



Chubu Electric Power Company, Incorporated

# 2024 CDP Corporate Questionnaire 2024

Word version

**Important: this export excludes unanswered questions**

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

[Terms of disclosure for corporate questionnaire 2024 - CDP](#)

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## C1. Introduction

### (1.3) Provide an overview and introduction to your organization.

#### (1.3.2) Organization type

Select from:

Publicly traded organization

#### (1.3.3) Description of organization

*Chubu Electric Power (Chuden) is an electric power company established in 1951, with a service area covering the Chubu region. The Chuden group's main businesses include the electric power business and related businesses, gas business, distributed energy business, overseas consulting and investment business, real estate management business, and IT business. The company has 9,191 MW of power generation facilities (3,617 MW of nuclear power generation, 5,475 MW of hydroelectric power generation, 99 MW of new energy, and 0.4 MW of thermal power generation for emergency use), approximately 10,000 transmission lines, and approximately 130,000 km of power distribution lines. The electric energy sold in FY2022 by the Chuden group was about 104.3 billion kWh in FY2023\*, making it represent the third biggest electric power company in Japan. Focusing on the energy business, all of the 152 companies constituting Chubu Electric Power Company Group are developing businesses such as the expansion of facilities relating to the electricity business, construction of facilities for maintenance, manufacturing of equipment and material supply. In Japan, full liberalization of electricity retail began in 2016 and gas retail began in 2017, and thus Chuden group has been actively addressing the expansion of business areas and improvement of service contents. In these circumstances, in April 2019 Chuden integrated the existing thermal power generation business, etc. into JERA Co., Inc. and has completed a thorough value chain ranging from procurement of fuel upstream, which has been in place for some time, to power generation and wholesale sales of electric power and gas, in order to create an autonomous business structure to be able to respond promptly and flexibly. Subsequently, in April 2020, Chuden demerged its power network business as Chubu Electric Power Grid Co., Inc. and its customer service & sales business as Chubu Electric Power Miraiz Co., Inc. respectively. (Hereinafter, these two companies will be collectively referred to as operating companies in this reply). The operating companies are consolidated subsidiary companies of Chuden, however, JERA Co., Inc. is not. Chuden calculates emissions by using the financial management standard and includes electricity procured from JERA in Scope 3 emissions.*

*\*: Total of Chuden and operating companies*

### (1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

	End date of reporting year	Alignment of this reporting period with your financial reporting period	Indicate if you are providing emissions data for past reporting years
	03/31/2024	Select from: <input checked="" type="checkbox"/> Yes	Select from: <input checked="" type="checkbox"/> No

**(1.5) Provide details on your reporting boundary.**

**(1.5.1) Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?**

Select from:

No

**(1.5.2) How does your reporting boundary differ to that used in your financial statement?**

*The reporting boundary used in the financial statements includes consolidated subsidiaries engaged in construction and real estate, etc., other than the electricity and gas business, which accounts for the majority of consolidated sales. For the electricity and gas business, which accounts for the majority of Chuden's sales, CDP has received responses from Chubu Electric Power Co., Inc., a listed company that also operates a power generation business, Chubu Electric Power Grid Co., Inc., which operates a power transmission and distribution business, and Chubu Electric Power Miraiz Co., Inc., which operates a retail electricity and gas businesses.*

**(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

**ISIN code - bond**

**(1.6.1) Does your organization use this unique identifier?**

Select from:

Yes

**(1.6.2) Provide your unique identifier**

JP352660BN55

## ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

Yes

(1.6.2) Provide your unique identifier

JP3526600006

## CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

No

## Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

No

## SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

No

## LEI number

### (1.6.1) Does your organization use this unique identifier?

Select from:

Yes

### (1.6.2) Provide your unique identifier

529900A76GOP0PGNHT63

### D-U-N-S number

### (1.6.1) Does your organization use this unique identifier?

Select from:

No

### Other unique identifier

### (1.6.1) Does your organization use this unique identifier?

Select from:

No

**(1.16.1) For your electricity generation activities, provide details of your nameplate capacity and electricity generation specifics for each technology employed.**

### Coal - Hard

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have coal-fired power generation facilities.*

## Lignite

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have lignite-fueled power generation facilities.*

## Oil

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

0

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

0

### (1.16.1.5) Comment

The operating company of Chuden has one petroleum-fueled thermal power station for backup use in case of disruption of supply to the remote islands (one transmission line), but since its rated generation capacity is 400 kW, it was set to zero. The thermal power station was decommissioned in March 2024 after the completion of the construction of an additional supply line to the remote islands, and its power generation (GWh) and total Scope 1 emissions (tons of CO2 equivalent) in fiscal year 2023 were both less than 1, and thus were assumed to be zero.

## Gas

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

Chubu Electric Power and its operating companies do not have gas-fueled power generation facilities.

## Sustainable biomass

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

49

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

348

### (1.16.1.5) Comment

*Chubu Electric Power's biomass power plant uses wood pellets and palm kernel shells as fuel. Of these, the wood pellets, which are used in large quantities, have all been certified by the FSC. The palm shells are currently in a grace period for certification standards. As a result, our biomass power plant is a sustainable biomass power plant. The total amount of electricity generated is not disclosed as it is business confidentiality for Chubu Electric Power, and has been entered as zero.*

## Other biomass

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have unsustainable biomass power generation facilities.*

## Waste (non-biomass)

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have power generation facilities that use waste (non-biomass) as fuel.*

## Nuclear

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

3617

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

0

### (1.16.1.5) Comment

*Our nuclear power plants did not generate electricity in FY2023.*

## Fossil-fuel plants fitted with carbon capture and storage

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have fossil fuel plants equipped with carbon dioxide capture and storage (CCS) facilities.*

## Geothermal

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

Chubu Electric Power and its operating companies do not have geothermal power generation facilities.

## Hydropower

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

5475

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

8730

### (1.16.1.5) Comment

*The total power generated will be information related to capacity factor, therefore it was not disclosed due to business confidentiality and its value has been entered as zero.*

## Wind

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

29

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

51

### (1.16.1.5) Comment

*Total power generation has been entered as zero because it is information related to facilities that utilize capacity factor, which is not disclosed due to Chubu Electric Power's business confidentiality.*

## Solar

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

20

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

30

### (1.16.1.5) Comment

*Since the total power generation is information related to the capacity factor, which is business confidentiality for Chuden, it is not disclosed and zero is entered.*

## Marine

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have renewable energy generation facilities other than hydro, wind, solar, and sustainable biomass.*

## Other renewable

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have any other renewable energy generation facilities.*

## Other non-renewable

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

No

### (1.16.1.5) Comment

*Chubu Electric Power and its operating companies do not have any other non-renewable generation facilities.*

## Total

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

Yes

### (1.16.1.2) Nameplate capacity (MW)

9190

### (1.16.1.3) Gross electricity generation (GWh)

0

### (1.16.1.4) Net electricity generation (GWh)

9159

### (1.16.1.5) Comment

*The total power generation capacity of Chuden and its operating companies/the total power generation capacity of each power generation facility is business confidentiality information related to capacity factor, so it is not disclosed and zero is entered.*

## (1.24) Has your organization mapped its value chain?

### (1.24.1) Value chain mapped

Select from:

Yes, we have mapped or are currently in the process of mapping our value chain

### (1.24.2) Value chain stages covered in mapping

Select all that apply

Upstream value chain

Downstream value chain

### (1.24.3) Highest supplier tier mapped

Select from:

- Tier 1 suppliers

### (1.24.4) Highest supplier tier known but not mapped

Select from:

- Tier 2 suppliers

### (1.24.7) Description of mapping process and coverage

The Chuden group mapped the upstream and downstream parts of the value chain for the three companies that make up the majority of its consolidated sales: Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc. The scope of suppliers covered is up to the first tier of suppliers.

