Responding to Environmental Issues

Our Group is devoted to preserving the planet and local communities, and ensuring a bright future for all. For this reason, we actively pursue climate change measures and environmental conservation activities, and work continuously to reduce our environmental footprint.

Initiatives towards Climate Change Problems

We strive to grasp changes in social needs and risk factors and reflect these in business management from an ESG perspective in order to increase the effectiveness of efforts aimed at the sustainable creation of corporate value. As part of these efforts, we expressed our support for the recommendations of the TCFD* in September 2019, and we will enhance our climate change-related information disclosures to fulfill our responsibility to explain such matters to stakeholders.

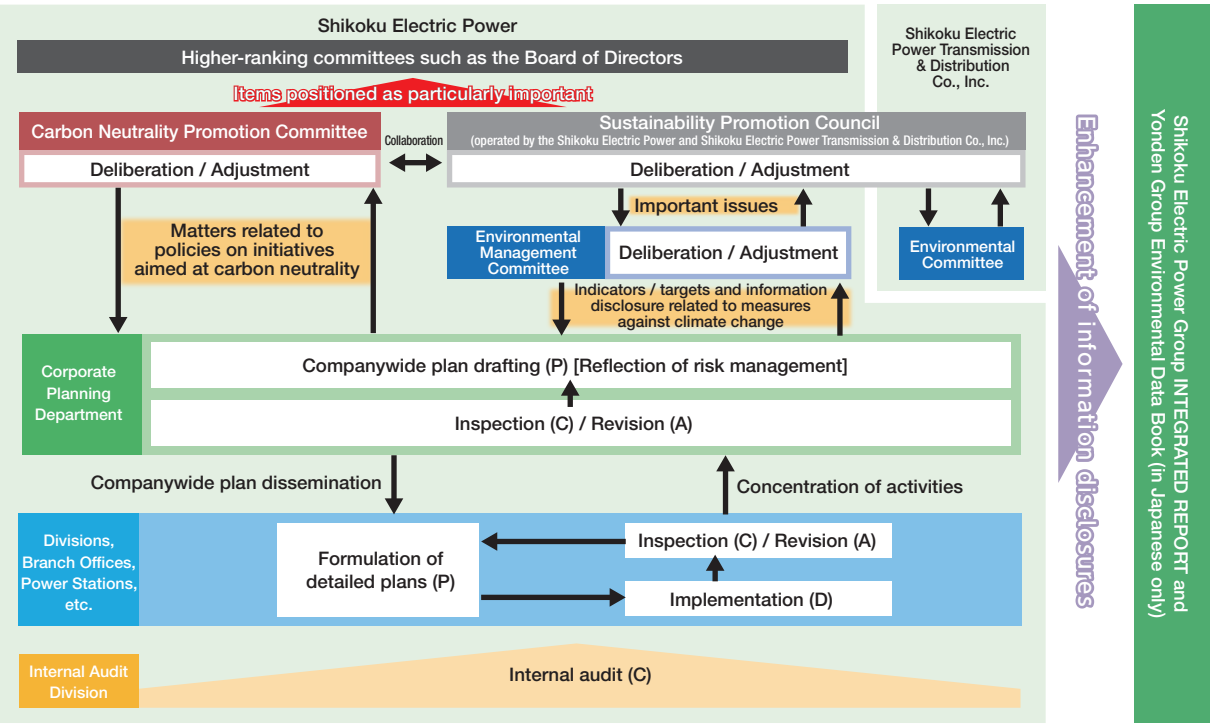
* Abbreviation for the Task Force on Climate-related Financial Disclosures. The Financial Stability Board (FSB), which is comprised of financial authorities from major countries, was established in December 2015 in response to a request provided by G20 Finance Ministers and Central Bank Governors. In June 2017, the TCFD issued recommendations on the disclosure of information concerning climate-related risks and opportunities.

Governance

Governance and promotion framework for measures against climate change

Addressing climate change is an important management issue. The Sustainability Promotion Council, the Environmental Management Committee (chaired by the General Manager of the General Planning Division), and the Carbon Neutrality Promotion Committee (chaired by the President) are taking the lead in promoting measures against climate change.

Items positioned as particularly important within the deliberation process of each committee are submitted to higher-ranking committees for discussion (including the Board of Directors). The results of these discussions are incorporated into the management plans for each fiscal year to improve and enhance the initiatives being undertaken.



