 companies)
- Unconsolidated subsidiaries accounted for by the equity method (6 companies)

### ■ Comprehensive Energy Business

- Energia Solution & Service Company, Incorporated
- O Chugoku Electric Power Australia Resources Pty. Ltd.
- O Chugoku Electric Power International Netherlands B.V.
- Chugoku Electric Power America, LLC
- O Chugoku Electric Power Singapore Pte. Ltd.
- O Setouchi Joint Thermal Power Co., LTD.
- O MIZUSHIMA LNG COMPANY, LIMITED
- O KAITA BIOMASS POWER CO., LTD.
- O AIR WATER & ENERGIA POWER YAMAGUCHI CORPORATION
- O AIR WATER & ENERGIA POWER ONAHAMA CORPORATION
- 3B Power Sdn. Bhd.
- O Jimah East Power Sdn. Bhd.
- O Toyo Thai Power Myanmar Co., Ltd.

#### ■ Power Transmission and Distribution Business

- O Chugoku Electric Power Transmission & Distribution Co., Inc.
- O Denryoku Support Chugoku Co., Inc.

#### ■ Information and Telecommunications Business

Energia Communications, Inc.

#### Other

- O CHUDEN KOGYO CO., LTD.
- O CHUDEN PLANT CO., LTD.
- O CHUGOKU INSTRUMENTS CO., INC.
- Energia L&B Partners Co., Inc.
- O CHUDEN KANKYO TECHNOS CO., LTD.
- O EnerGia Business Service Co., Inc.
- Power Engineering and Training Services, Incorporated
- O ADPLEX Co., Ltd.
- O CHUDEN ENGINEERING CONSULTANTS CO., LTD.
- O The Energia Logistics Co., Inc.
- TEMPEARL INDUSTRIAL CO., LTD.
- O CHUGOKU KOATSU CONCRETE INDUSTRIES CO., LTD.
- O CHUGOKU HEALTH AND WELFARE CLUB CO., INC.
- Osaki CoolGen Corporation
- O CHUDENKO CORPORATION
- The Chugoku Electric Manufacturing Company, Incorporated
- EnerGia Smile CO., INC.
- EnerGia Care Service Co., Inc.
- NichiDenKogyo Co., LTD.
- CHUGOKU BEND CO., LTD.
- Chugoku Record Management Inc.
- TEMPEARL INDUSTRIAL (VIETNAM) CO., LTD.

# Stock Information (as of March 31, 2021)

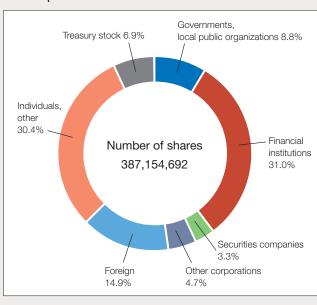
Number of shares issued	387,154,692 shares
Number of shareholders	108,956
Accounting auditor	KPMG AZSA LLC
Listed financial instruments exchange	Tokyo Stock Exchange, Inc.
Shareholder registry administrator	Sumitomo Mitsui Trust Bank, Limited 1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233

# ■ Major shareholders (top 10)

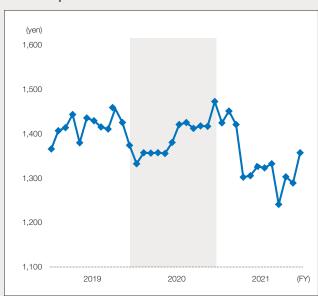
Name	Number of shares held (thousands)	Shareholding (%)*
Yamaguchi Prefecture	34,005	9.4
The Master Trust Bank of Japan, Ltd. (trust account)	31,910	8.9
Custody Bank of Japan, Ltd. (trust account)	16,590	4.6
Nippon Life Insurance Company	14,818	4.1
STATE STREET BANK WEST CLIENT - TREATY 505234	7,643	2.1
Chugoku Electric Power Company's Stock Investment	6,905	1.9
The Hiroshima Bank, Ltd.	5,842	1.6
JPMorgan Securities Japan Co., Ltd.	4,924	1.4
Custody Bank of Japan, Ltd. (trust account 5)	4,423	1.2
Custody Bank of Japan, Ltd. (trust account 6)	3,921	1.1

 $<sup>^{*}</sup>$ Shareholding is calculated after deducting 26,619,833 shares of treasury stock from the total number of shares issued.

# ■ Composition of shareholders



# ■ Stock price





### THE CHUGOKU ELECTRIC POWER CO., INC.

4-33 Komachi, Naka-ku, Hiroshima 730-8701 Japan TEL: +81-82-241-0211 https://www.energia.co.jp

Chugoku Electric Power Official Facebook https://www.facebook.com/energia.jp

Chugoku Electric Power Official Instagram https://www.instagram.com/energia.jp/

Chugoku Electric Power Official Twitter https://twitter.com/energiaJP

Chugoku Electric Power Official YouTube
https://www.youtube.com/channel/UCpmAX0M1qKSglw9k\_zyXSfw

Chugoku Electric Power Transmission & Distribution Official Twitter https://twitter.com/chugoku\_nw

Chugoku Electric Power Transmission & Distribution Official YouTube https://www.youtube.com/channel/UCKHOgWNF3x95tEVp8wIPWCw