### (1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

	Plastics mapping	Value chain stages covered in mapping
	<p>Select from:</p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Yes, we have mapped or are currently in the process of mapping plastics in our value chain</li></ul>	<p>Select all that apply</p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Other, please specify : Direct operation</li></ul>

## **C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities**

**(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?**

### **Short-term**

**(2.1.1) From (years)**

0

**(2.1.3) To (years)**

1

**(2.1.4) How this time horizon is linked to strategic and/or financial planning**

*Every year, the Chuden group formulates a medium-term management plan based on the “Long-term Supply and Demand Plan,” which consists of demand, sales, procurement and power source plans, and other factors, and formulates business plans for each business based on this. Based on this basic management plan and business plan, the budget and business execution plan for the first year are formulated.*

### **Medium-term**

**(2.1.1) From (years)**

1

**(2.1.3) To (years)**

5

**(2.1.4) How this time horizon is linked to strategic and/or financial planning**

The Chuden group has formulated a basic management plan as a medium-term management plan covering the next five years, and business plans for each business are being formulated based on this. In addition, we have formulated a medium-term management plan with a target of FY2025.

## Long-term

### (2.1.1) From (years)

6

### (2.1.2) Is your long-term time horizon open ended?

Select from:

No

### (2.1.3) To (years)

27

### (2.1.4) How this time horizon is linked to strategic and/or financial planning

*In November 2021, the Chuden group updated its management vision to boldly take on the challenge of seizing new business opportunities in the face of radical changes in the business environment, such as the acceleration of policies aimed at decarbonization. The group has also set out a concrete vision for the realization of a “society to be achieved by 2030” with a view to the society to be achieved by 2050, as “Management Vision 2.0”. In this, the Chuden group aims to provide the infrastructure to support the transformation to a “decarbonized,” “safe and secure,” “self-distributed and circular” society, and to grow sustainably together with our customers and society. Furthermore, in March 2021, we formulated the “Zero Emission Challenge 2050”, which includes a roadmap for a carbon-free society over the very long term, and we are advancing specific initiatives by setting targets for 2030 and 2050. In addition, based on the Electricity Business Act, we formulate a “Supply Plan” for the next 10 years every year and submit it to the Minister of Economy, Trade and Industry.*

## (2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

	Process in place	Dependencies and/or impacts evaluated in this process
	Select from: <input checked="" type="checkbox"/> Yes	Select from: <input checked="" type="checkbox"/> Both dependencies and impacts

**(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?**

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: <input checked="" type="checkbox"/> Yes	Select from: <input checked="" type="checkbox"/> Both risks and opportunities	Select from: <input checked="" type="checkbox"/> Yes

**(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.**

**Row 1**

**(2.2.2.1) Environmental issue**

Select all that apply

Climate change

### (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

*Select all that apply*

- Dependencies
- Impacts
- Risks
- Opportunities

### (2.2.2.3) Value chain stages covered

*Select all that apply*

- Direct operations
- Upstream value chain
- Downstream value chain

### (2.2.2.4) Coverage

*Select from:*

- Full

### (2.2.2.5) Supplier tiers covered

*Select all that apply*

- Tier 1 suppliers

### (2.2.2.7) Type of assessment

*Select from:*

- Qualitative and quantitative

### (2.2.2.8) Frequency of assessment

*Select from:*

- More than once a year

### (2.2.2.9) Time horizons covered

*Select all that apply*

- Short-term
- Medium-term
- Long-term

### (2.2.2.10) Integration of risk management process

*Select from:*

- Integrated into multi-disciplinary organization-wide risk management process

### (2.2.2.11) Location-specificity used

*Select all that apply*

- Site-specific
- Local
- Sub-national
- National

### (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

- Enterprise Risk Management
- Internal company methods

#### **Other**

- Scenario analysis

### (2.2.2.13) Risk types and criteria considered

### **Acute physical**

- Avalanche
- Landslide
- Subsidence
- Cold wave/frost
- Cyclones, hurricanes, typhoons

### **Chronic physical**

- Sea level rise
- Change in land-use
- Changing wind patterns
- Temperature variability
- Precipitation or hydrological variability

### **Policy**

- Carbon pricing mechanisms
- Changes to international law and bilateral agreements
- Changes to national legislation

### **Market**

- Availability and/or increased cost of raw materials
- Changing customer behavior

### **Reputation**

- Increased partner and stakeholder concern and partner and stakeholder negative feedback
- Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

### **Technology**

- Transition to lower emissions technology and products
- Unsuccessful investment in new technologies

### **Liability**

- Heavy precipitation (rain, hail, snow/ice)
- Flood (coastal, fluvial, pluvial, ground water)
- Storm (including blizzards, dust, and sandstorms)

- Changing precipitation patterns and types (rain, hail, snow/ice)

- Exposure to litigation
- Non-compliance with regulations

#### (2.2.2.14) Partners and stakeholders considered

Select all that apply

- Customers
- Employees
- Investors
- Suppliers
- Regulators
- Local communities

#### (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

- No

#### (2.2.2.16) Further details of process

*At Chuden and its operating companies, the risk owners (i.e. the person in charge of each operating company, company, or department) identify risks over the next 10 years or so within the scope of their own operations, including direct operations, upstream, and downstream operations, and prioritize countermeasures based on the frequency of occurrence and impact (from the perspective of the impact on income and expenditure, such as sales and operating costs, and the impact on life and limb). Risks related to climate change are related to the division of duties of multiple risk owners. Of these, risks related to changes in regulatory trends related to climate change are collected and identified by the risk owner in charge of the management strategy department. For example, Chubu Electric Power Miraiz Co., Inc. has identified the risk of increased operating costs due to the introduction of carbon pricing, such as carbon taxes and emissions trading systems, which are climate-related regulations that may be imposed in the future, while Chubu Electric Power Grid Co., Inc. has identified the risk of increased restoration costs in the event of a large-scale power outage caused by damage to power transmission and distribution facilities due to a disaster, such as an unprecedented large-scale typhoon. Risk owners report on risks that could have a significant impact on the company once a year, based on the criteria set out by the Risk Management Department (Corporate Planning & Strategy Division). The company-wide risk managers, including the president and vice president, discuss and decide on the risk response policy formulated by the Risk Management Department based on the risk owners' reports at the Risk Management Committee, and reflect it in the management plan, etc., before passing it on to the Board of Directors for resolution. Measures are based on the risk response policy and are considered by the risk owner and reflected in the management plan. The implementation status and changes in risk are checked by the president, vice president, etc. in the monitoring committee on a quarterly basis and reported to the Board of Directors on a semi-annual basis. Regarding opportunities, the Chuden group, in its "Chubu Electric Power Group Management Vision 2.0", aims to provide the infrastructure to support the transformation to a "decarbonized", "safe and secure", "self-distributed and circular" society, and to grow sustainably with customers and society. In order to realize this vision, the Chubu Electric Power Group's Initiatives for Achieving Medium-term Management Plan and Reevaluation of Management*

Targets are being implemented, with specific initiatives centered on the current five-year period being indicated in the “Chubu Electric Power Group's Initiatives for Achieving Medium-term Management Plan and Reevaluation of Management Targets” section of the Medium-term Management Plan, and these are being evaluated and inspected each year.