Environmental Management Committee	Deliberations that are focused on setting targets for measures against climate change, on assessing and managing the status of the achievement of the targets, and on enhancing information disclosure
Carbon Neutrality Promotion Committee	Various initiatives in both supply and demand to achieve carbon neutrality in 2050 Focused discussion on policy See pages 17-19

Performance-linked remuneration system in consideration of climate change measures

Shikoku Electric Power will introduce a new “performance-linked remuneration system” See page 63 for directors, etc.
In order to promote low carbonization and decarbonization, the status of initiatives to address climate change will be reflected in remuneration.

Risk management

We are well aware of the importance of climate change-related risk management. Every year, the management team conducts checks and reviews after extracting climate change-related risks with the potential to significantly impact management, comprehensively taking into account factors such as the probability of the occurrence of risk, and their impact on earnings and expenses (cost increases, etc.). We strive to prevent the occurrence of risks and reduce their impact on the operation of our business by incorporating the results into our business plans for the following fiscal year.

Note: Our climate change-related risk management system is integrated into our company-wide risk management system. See page 65

Strategy

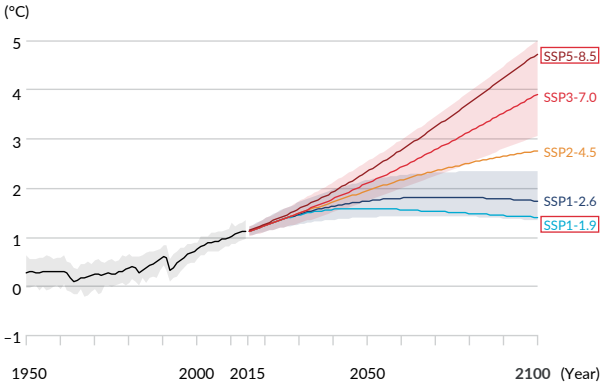
We will continuously evaluate and confirm the kinds of impacts that climate change-related risks and opportunities will have on our business operations under certain future scenarios, formulate the required measures based on the results, and then move on to execution of those measures.

Scenario selection

We selected a scenario in which no additional measures beyond current measures are taken to control temperature rise (4°C Scenario*1) and a scenario in which further measures are taken (1.5 °C Scenario*2) after fully achieving the currently announced measures, and then assumed a future of the electric power business under each scenario.

*1 See the Stated Policies Scenario (STEPS) presented by the International Energy Agency (IEA) and SSP5-8.5, etc. of the IPCC Sixth Assessment Report
*2 See The Net Zero Emissions by 2050 Scenario (NZE) presented by the International Energy Agency (IEA) and SSP1-1.9, etc. of the IPCC Sixth Assessment Report

Changes in global average temperature, using 1850 to 1900 as a baseline



Source: IPCC AR6 WG I

Future image of the electric power business

Item		1.5°C Scenario	4°C Scenario
Policies	Energy policy	• Rapid change in policies aimed at decarbonization (promotion of the development of renewable energy, nuclear energy and hydrogen energy)	• Gradual change of policies aimed at decarbonization (thermal power is maintained while introducing renewable energy as an extension of current policy in consideration of stable supply and economic factors)
	Other policies	• Introduction of carbon taxes and emission trading schemes advance rapidly	• Introduction of carbon taxes and emission trading schemes advance gradually
Technology	Low carbonization and decarbonization technologies	• Technological innovation in low carbonized and decarbonized power generation progress rapidly	• Technological innovation in low carbonized and decarbonized power generation progress gradually
Fuel price	Fossil fuels	• Fossil fuel use declines and fuel prices fall	• Fossil fuel use gradually declines and fuel prices gradually fall, but prices increase for some fuel types
Market	Energy demand	• Increasing electrification in an effort to decarbonize, thereby increasing demand for electricity	• A lack of societal momentum toward decarbonization and a lack of progress in terms of electrification reduces demand for electricity
	Customer needs	• The need for low carbonized/decarbonized power significantly increases	• The need for low carbonized/decarbonized electricity increases to a certain extent
Disasters	Unusual weather	• Typhoons and other disasters occur, but the extent of the damage caused is not much different than the current situation	• Typhoons and other disasters become more intense, with damage becoming more severe than seen currently

Risks and opportunities

Climate change-related risks and opportunities were identified for the 1.5°C Scenario, and the 4°C scenario. We conducted an evaluation and confirmation of the major factors which will affect our company's business in the future. As a result, we were able to confirm that while there is a possibility of increased costs due mainly to the "expansion of the ratio of non-fossil power sources / strengthening of regulations on thermal power sources" and the "introduction of a carbon pricing" under each scenario, on the other hand, we can also expect improvements in profitability due to "improvements in the value of non-fossil power sources" and the "development of electrification / expansion of needs for low carbonized / decarbonized electricity."