## Row 2

### (2.2.2.1) Environmental issue

Select all that apply

- Water

### (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Dependencies
- Impacts
- Risks
- Opportunities

### (2.2.2.3) Value chain stages covered

Select all that apply

- Direct operations
- Upstream value chain
- Downstream value chain

### (2.2.2.4) Coverage

Select from:

- Partial

### (2.2.2.5) Supplier tiers covered

*Select all that apply*

- Tier 1 suppliers

### **(2.2.2.7) Type of assessment**

*Select from:*

- Qualitative and quantitative

### **(2.2.2.8) Frequency of assessment**

*Select from:*

- Annually

### **(2.2.2.9) Time horizons covered**

*Select all that apply*

- Short-term
- Medium-term
- Long-term

### **(2.2.2.10) Integration of risk management process**

*Select from:*

- Integrated into multi-disciplinary organization-wide risk management process

### **(2.2.2.11) Location-specificity used**

*Select all that apply*

- Site-specific
- Local
- Sub-national
- National

### **(2.2.2.12) Tools and methods used**

### Commercially/publicly available tools

- WRI Aqueduct
- Other commercially/publicly available tools, please specify :環境影響評估

### Databases

- Nation-specific databases, tools, or standards
- Regional government databases

### Other

- Scenario analysis

## (2.2.2.13) Risk types and criteria considered

### Acute physical

- Cyclones, hurricanes, typhoons
- Flood (coastal, fluvial, pluvial, ground water)
- Heavy precipitation (rain, hail, snow/ice)
- Toxic spills

### Chronic physical

- Water stress
- Declining water quality
- Temperature variability
- Poorly managed sanitation
- Declining ecosystem services
- Changing temperature (air, freshwater, marine water)
- Changing precipitation patterns and types (rain, hail, snow/ice)
- Increased levels of environmental pollutants in freshwater bodies

- Rationing of municipal water supply
- Water quality at a basin/catchment level
- Precipitation or hydrological variability
- Increased severity of extreme weather events
- Water availability at a basin/catchment level

### Policy

- Increased pricing of water
- Changes to national legislation
- Mandatory water efficiency, conservation, recycling, or process standards
- Uncertainty and/or conflicts involving land tenure rights and water rights

- Regulation of discharge quality/volumes
- Increased difficulty in obtaining water withdrawals permit
- Statutory water withdrawal limits/changes to water allocation
- Introduction of regulatory standards for previously unregulated contaminants

### **Market**

- Changing customer behavior
- Inadequate access to water, sanitation, and hygiene services (WASH)

### **Reputation**

- Impact on human health
- Increased partner and stakeholder concern and partner and stakeholder negative feedback
- Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g., GHG emissions, deforestation & conversion, water stress)
- Stakeholder conflicts concerning water resources at a basin/catchment level
- Stigmatization of sector

### **Technology**

- Transition to water efficient and low water intensity technologies and products
- Transition to water intensive, low carbon energy sources

### **Liability**

- Exposure to litigation
- Non-compliance with regulations

## **(2.2.2.14) Partners and stakeholders considered**

*Select all that apply*

- Customers
- Employees
- Investors
- Suppliers
- Regulators
- Local communities
- Water utilities at a local level
- Other water users at the basin/catchment level

### (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

No

### (2.2.2.16) Further details of process

*At Chuden and its operating companies, the risk owners (i.e., the managers of each operating company, company, or department) identify water-related risks over the next 10 years or so, in conjunction with their day-to-day operations, within the scope of their responsibilities, including direct operations, upstream, and downstream operations, in accordance with the risk management rules. They then evaluate the risks in terms of frequency of occurrence and impact (i.e., impact on income and expenditure, such as sales and operating costs, and impact on life and limb), and prioritize countermeasures. Water-related risks are related to the division of duties between multiple risk owners. Of these, the risk owners in charge of the Corporate Communication Division collect and identify information on risks related to changes in water-related regulations, etc. Risk owners report on risks that could have a significant impact on management once a year, based on the criteria set out by the risk management department (Corporate Planning & Strategy Division). The company-wide risk managers, including the president and vice president, discuss and decide on the risk response policy formulated by the Risk Management Department based on the reports from the risk owners, and reflect it in the management plan, etc., and then submit it to the Board of Directors for resolution. The risk owners consider countermeasures based on the risk response policy and reflect them in the management plan. The status of implementation and changes in risk are checked by the President, Vice President, etc. at the Monitoring Committee on a quarterly basis, and reported to the Board of Directors on a semi-annual basis. Examples of water-related risks include the increased operating costs that Chubu Electric Power Miraiz Co., Inc. may face in the future due to the introduction of carbon pricing, such as carbon levies and emissions trading systems, as climate-related legislation, and the increased restoration costs that Chubu Electric Power Grid Co., Inc. may face in the event of a large-scale power outage caused by damage to power transmission and distribution facilities due to a disaster, such as an unprecedentedly large typhoon. When constructing a power station that uses water or installing new equipment, we make decisions on risk management by selecting sites and conducting basic design based on the WRI's Aqueduct evaluation data and local government databases such as hydro power surveys. In addition, when it comes to the environmental impact assessment of nuclear power stations and biomass power generation, we also manage and assess risks using the above procedures and other methods when designing facilities, including environmental conservation plans. With regard to water risks in the supply chain, the Yokkaichi Biomass Power Plant, which is located in Yokkaichi City, Mie Prefecture, is situated within the premises of the Yokkaichi Thermal Power Plant, which is operated by JERA Co., Ltd., our supplier. All wastewater generated by the operation of the biomass power plant is treated by JERA. In terms of the environmental impact assessment, risk management is carried out in accordance with the above procedures, etc., in the cross-section of equipment design, including environmental conservation planning, and wastewater quality is treated by JERA in accordance with the standards set by the national or local government. For this reason, the wastewater quality, etc., at the power station may indirectly affect our business, and we are assessing the risk.*

### Row 3

#### (2.2.2.1) Environmental issue

Select all that apply

Plastics

### (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Impacts

### (2.2.2.3) Value chain stages covered

Select all that apply

- Direct operations

### (2.2.2.4) Coverage

Select from:

- Partial

### (2.2.2.7) Type of assessment

Select from:

- Qualitative and quantitative

### (2.2.2.8) Frequency of assessment

Select from:

- Annually

### (2.2.2.9) Time horizons covered

Select all that apply

- Short-term

### (2.2.2.11) Location-specificity used

Select all that apply

Site-specific

Local

#### (2.2.2.12) Tools and methods used

##### Other

Desk-based research

Internal company methods

#### (2.2.2.14) Partners and stakeholders considered

*Select all that apply*

Customers

#### (2.2.2.15) Has this process changed since the previous reporting year?

*Select from:*

No

#### (2.2.2.16) Further details of process

*Chubu Electric Power Grid assesses the environmental impact of its plastic use (specific figures will not be provided as they are sensitive information). Chubu Electric Power Grid is working to reduce emissions and recycle the plastic products it uses, and is cooperating with Mie Prefecture's Mixed Plastic Recycling Demonstration Project in regard to recycling.*

#### (2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

##### (2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

*Select from:*

Yes

## (2.2.7.2) Description of how interconnections are assessed

*In the construction of nuclear power, biomass power, and hydroelectric power generation, as well as the installation of new facilities, we evaluate the interrelationships among environmental dependence, impact, risk, and opportunity, considering the natural and social conditions surrounding each power plant. For hydroelectric power generation, WRI's Aqueduct evaluation data and municipal databases such as hydroelectric surveys are used for site selection and basic design of facility structure and size, and risk management is conducted for these plans. In determining development sites for hydropower plants, after determining the scale of development, we evaluate the risk of power generation projects not being viable due to insufficient water resources, utilizing survey data and field survey results (such as local government databases) conducted by the Ministry of Land, Infrastructure, Transport and Tourism and others, as well as our own field survey results. Water quality in hydropower catchments is always evaluated because of its relevance and importance to post-discharge risks. For example, we assess the risk of pollution due to organic pollution, eutrophication, and water corruption caused by development in the catchment area, as well as the risk of long-term phenomenon of turbid water, in which suspended sediment flows into the reservoir and is stored by flooding, and is released from the reservoir before it settles on the lake bottom, polluting river water, through actual surveys in the upper reaches of dam rivers, forecasts after completion of dams, hydraulic Experiments, simulation calculations (environmental impact assessment), etc. are conducted, and experts are brought together to study and evaluate the risks. Freshwater used for nuclear power generation and biomass power generation is used in nuclear reactors and boilers to produce high-temperature, high-pressure steam to drive turbines and generate electricity, so ensuring the quantity of high-quality water is a major issue. In addition, the impact of hot wastewater discharged from nuclear power plants and biomass power plants on marine ecosystems is important, so we conduct environmental impact assessments before construction to evaluate the risks and minimize the impact as much as possible. The Group recognizes that renewable energy sources, such as hydroelectric power generation, do not emit CO2 during power generation, and therefore, we recognize the opportunity for our products to meet the various needs of our customers who are interested in reducing their impact on the environment. With the goal of expanding renewable energy sources to more than 3.2 million kW by around 2030, the Chuden Group is working with customers to expand renewable energy sources that will help reduce environmental impact by expanding sales of CO2-free menu items.*

## (2.3) Have you identified priority locations across your value chain?

### (2.3.1) Identification of priority locations

Select from:

Yes, we have identified priority locations

### (2.3.2) Value chain stages where priority locations have been identified

Select all that apply

Direct operations

### (2.3.3) Types of priority locations identified

Sensitive locations

- Areas important for biodiversity

#### **Locations with substantive dependencies, impacts, risks, and/or opportunities**

- Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water
- Locations with substantive dependencies, impacts, risks, and/or opportunities relating to biodiversity

### **(2.3.4) Description of process to identify priority locations**

*Based on the TNFD Framework (v1.0) published in September 2023, the Chubu Electric Power Group has begun analyzing the relationship between its business and nature and the risk opportunities arising from this relationship, covering the electric power operations of Chubu Electric Power, Chubu Electric Power Grid, and Chubu Electric Power Miraiz. As a region, a total of 233 power plants (nuclear, hydro, solar, wind, and biomass) and substations (500kV) in Aichi, Gifu, Nagano, Shizuoka, and Mie prefectures were targeted for desk research on the importance of local biodiversity and water stress. As an example of the survey results, we found that a part of the Kiso River and Yahagigawa River system, where our hydroelectric power generation facilities are located, is designated as a Key Biodiversity Area (KBA) due to the presence of several endangered aquatic organisms, and that it is necessary to pay attention to the characteristics of hydroelectric power generation projects. We have long been engaged in biodiversity protection activities by designating priority areas according to the natural conditions of the areas where we conduct our business activities. Specific priority areas include the Hida region of Gifu Prefecture (protection of rare plants such as *Aconitum kiyomiense*), the southern waters of Mie Prefecture and the waters around the Hamaoka Nuclear Power Plant in Shizuoka Prefecture (creation of seaweed beds and restoration of fish and shellfish resources), and the Nakatajima Dunes in Hamamatsu City, Shizuoka Prefecture (activities to protect the endangered loggerhead turtle).*

### **(2.3.5) Will you be disclosing a list/spatial map of priority locations?**

Select from:

- Yes, we will be disclosing the list/geospatial map of priority locations

### **(2.3.6) Provide a list and/or spatial map of priority locations**

[env\\_report2023\\_full.pdf](#)

## **(2.4) How does your organization define substantive effects on your organization?**

### **Risks**

#### **(2.4.1) Type of definition**

Select all that apply

- Qualitative
- Quantitative

### (2.4.2) Indicator used to define substantive effect

Select from:

- Capital expenditures

### (2.4.3) Change to indicator

Select from:

- Absolute increase

### (2.4.5) Absolute increase/ decrease figure

0

### (2.4.6) Metrics considered in definition

Select all that apply

- Frequency of effect occurring
- Time horizon over which the effect occurs
- Likelihood of effect occurring

### (2.4.7) Application of definition

*Chuden and its operating companies manage risk as an integral part of the Chuden group's management planning and the business planning cycles of each operating company and business execution division, and define significant risks that have a material financial or strategic impact. Significant risks are assessed based on the financial impact over a 10-year period, and those exceeding a certain size are categorized and classified. In the climate-related area, "environmental risk," "policy and institutional risk," "major natural disaster risk," "risk of responding to stable supply and high efficiency," and "risk of responding to technological innovation" are recognized as having the potential to significantly affect our overall business and are considered in the planning process. (Details of absolute increase/decrease are not disclosed due to business confidentiality, and zeros have been entered.*

## Opportunities

### (2.4.1) Type of definition

Select all that apply

- Qualitative
- Quantitative

### (2.4.2) Indicator used to define substantive effect

Select from:

- EBITDA

### (2.4.3) Change to indicator

Select from:

- Absolute increase

### (2.4.5) Absolute increase/ decrease figure

0

### (2.4.6) Metrics considered in definition

Select all that apply

- Frequency of effect occurring
- Time horizon over which the effect occurs
- Likelihood of effect occurring

### (2.4.7) Application of definition

*Regarding opportunities, in its "Management Vision 2.0," the Chuden group has stated that it will grow sustainably together with its customers and society by providing the foundations to support the transformation to a "decarbonized," "safe and secure," "self-distributed and circular" society. In order to realize this vision, we have set forth specific initiatives, focusing on the current five-year period, in the "Initiatives for Realization of the Management Vision" section of our medium-term management plan, which we evaluate and check every year as we conduct our business operations toward achieving our management targets and other goals. (Details of absolute increase/decrease are not disclosed due to business confidentiality, and zeros have been entered.*

## (2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

### (2.5.1) Identification and classification of potential water pollutants

Select from:

Yes, we identify and classify our potential water pollutants

### (2.5.2) How potential water pollutants are identified and classified

*(Details of policies and processes established to identify and classify potential water pollutants that could adversely affect water bodies and ecosystems) In the national environmental impact assessment system for the installation of biomass power generation and nuclear power stations, warm wastewater from power stations is a predicted assessment target item, and it is also identified as a potential pollutant in order to gain the understanding of fishermen at the location. In 1975, the Central Pollution Control Council of Japan compiled an interim report on the effects of warm wastewater on marine organisms, entitled "Interim Report on Warm Wastewater Problems," which stated, "Although changes in biota and a decrease in the number of species can be observed in drainage channels and areas where the temperature is constantly rising by 2 to 3°C or more as a result of the discharge of warm wastewater, no significant changes in biota are known outside of these areas. However, the effects of a one-degree temperature increase on seaweed and other organisms may be observed." Fishermen actively operate in the sea area surrounding our nuclear power station, and we pay special attention to the discharge of warm wastewater when operating the station, as they are the potential victims of the warm wastewater. The temperature of seawater before and after heat exchange in the condenser is continuously measured, and the difference is defined as the temperature difference between the intake and discharge water of 7 degrees Celsius or less. For nuclear power generation, the thermometers are installed in the intake tanks and water discharge outlets on the nuclear power station site. For biomass power generation, the thermometers are installed at the seawater inlet and outlet of the condenser. (Details of standards to be complied with) At our nuclear and biomass power plants, the temperature difference between the intake and discharge water is kept below 7 degrees. The reason for this is that the impact of warm wastewater on marine organisms and fisheries was raised as an issue, and at the time there was a debate about setting the temperature difference between the intake and discharge water at around 7-8 degrees, based on factors such as economic efficiency and impact on marine organisms. However, from the perspective of minimising the impact on the environment, the direction was set to raise the water temperature to around 7 degrees, and so far, in environmental reviews of power plants, the temperature difference between the intake and discharge water has been set at 7 degrees or less, and the understanding of local residents, including fishermen, has been gained and it has become the standard.*

*(Indicator used to identify water pollution) The temperature difference between the intake and discharge of water from nuclear power stations and biomass power generation stations is set at 7 degrees or less. The thermometer used to measure the temperature difference of the intake and discharge water is a high-precision quartz thermometer for nuclear power generation, and a resistance thermometer for biomass power generation, which has good measurement accuracy and response and is easily available. To ensure the accuracy of the thermometers, quartz thermometers are returned to the factory for calibration in accordance with periodic plant inspections.*

*(Information on whether and how the policy and process changes throughout the value chain) The policy and specific process for water withdrawal temperature differences is the norm in our country and should not be different for our customers and suppliers.*

## **(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.**

### **Row 1**

#### **(2.5.1.1) Water pollutant category**

Select from:

- Other, please specify : heat pollution

#### **(2.5.1.2) Description of water pollutant and potential impacts**

*The seawater that has undergone heat exchange in the condenser that cools the steam that drives the turbines at our biomass and nuclear power stations is discharged as warm water into the sea area in front of the power station, keeping the temperature difference between the intake and discharge water at less than 7 degrees Celsius. The amount of seawater used for heat exchange ranges from several metric tons per second to over 100 tons per second per power plant, and an enormous amount of seawater is heated and emitted as warm drainage. The temperature of the warm wastewater diffuses into the seawater outlet of the power plant at a temperature equal to or lower than the temperature of the water at the condenser outlet, but as it moves away from the outlet, the temperature decreases due to diffusion and mixing with seawater. It has been reported that the effect of rising water temperature on aquatic organisms is that the biota may change, and the number of species may decrease in areas where the water temperature is constantly rising by more than 2-3°C. If the temperature of the seawater at the inlet of the condenser is higher than the temperature of the seawater at the outlet of the condenser, the biota may change, and the number of species may decrease. If the temperature difference between the inlet and outlet of the condenser's seawater continuously exceeds 7 degrees Celsius, these effects on the seawater area will become more pronounced, and the change in the number of organisms living in the water area will be considered, which will have a serious impact on fishing activities and other activities. Therefore, in order to minimize the impact on marine organisms, the power plant adopts a power generation facility design that can discharge water into the sea area in front of the plant as warm water, keeping the temperature difference between the intake and discharge water at less than 7 degrees Celsius. In the environmental impact assessment conducted prior to the construction of the nuclear power generation station, a diffusion forecast assessment of the warm water was conducted, and an envelope of 3, 2, and 1 degree Celsius temperature differences from the ambient water temperature at the sea surface, 1 meter below the sea surface, and 2 meters below the sea surface was created for reference in the forecast assessment of the impact of the facility design on the marine environment and marine organisms.*

#### **(2.5.1.3) Value chain stage**

Select all that apply

- Direct operations
- Downstream value chain

#### **(2.5.1.4) Actions and procedures to minimize adverse impacts**

Select all that apply

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

### (2.5.1.5) Please explain

*The temperature difference of the intake and discharge water, which is controlled as warm wastewater, is less than 7 degrees Celsius according to the design value for the environmental impact assessment. The management of warm wastewater is conducted in accordance with the operational documents related to the operation of the power plant. These documents include information on points to be checked for plant condition monitoring and measures to be taken if the temperature may exceed 7 degrees Celsius to maintain the temperature difference of 7 degrees Celsius or less. As for emergency preparedness, nuclear power stations collect records every two hours and evaluate the records, and if the temperature exceeds 7 degrees Celsius, recovery measures specified in the operation document are promptly implemented to return the plant to normal conditions. If the temperature does not return to normal even after these measures are taken, the plant's operation document stipulates that measures such as curtailment of power output will be taken. The temperature difference between the intake and discharge water was confirmed to be less than 7 degrees Celsius and stable by the data of the temperature difference between the intake and discharge water at the central control room, and it can be judged that the seawater temperature is maintained at a level that is considered to have little impact on marine organisms in the preliminary environmental impact assessment results. Therefore, it is judged that the measures are effective. In addition, when output control measures are implemented, they are posted on our website.*

### C3. Disclosure of risks and opportunities

**(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?**

#### Climate change

##### (3.1.1) Environmental risks identified

Select from:

Yes, both in direct operations and upstream/downstream value chain

#### Water

##### (3.1.1) Environmental risks identified

Select from:

Yes, only within our direct operations

##### (3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

Environmental risks exist, but none with the potential to have a substantive effect on our organization

##### (3.1.3) Please explain

*In April 2019, we integrated our existing thermal power generation and other businesses into JERA Co. and the company and other power generation businesses are important suppliers of the electricity we sell. The wastewater quality, measurement frequency, and measurement methods for the wastewater generated from the operation of these business establishment are regulated by the Water Pollution Prevention Act and agreements with local governments, and the wastewater is measured and monitored in accordance with these stipulations to minimize its impact on the surrounding environment. While it is essential for power plants to secure sufficient quantities of quality fresh water, the most common cause of fresh water shortage (drought) is the synergistic effect of a decrease in water resources during the summer and an increase in water consumption for industrial and consumer use. In preparation for the shortage of industrial water supply, power stations have fresh water tanks,*

some thermal power stations have installed groundwater pumps, and some have installed receiving lines so that they can receive and use treated water from the adjacent wastewater purification center. Therefore, although there are risks associated with water shortages, we believe that we have the necessary equipment and operational systems in place to mitigate these risks. Suppliers that supply electricity to us also use recycled water in thermal power generation and other power generation processes. In this power generation process, fresh water is treated to remove impurities from the water, which is then used to drive turbines and circulated as steam to drive the turbines, thereby helping to reduce the amount of fresh water used. Since recycled water is treated fresh water, we consider the water risk to be the same as the fresh water risk described above. With regard to our response to major water-related disasters such as large-scale typhoons, storm surges, earthquakes, and tsunamis, JERA, our largest supplier, is included in the aforementioned BCM Committee's monitoring scope. Based on damage assumptions from the Nankai Trough earthquake, JERA has implemented the formation of disaster-resistant facilities, including tsunami countermeasures for thermal power generation fuel receiving related facilities. As a result of the above, although there are water risks in the value chain, the Company has established the necessary equipment and operational systems to mitigate these risks, and therefore, the risks do not meet the Company's definition of significant risks (those exceeding a certain size, evaluated based on the amount of financial impact over a 10-year period, etc.). Therefore, we do not believe that we are exposed to water risks that could have a significant financial or strategic impact.