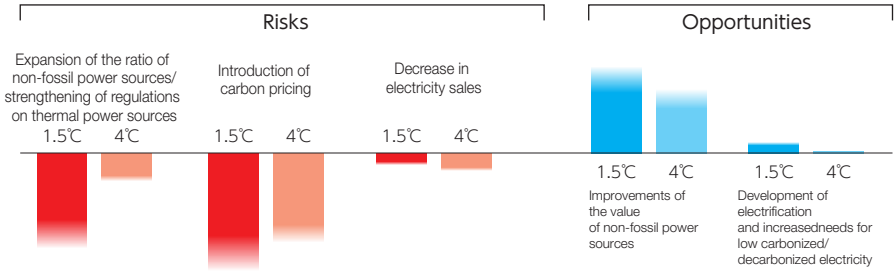
We also considered measures serving to minimize risks and maximize opportunities. Each of these measures has been incorporated into the Group's Medium-Term Management Planand we will contribute to the realization of a sustainable society through the steady implementation of these measures.

Key risks, opportunities and measures extracted from each scenario

Classification			Impact period*	Details of risks and opportunities	Main measures
Transition risks	Policies and regulations	Expansion of the ratio of non-fossil power sources/ strengthening of regulations on thermal power sources	Short/ Medium/ Long	• Cost increases due to the expansion of the ratio of non-fossil power sources and the strengthening of regulations on thermal power sources	• R&D and introduction of new technologies such as hydrogen / ammonia power generation • Further expansion of the introduction of renewable energy power sources • Advocacy and involvement in energy policy
		Introduction of carbon pricing	Short/ Medium/ Long	• Increase in costs resulting from the introduction of carbon pricing	
	Market	Decrease in electricity sales	Short/ Medium/ Long	• Reduced electricity sales due to the spread of distributed power sources • Reduced acceptance of sales contracts with low environmental value derived from thermal power sources, resulting in reduced electricity sales	• Consideration of profit opportunities through business utilizing distributed power resources • Promotion of low carbonization / decarbonization of power sources
	Reputation	Lack of information disclosure	Short/ Medium/ Long	• Decline in investor appetite, reputational damage resulting in higher funding costs, lower stock price, and divestment	• Appropriate disclosure of information to stakeholders
Physical risks	Chronic	Increased chronicity of unusual weather	Short/ Medium/ Long	• Lack of supply and adjustment capacity due to severe weather conditions, etc. • Reduced hydropower generation due to a decrease in the flow rate associated with changes in precipitation patterns	• Securing supply and adjustment capacity through the further utilization of electric energy, etc. • Improved power generation efficiency and optimized operations
	Acute	Intensification of natural disasters	Short/ Medium/ Long	• Large increase in the cost of recovery from typhoons and other natural disasters	• Strengthening of disaster countermeasures systems, including the strengthening of cooperation with local governments and related organizations (Reference (1))
Opportunities	Energy sources	Improvements in the value of non-fossil power sources	Short/ Medium/ Long	• Increased advantages of nuclear power stations • Increased profits due to the expanded generation of renewable energy	• Continuation of the safe and stable operation of nuclear power stations (Reference (2)) • Increased investment in renewable energy sources
		R&D progress for new technologies	Medium/ Long	• Commercialization of hydrogen utilization technologies, etc. through progress in R&D	• Conducting joint R&D and demonstration tests with manufacturers and other electric power companies
	Products/ services	Development of electrification and increased needs for low carbonized/ decarbonized electricity	Short/ Medium/ Long	• Increased electricity sales due to greater needs for electrification • Increased electricity sales due to greater needs for low carbonized / decarbonized electricity	• Further expansion of the introduction of low carbonized / decarbonized power sources, promotion of electrification. • Offering of CO2-free pricing contracts, etc.
	Resilience	Increasing need to secure supply and adjustment capacity	Short/ Medium/ Long	• Rising market prices due to a lack of supply and adjustment capacity nationwide	• Securing supply and adjustment capacity based on the optimization of supply facilities
		Increasing need for disaster prevention and mitigation	Short/ Medium/ Long	• Strengthening trust relationships with customers and society and improving corporate reputation through disaster-resilient business operations	• Further enhancing disaster countermeasures by strengthening equipment measures and increasing cooperation with local governments and related organizations

* Short-term / medium-term: Up to 2030; Long-term: Up to 2050

Major impact assessment for fiscal 2030 in each scenario



Major financial impact (Reference)

(1) Responses to increasingly severe natural disasters

Cost of recovery from the July 2018 floods in Japan

Approx. 3 billion yen

(2) Safe and stable operation of nuclear power

Improvement of the earnings and expenses after one month of safe and stable operation at Ikata Unit No. 3*

Approx. 10 billion yen

* Effects in terms of improved earnings and expenses related to supply and demand, as estimated based on fiscal 2022 results

Transition plan: Carbon Neutral Challenge 2050

Our Group has set up a challenge of becoming carbon neutral in 2050 as a long-term priority within its Medium-Term Management Plan.

With this in mind, based on the measures serving to address climate change-related risks and opportunities incorporated in our Medium-Term Management Plan. We have formulated a roadmap and are promoting specific initiatives concerning the "low carbonization / decarbonization of power sources," and the "further utilization of electric energy" with a view to fiscal 2030 and even further ahead to fiscal 2050, also taking the environmental conservation and other factors into account.

See pages 17—19

Indicators and targets

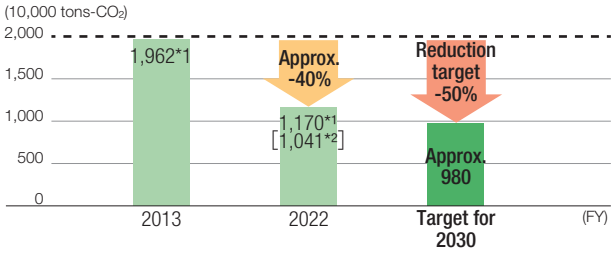
We have set targets for various climate-related indicators, including CO_2 emissions from the retail sector. We will work to minimize climate change-related risks and maximize opportunities by promoting initiatives that are aimed at achieving these targets.

Halve CO_2 emissions from the retail sector by fiscal 2030 in comparison to fiscal 2013

Shikoku Electric Power is promoting the "low carbonization / decarbonization of power sources" by maximizing the utilization of nuclear power, making renewable energy a main source of power, improving the efficiency of thermal power generation, and expanding upon the introduction of renewable energy, as well as the "further use of electric energy" based on initiatives such as promoting electrification, including in the industrial and transportation sectors. By doing so, we aim to reduce CO2 emissions from the retail sector by half in fiscal 2030 compared to fiscal 2013.

Note: CO_2 emissions from the retail sector in recent fiscal years See page 75

CO_2 emissions from the retail sector



*1 Emissions excluding free allocation of FIT on the same basis as the fiscal 2030 target
*2 Emissions including free allocation of FIT (Value based on the Act on Promotion of Global Warming Countermeasures)

Greenhouse gas emissions throughout the supply chain

In fiscal 2022, greenhouse gas emissions throughout the supply chain amounted to 14.44 million t-CO2. We will work to reduce emissions in order to achieve the targets newly set in the GX League, which we joined in April 2023.

* Greenhouse gas emissions in recent fiscal years See page 75

Emissions throughout the supply chain in FY2022*1

	Scope 1*2	Scope 2*3	Scope 3*4
Emissions volume [10,000 tons-CO_2]	809	0	635

Scope 3 breakdown	Emissions volume [10,000 tons-CO_2]
Capital goods	14.1
Fuel and energy-related activities	590.0
Investments	27.4
Other	3.3

Shikoku Electric Power's targeted emissions in the GX League*5

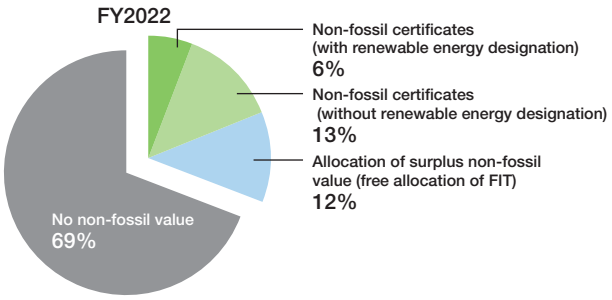
Emissions volume [10,000 tons-CO_2]	Criteria	Targets		
	FY2013	FY2025	Total for FY 2023-FY2025	FY2030
Scope 1	1,221	950	2,850	850
Scope 2	0.0465	0.0240	0.0720	0.0240