## Plastics

### (3.1.1) Environmental risks identified

Select from:

No

### (3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

Environmental risks exist, but none with the potential to have a substantive effect on our organization

### (3.1.3) Please explain

*We have determined that there are no plastics-related risks in our business value chain that could have a material financial or business strategy impact*

**(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.**

## Climate change

### (3.1.1.1) Risk identifier

Select from:

Risk1

### (3.1.1.3) Risk types and primary environmental risk driver

**Acute physical**

Cyclone, hurricane, typhoon

### (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

Japan

### (3.1.1.9) Organization-specific description of risk

*Chubu Electric Power Grid Co., Inc. has more than 10,000 km of transmission lines, 130,000 km of distribution lines, and approximately 1,000 substation facilities in five prefectures in the Chuden region. If extensive damage were to occur to facilities due to typhoon storms or river flooding, the impact would be enormous.*

### (3.1.1.11) Primary financial effect of the risk

Select from:

Increased indirect [operating] costs

### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

Long-term

### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

About as likely as not

### (3.1.1.14) Magnitude

Select from:

High

### (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*When extensive damage to facilities occurs due to typhoon storms or river flooding, the cost of repairing the facilities for the fiscal year will increase, which will affect our financial results.*

### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

Yes

### (3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

3600000000

### (3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

3600000000

### (3.1.1.25) Explanation of financial effect figure

*Actual amount of damage caused by typhoons 21 and 24 in 2018. (Maximum actual damage over the past 5 years. Excluding labor costs) Since 2019, we have not had any disasters that caused more damage than this example. Note that this actual amount is an estimate of actual costs, including the cost of transmission and distribution equipment materials, equipment rentals, transportation costs, and related outsourcing costs for the restoration of transmission and distribution facilities caused by the typhoon mentioned above, which were recorded as expenses at the time of 2018.*

### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

- Improve maintenance of infrastructure

### (3.1.1.27) Cost of response to risk

0

### (3.1.1.28) Explanation of cost calculation

*Details of administrative expenses were not disclosed due to business confidentiality and were entered as zero.*

### (3.1.1.29) Description of response

*The Chuden group strives to form facilities that are resilient to disasters and has established a disaster prevention system for early recovery in the event that a disaster should occur. When a disaster occurs or is anticipated to occur, an emergency system is immediately issued, and an emergency disaster headquarters is set up at each business establishment. In addition, each business establishment repeatedly conducts practical drills, such as disaster drills and facility restoration drills, in cooperation with external organizations, to ensure that each employee is able to respond promptly and appropriately. In its business plan announced in December 2022 (FY2023-FY2027), Chuden Electric Power Grid Co., Inc. is committed to making the necessary investments for the shift to the next generation, including “expansion of renewable energy introduction (decarbonization),” “resilience improvement including natural disaster response,” “wide-area expansion of system operation,” “utilization of digital technology and improvement of customer services. The Company will systematically and efficiently make the investments necessary for the transition to the next-generation society. In addition, the Company will also work on “greenhouse gas reduction” targets through the introduction of EV vehicles and SF6 gas substitute equipment. In addition to the above, with regard to disaster coordination, the Company has established a “goal” and “specific initiatives” based on issues and reflections on the restoration of power outages in the event of severe damage caused by Typhoons 21 and 24 in 2018 and Typhoon 15 in 2019, etc., and is promoting efforts to achieve these goals. Specifically, we are working to systematically introduce generators with standardized specifications and to secure in advance the fuel and transportation vehicles needed for the generators. In addition, with local governments, we are discussing and implementing planned logging to avoid power outages due to fallen trees and delays in restoration work due to road disruptions. In addition, we conduct drills in cooperation with each general power transmission operator and related organizations. In addition, in accordance with the review of various hazard maps, we are working to avoid risk by taking measures against flooding in areas where flooding damage is anticipated. As an example, the Nishiowari Substation, a substation on the backbone system, will implement flooding countermeasures such as raising the foundation and installing waterproof walls to prevent the substation from losing its function even in the event of flood damage with an assumed flood depth of 2.9 m, in conjunction with the replacement of switchgear, in accordance with the Chubu Electric Power Grid Co. Chubu Electric Power Company's Power Grid Project Plan (2023-2027) announced in December 2022 as a reference case (construction cost of approximately 6.7 billion yen out of the total construction cost of 16 billion yen. Chubu Electric Power is taking steps to avoid risks by disclosing this information as a reference case in the Chubu Electric Power Grid Project Plan (2023-2027) announced in December 2022 (construction period: January 2024 - January 2029). With the risk of damage before the completion of permanent measures to avoid such risks, additional mobile substation equipment such as transformer cars (300 million yen/unit) and mobile transformers (200 million yen/unit) will be deployed to quickly resolve supply disruptions and ensure early reliability.*

## Water

### (3.1.1.1) Risk identifier

Select from:

Risk1

### (3.1.1.3) Risk types and primary environmental risk driver

#### Acute physical

Other acute physical risk, please specify : Tsunami

### (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

Japan

### (3.1.1.7) River basin where the risk occurs

Select all that apply

Other, please specify : Niino River

### (3.1.1.9) Organization-specific description of risk

*At our company, we are working to improve the safety of the Hamaoka Nuclear Power Station based on our firm determination to “never again allow an accident like the one at the Fukushima Daiichi Nuclear Power Station to occur”. The Hamaoka Nuclear Power Station is located in Sakura, Omaezaki City, Shizuoka Prefecture, and most of the fresh water used is supplied by pumping up groundwater from the Niino River, which flows on the west side of the power station. In order to prevent accidents from occurring due to flooding of the power station grounds or buildings, or a shortage of fresh water for injection, in the event of a large-scale disaster such as a tsunami, which has never been seen before, we are working to strengthen our multiple and diverse equipment countermeasures and to strengthen our on-site response*

capabilities to ensure that our equipment functions effectively. The Chuden group is using thermal power sources to replace the power generated by all units at the Hamaoka Nuclear Power Station, which is currently not in operation. The continued suspension of operations at the Hamaoka Nuclear Power Station, including the new regulatory standards for responding to tsunamis, may have an impact on the financial position, business performance and cash flow of the Chuden group due to factors such as a significant increase in power procurement costs.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

- Increased capital expenditures

#### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

- Long-term

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

- Unlikely

#### (3.1.1.14) Magnitude

Select from:

- High

#### (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Chuden group is substituting thermal power source under the situation where all units of Hamaoka nuclear power station are out of operation. The Group's financial position, operating results, and cash flow may be affected by a significant increase in power supply procurement costs, etc., if the Hamaoka nuclear power station continues to be out of operation to comply with new regulatory standards, such as those regarding tsunami response.