*1 Calculated for Shikoku Electric Power and consolidated subsidiaries (excluding companies with negligible emissions) in reference to documents such as the "Basic Guidelines for Calculating Greenhouse Gas Emissions through the Supply Chain (ver. 2.5)" (Ministry of the Environment / Ministry of Economy, Trade and Industry)
*2 Direct emissions from the use of fuel for in-house power generation, etc. In addition, emissions in fiscal 2022 decreased significantly from 9.66 million t-CO2 in fiscal 2021 as a result of the shutdown of Saijo Power Plant Unit No. 1 due to its replacement.
*3 Indirect emissions associated with the use of electricity purchased from other companies at our places of business (offices), etc.
*4 Indirect emissions contained in electricity purchased from other companies (for electricity sales), etc.
*5 Shikoku Electric Power's emissions are calculated based on the GX League rules.

Ratio of non-fossil certificates held by the retail sector in relation to the amount of electricity sold*1 Achievement of 44% or more in fiscal 2030*2

In order to respond to opportunities such as the increasing need for low carbonized / decarbonized electricity, we will aim to increase the ratio of non-fossil certificates held by the retail sector in relation to the amount of electricity sold (equivalent to the ratio of non-fossil power sources derived from the Act on Sophisticated Methods of Energy Supply Structures*1) to 44% or more in fiscal 2030*2.
We will also proactively work on continuing the safe and stable operation of nuclear power plants, which are non-fossil power sources, increasing the output of hydropower plants, and similar efforts.

Ratio of non-fossil certificates held by the retail sector in relation to the amount of electricity sold



*1 In order to promote the effective use of non-fossil power sources, such as renewable energy and nuclear power, the Act on Sophisticated Methods of Energy Supply Structures (Act on the Promotion of Applicable Environmental Use of Energy Sources and the Effective Use of Fossil Energy Materials by Energy Suppliers) sets a target for the ratio of non-fossil power sources for electricity retailers, etc.

Ratio of non-fossil power sources in recent fiscal years → See page 75

*2 Notification of the Ministry of Economy, Trade and Industry "Judgment Standard for Electricity Utilities Concerning the Applicable Environmental Use of Energy Sources" requires that, in fiscal 2030, 44% or more of the electricity supplied by electricity retailers be derived from non-fossil power sources.

Investments aimed at low carbonization / decarbonization of power sources Cumulative total for the 10-year period from fiscal 2021 to fiscal 2030 350 billion yen

In order to respond to climate change-related risks and opportunities, we will invest a cumulative 350 billion yen over the 10-year period spanning from fiscal 2021 to fiscal 2030 to promote low carbonization / decarbonization of power sources.

	Result in FY2021 to FY2022
Amount of investments related to low carbonization / decarbonization of power sources	Approx. 120 billion yen

Introducing internal carbon pricing

Shikoku Electric Power has introduced an internal carbon price and is using this to make investment decisions in order to accelerate capital investment for low carbonization / decarbonization, such as renewable energy development.

Zero power plants that are inadequately prepared for conceivable flood risks

We have conducted risk assessments of power plants in relation to conceivable floods based on past disasters and other factors. As a result of these assessments, we have completed the construction works for countermeasures at power plants requiring countermeasures.

We will continue to make efforts to prepare for risks, including responding to disasters which had not been previously anticipated. This is something we will do by implementing "hard" measures, as well as "soft" measures such as disaster drills.

Achieve benchmark index (Act on the Rational Use of Energy (Energy Conservation Act)) in FY2030*1 (Indicator A: 1.00 or higherIndicator B: 44.3% or higher Coal indicator: 43.0% or higher)*2

The thermal efficiency of thermal power plants declines gradually as a result of operating time and the deterioration of facilities, etc. We implement daily equipment inspections, operational management and equipment upgrades as appropriate to make efforts to maintain the thermal efficiency of existing thermal power plants. We are also working on improving the efficiency of thermal power generation by promoting the replacement of aging thermal power facilities. → See page 35

Through these efforts, we aim to achieve the benchmark indicator targets of the Act on the Rational Use of Energy in fiscal 2030.

	FY2020	FY2021	FY2022
Indicator A	1.02	1.02	1.04
Indicator B (%)	43.1	42.1	43.5
Coal indicator (%)*3	—	—	39.43

*1 Under the Act on the Rational Use of Energy and Non-Fossil Energy Conversion, etc, an index (benchmark index) is set for each specific industry and field so that energy saving conditions among business operators in that industry can be compared.
Indicator A: Indicator of the rate of accomplishment of targets for power generation efficiency by fuel source
Indicator B: Indicator of overall thermal power generation efficiency
Coal indicator: Indicator of coal-fired power generation efficiency

*2 According to a notification of the Ministry of Economy, Trade and Industry - "Standards of judgment for business operators using energy at factories," - the target level in fiscal 2030 for Indicator A is 1.0 or more, while for Indicator B is 44.3% or more, and for the Coal indicator is 43.0% or more.

*3 Reported based on results for fiscal 2022 in line with revisions to the Act on the Rational Use of Energy (Energy Conservation Act)

Developing new renewable energy throughout the Group: 500 MW by fiscal 2030 2,000 MW by fiscal 2050

Note: Results up to the end of fiscal 2022 → See page 33

Advancing Environmental Preservation Activities

Our Group is continuously working to reduce the environmental impact of our business activities and to conserve the environment in cooperation with local communities.

Prevention of air pollution

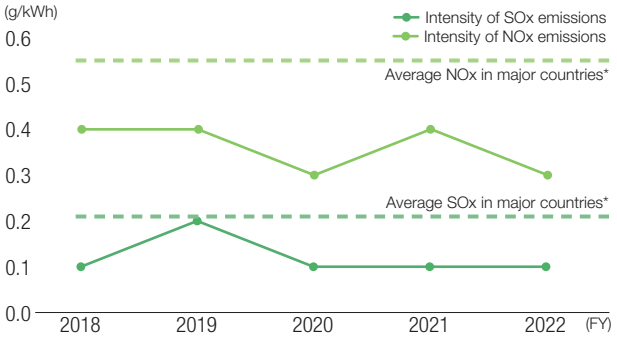
In order to reduce the emission of sulfur oxides (SOx) and nitrogen oxides (NOx) by thermal power plants into the atmosphere, we are taking measures such as using fuels with low sulfur content, installing flue gas desulfurization and denitrification equipment, and implementing the thorough management of combustion.

We have also undertaken the planned replacement of the aging oil-fired thermal power facility at the Sakaide Power Station with an LNG combined cycle, and curbed of the amount of power generated by oil. As a result, the intensity of SOx and NOx emissions has remained at low levels in recent years.

Result in fiscal 2022
Intensity of SOx emissions **0.1g/kWh**

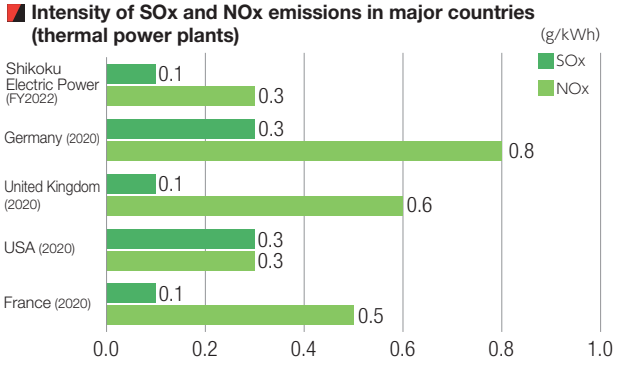
Result in fiscal 2022
Intensity of NOx emissions **0.3g/kWh**

Intensity of SOx and NOx emissions from thermal power plants



* Derived from 2019 data of four major countries (Germany, United Kingdom, USA, and France)

Intensity of SOx and NOx emissions in major countries (thermal power plants)



* Compiled based on the website of the Federation of Electric Power Companies of Japan ("Energy and the Environment")

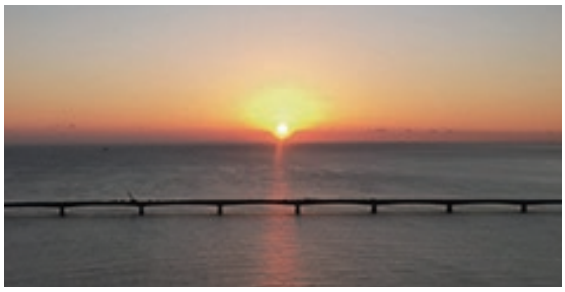
Promotion of recycling

Coal ash recycling

Coal ash generated at coal-fired power plants is used as a raw material for cement and as a concrete admixture in various applications, such as bridges, roads, and the exterior walls of buildings. Almost all of it is recycled.

Recent cases of utilization

Coal ash was used for the Yoshinogawa Sunrise Bridge (Opened in March 2022) in Tokushima Prefecture.



Source: NEXCO West Japan ("E55 Tokushima Nanbu Expressway, Tokushima JCT - Tokushima Okinosu IC")

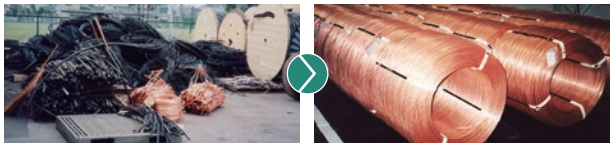
Result in fiscal 2022
Coal ash recycling ratio **99.6%**

Recycling of remains of demolished structures

All of the old and replaced copper and aluminum wires are recycled as new wires, etc.

All of the removed concrete columns are pulverized, separated from the reinforcing bars, and then reused as construction aggregate (roadbed material for road paving).

Recycling status of power lines and concrete pillars



Power lines before recycling — Recycled power lines

Concrete pillars before recycling — Recycled construction aggregates

Initiatives toward Environmental Issues (in Japanese only)
https://www.yonden.co.jp/energy/environment/index.html

Yonden Group Environmental Policies (in Japanese only)
https://www.yonden.co.jp/energy/environment/policy/index.html

Yonden Group Environmental Data Book (in Japanese only)
https://www.yonden.co.jp/energy/environment/data/index.html

Conservation of biodiversity

Amid growing interest in biodiversity and nature, the Taskforce on Nature-related Financial Disclosures (TNFD) was established in June 2021. The TNFD is developing a framework for assessing and disclosing risks and opportunities related to nature, and its final recommendations will be published in September 2023.

The dependence on nature of corporate activities, and the impact of such activities on nature, can be seen as risks and opportunities related to nature. Shikoku Electric Power will continue to monitor TNFD trends and work to contribute to building a nature-positive society.

Inspection and maintenance of nesting towers (Seiyo City)

Oriental stork flying into the area (Seiyo City)

Initiatives at electric power stations

To minimize the impact on river environments and to comply with laws and regulations concerning the amount of water intake, we have implemented measures for hydroelectric power plants, including:

- Installation of equipment able to take in water with low turbidity and return it downstream after use for power generation
- Discharge of maintenance flow to improve the environments downstream from dams
- Removal of driftwood and dust from reservoirs to use as biomass fuel, etc.

At thermal and nuclear power plants, we are working to reduce the amount of water required for power generation, while at the same time strictly complying with laws, regulations and other standards when discharging wastewater. In addition, when it comes to the seawater used to cool steam etc., the temperature differences between the intake and discharge water is controlled in accordance with agreements with local governments.

When constructing power plants, environmental assessments are carried out to predict and evaluate the impact of construction work and the operation of power plants on the surrounding area in advance, and the results are reflected in environmental conservation measures.

Conservation activities for the oriental stork

From the viewpoint of conserving biodiversity, we are working to protect the Oriental stork, a bird designated as nationally protected species. We are donating nesting towers to local governments and also working to preserve the habitats of the Oriental stork by continuously undertaking efforts such as the conducting of inspections and maintenance using aerial work platforms.

Environmental conservation activities together with the community

We are working throughout the year with local communities around Shikoku on environmental conservation activities (such as clean-ups and forest preservation activities) mainly through “Environment Month”, which is sponsored by the Ministry of the Environment.

Shimanto Yonden Forest activities

At our Kochi Branch office, employees are participating in Kochi Prefecture’s Forest Development Project in Collaboration with Environmentally Advanced Companies. In the agreed forest (in Shimanto Town) named Shimanto Yonden-No-Mori, they are carrying out forest preservation activities such as tree planting and cutting the undergrowth, together with the local authorities and people of the area.

Forest preservation activity