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

Yes

### (3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

160000000000

### (3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

160000000000

### (3.1.1.25) Explanation of financial effect figure

*The potential financial impact is the cost of replacing the Hamaoka nuclear power station with procurement of electricity from thermal power generation when the station is out of operation to comply with the new regulatory standards, including tsunami countermeasures, etc. We have answered the estimated annual fuel cost that would not need to be accounted for if the Hamaoka nuclear power station were restarted and there was no need to procure an alternative thermal power source at this time..*

### (3.1.1.26) Primary response to risk

#### Engagement

Engage with regulators/policy makers

### (3.1.1.27) Cost of response to risk

79600000000

### (3.1.1.28) Explanation of cost calculation

*Of the total amount of capital expenditures by our segments, the total amount of capital expenditures in the “Others” segment, to which the nuclear power generation business belongs, is shown. This “Other” segment capital expenditures include the installation of seawall to prevent flooding of the Hamaoka nuclear power station site to improve safety, the installation of reinforced and watertight doors to prevent flooding of the buildings, and the installation of fresh water storage tanks as an alternative means of water injection in emergency situations. This includes the cost of reinforcing multiple and diverse facility measures. Since we do not have the resources to specifically calculate the amount of capital investment related to nuclear power generation facilities relative to the total investment, we will respond with the total amount for as much of the response costs as we are able to disclose.*

### (3.1.1.29) Description of response

*With regard to the Hamaoka Nuclear Power Station, we are taking steps to improve safety based on our firm determination to prevent another accident like the one at the Fukushima Daiichi Nuclear Power Station. Units 3 and 4 are currently undergoing a review by the Nuclear Regulation Authority to confirm compliance with the new regulatory standards, and progress is being made steadily towards determining the standard seismic motion and standard tsunami. Once the standard seismic motion and standard tsunami have been largely confirmed, we will respond to the plant-related inspections and, based on these, we will implement activities to raise understanding of the safety of the Hamaoka Nuclear Power Station, including the effectiveness of the safety improvement measures. At the Hamaoka Nuclear Power Station, we have always reflected the latest knowledge and worked to improve safety. Even after the accident at the Fukushima Daiichi Nuclear Power Station, we have not only responded to the new regulatory standards, but have also worked to reduce risk and have made voluntary and continuous efforts to improve safety. We are working to strengthen our on-site response capabilities to ensure that our facilities function effectively, by taking multiple and diverse measures to prevent accidents from occurring and to prepare for accidents, such as installing seawalls to prevent flooding on the premises, installing reinforced and watertight doors to prevent flooding in buildings, and installing fresh water storage tanks as an alternative means of water injection in an emergency.*

## Climate change

### (3.1.1.1) Risk identifier

Select from:

Risk2

### (3.1.1.3) Risk types and primary environmental risk driver

#### Policy

Carbon pricing mechanisms

### (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

Japan

### (3.1.1.9) Organization-specific description of risk

The Japanese government is considering introducing carbon pricing in the future. Chubu Electric Power Miraiz Co., Inc., a sales company in the Chuden group, operates in Japan and recognizes the economic impact of increased procurement costs in the event of the introduction of carbon pricing as a significant risk for the Chuden group.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

- Increased direct costs

#### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

- Long-term

#### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

- About as likely as not

#### (3.1.1.14) Magnitude

Select from:

- High

#### (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The introduction of a carbon pricing mechanism will increase the procurement costs of thermal power sources among the electricity purchased for sale. This will have the effect of increasing spending in the company's performance for the fiscal year in which the electricity is sold.

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

- Yes

### (3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

466095000000

### (3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

466095000000

### (3.1.1.25) Explanation of financial effect figure

*Based on the CO2 emissions (approximately 44.39 million t-CO2) for FY2022, which were adopted at the time of risk assessment, our company has calculated the internal carbon price using the median of the Stated policies Scenario (STEPS) and the Announced Pledges Scenario (APS) of the WEO (STEPS 5,000 yen/t-CO2 (FY2030), APS 16,000 yen/t-CO2 (FY2030). The calculations are based on the assumption that the carbon price is 10,500 yen/t-CO2, which is the median of the internal carbon prices of STEPS 5,000 yen/t-CO2 (FY2030) and APS 16,000 yen/t-CO2 (FY2030).*

### (3.1.1.26) Primary response to risk

#### **Diversification**

Develop new products, services and/or markets

### (3.1.1.27) Cost of response to risk

400000000000

### (3.1.1.28) Explanation of cost calculation

*We are planning to invest around 400 billion yen in renewable energy projects from FY2021 onwards. For risk response costs, we have entered the amount of investment planned for FY2021 onwards.*

### (3.1.1.29) Description of response

*In February 2016, the Japanese electricity industry, including Chuden, established the Electric Utility Industry Council for a Low-Carbon Society, and in order to achieve the national reduction target (-46% compared to FY2013), the council is continuing to work towards the realization of a low-carbon society in the future by promoting initiatives on both the supply and demand sides of electricity, based on the principle of making maximum efforts to achieve the S+3E, which prioritizes the stable supply of energy while ensuring safety, and which aims for environmental compliance as well as economic efficiency. society. As a member of this council, the Chuden group is working to reduce the impact of carbon pricing if it is introduced by promoting the use of the Hamaoka nuclear power station on the fundamental premise of safety,*

while also working to reduce emissions by contributing to the achievement of emissions intensity targets through measures such as expanding renewable energy power generation. We are working to expand renewable energy power generation to more than 3.2 million kW by around 2030. In addition to new development, we are also strategically considering increasing power output through the replacement of existing facilities and acquiring sites for post-FIT power sources such as mega solar power plants, while assessing their effectiveness. As indicated in the responses to questions 7.55.2, we are steadily making progress with initiatives to expand the introduction of a diverse range of renewable energies, including the commencement of commercial operations at the Aichi Gamagori Biomass Power Plant, the Seinaiji Hydroelectric Power Plant, the Shizugin Solar Park, and the Wind Farm Toyotomi.

## Climate change

### (3.1.1.1) Risk identifier

Select from:

Risk3

### (3.1.1.3) Risk types and primary environmental risk driver

#### Technology

Transition to lower emissions technology and products

### (3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

### (3.1.1.6) Country/area where the risk occurs

Select all that apply

Japan

### (3.1.1.9) Organization-specific description of risk

Chubu Electric Power Grid Co., Inc. has over 10,000 km of transmission lines, over 130,000 km of distribution lines, and approximately 1,000 substations in the five prefectures of the Chubu region. In order to accommodate the large-scale connection of renewable energy, the company is working to improve system operation using next-generation distribution equipment and ICT as a measure to stabilize the grid. A large amount of investment is required to build the necessary facilities.

### (3.1.1.11) Primary financial effect of the risk

Select from:

- Increased capital expenditures

### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

- Medium-term

### (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

- About as likely as not

### (3.1.1.14) Magnitude

Select from:

- Medium

### (3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*When measures are taken to stabilize the power system, the amount of capital investment in the fiscal year in which the measures are implemented will increase, and this will have an impact on the amount of assets in the financial situation.*

### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

- Yes

### (3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

9000000000

### (3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

9000000000

### (3.1.1.25) Explanation of financial effect figure

*Responded with a 2024 investment plan necessary for the transition to next-generation technology, such as upgrading electric power network facilities to expand the introduction of renewable energy (decarbonization) (planned values for Chubu Electric Power Grid Co., Inc. decided in 2022)*

### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

- Improve maintenance of infrastructure

### (3.1.1.27) Cost of response to risk

0

### (3.1.1.28) Explanation of cost calculation

*The management fee is set at zero because it is difficult to calculate at this time.*

### (3.1.1.29) Description of response

*Chubu Electric Power Grid Co., Inc. is also keeping a close eye on technological development trends related to the advancement of system operations using next-generation power distribution equipment and ICT, etc., as a measure to stabilize the grid in response to the large-scale connection of renewable energy, and will maintain the quality of electricity while using such new technologies. Specifically, we are considering installing new types of power distribution equipment, such as automatic switchgears and automatic voltage regulators with communication functions, and enabling grid control through advanced analysis of real-time data on current, in order to respond to fluctuations in the output of renewable energy.*

## (3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

## Climate change

### (3.1.2.1) Financial metric

Select from:

Assets

### (3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

### (3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

Less than 1%

### (3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

1902647000000

### (3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

Less than 1%

### (3.1.2.7) Explanation of financial figures

*Electric power distribution facilities are subject to the physical effects of climate change. However, because they have redundancy as a whole so that even if a single point failure occurs, it will not affect the supply, the entire facility asset is not evaluated as being vulnerable. The amounts of the financial indicators entered are the book values of the fixed assets of the electric power business of Chubu Electric Power Grid Co., Inc.*

## Water

### (3.1.2.1) Financial metric

Select from:

OPEX

### (3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

2077000000000

### (3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

61-70%

### (3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

0

### (3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

Less than 1%

### (3.1.2.7) Explanation of financial figures

*The amount of the vulnerable financial metrics is the cost of replacing thermal power sources in the event that the Hamaoka nuclear power station continues to be out of operation due to compliance with new regulatory standards, including measures to deal with tsunamis, etc., and is recognized as a cost related to transition risks. As it is not possible to identify the amount of annual fuel costs covered by the procurement of thermal power sources from other companies, the total amount of purchased power costs from other companies is stated. The total amount of operating expenses is used for the overall financial metrics.*

**(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?**

**Row 1**

**(3.2.1) Country/Area & River basin**

**Japan**

Other, please specify : Niino River

**(3.2.2) Value chain stages where facilities at risk have been identified in this river basin**

*Select all that apply*

Direct operations

**(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin**

1

**(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin**

*Select from:*

Less than 1%

**(3.2.8) % organization's annual electricity generation that could be affected by these facilities**

*Select from:*

Less than 1%

**(3.2.10) % organization's total global revenue that could be affected**

*Select from:*

Less than 1%

### (3.2.11) Please explain

The facility with water-related risks that could have a significant impact on the business in terms of finance or strategy is the Hamaoka Nuclear Power Station. All units at the Hamaoka Nuclear Power Station are currently suspended, and the company is steadily implementing measures based on the new regulatory standards, while Units 3 and 4 are undergoing a review by the Nuclear Regulation Authority to confirm their compliance with the new regulatory standards. The current power generation at the Hamaoka Nuclear Power Station is 0 kWh.

### (3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Comment
	Select from: <input checked="" type="checkbox"/> No	<i>There are no fines, legal orders, or other penalties due to violating water-related regulations.</i>

### (3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

Yes

#### (3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply

Japan carbon tax

#### (3.5.3) Complete the following table for each of the tax systems you are regulated by.

Japan carbon tax

### **(3.5.3.1) Period start date**

04/01/2023

### **(3.5.3.2) Period end date**

03/31/2024

### **(3.5.3.3) % of total Scope 1 emissions covered by tax**

18.9

### **(3.5.3.4) Total cost of tax paid**

2980457

### **(3.5.3.5) Comment**

*Of the Scope 1 CO2 emissions of Chuden and its operating companies, the main items subject to the Global Warming Tax are fuel for vehicles used in business, and fuel for equipment maintenance, including emergency power generators. The total amount was calculated based on the amount of this fuel used (Global Warming Tax 289 yen/t-CO2).*

## **(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

*In addition to reducing the burden of the tax on global warming countermeasures, which is proportional to the amount of fossil fuels procured, Chuden is promoting the development and use of non-fossil power sources, including renewable energy, in order to achieve the non-fossil power source ratio targets (44% in FY2030 and interim targets) set out in the Act on Sophisticated Methods of Energy Supply Structures. Specifically, while working to ensure the safety of the Hamaoka Nuclear Power Station as a major consideration, we are accelerating the entire process from site selection to construction, and are also promoting participation in related projects, with the goal of expanding renewable energy power sources to more than 3.2 million kW by around 2030. As of the end of FY2023, we have realized an expansion of 920,000 kW, which is approximately 29% of our target. In the Chuden group's management plan, the development of renewable energy power sources is positioned as one of our strategic investments, and we are planning to invest a total of approximately 400 billion yen from FY2021 onwards, with a focus on the development of renewable energy power sources. We will continue to accelerate the development of renewable energy power sources, including power output, power generation, and efficient operation, through the renovation and reinforcement of existing power generation facilities, as well as improvement activities and the promotion of DX, starting with the Abekawa Hydroelectric Power Station, which is scheduled to begin operations in 2024. In addition, we have set a target of 100% electrification of company-owned vehicles owned by our company and business companies by 2030, excluding some vehicles that are not suitable for electrification, and are working towards this goal.*

**(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?**

	Environmental opportunities identified
Climate change	<i>Select from:</i> <input checked="" type="checkbox"/> Yes, we have identified opportunities, and some/all are being realized
Water	<i>Select from:</i> <input checked="" type="checkbox"/> Yes, we have identified opportunities, and some/all are being realized

**(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.**

### Climate change

#### (3.6.1.1) Opportunity identifier

*Select from:*

Opp1

#### (3.6.1.3) Opportunity type and primary environmental opportunity driver

##### Energy source

Use of low-carbon energy sources

#### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

- Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- Japan

### (3.6.1.8) Organization specific description

*The Chuden group has a demand of around 122.7 billion kWh in the Chubu District, which is a core area for manufacturing, but against the backdrop of the expansion of ESG investment, the number of customers who support initiatives such as RE100 is increasing. In light of these trends, we are expanding the development of renewable energy, including that of our group companies, and are also providing CO2-free menus that utilize our own non-fossil power sources, which have a power generation capacity of around 9.2 billion kWh per year (FY2023 results), in order to meet the needs of customers who are interested in reducing environmental burden and to increase our profits.*

### (3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

- Short-term
- Medium-term
- Long-term
- The opportunity has already had a substantive effect on our organization in the reporting year

### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

- Virtually certain (99–100%)

### (3.6.1.12) Magnitude

Select from:

High

### **(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period**

*When developing renewable energy power sources, the financial impact of the investment spending will be incurred in the year in which the capital investment for the power source development is made, and the impact of the revenue from the sale of electricity generated will be incurred in each year of the operation period after the operation of the developed power source begins.*

### **(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons**

*When developing renewable energy power sources, the financial impact of the investment spending will be felt in the year in which the capital investment for the power source development is made, and the impact of the revenue from the sale of electricity generated will be felt in each year of the operational period after the operational start of the developed power source.*

### **(3.6.1.15) Are you able to quantify the financial effects of the opportunity?**

Select from:

Yes

### **(3.6.1.16) Financial effect figure in the reporting year (currency)**

9300000000

### **(3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)**

9300000000

### **(3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)**

9300000000

### **(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)**

40000000000

### **(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)**

45000000000

### **(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)**

80000000000

### **(3.6.1.22) Anticipated financial effect figure in the long-term – maximum (currency)**

90000000000

### **(3.6.1.23) Explanation of financial effect figures**

*In its “Management Vision 2.0” announced in November 2021, the Chuden group aims to continue to achieve consolidated ordinary income of at least 250 billion yen in FY2030, as well as securing 80-90 billion yen in sales and power generation businesses, including CO2-free menus. The amount listed in the Potential Financial Impact is the total of sales and power generation, including CO2-free menus, out of the consolidated ordinary income targeted for FY2030. Financial impact in the reporting year: The actual revenue amount by power source is not disclosed due to business confidentiality, so we have entered a value calculated by assuming that the revenue per kWh of non-fossil fuel power generation is 1 yen, regardless of the power source, as a rough estimate. The minimum and maximum financial impacts expected in the short term (minimum) - (maximum) are the same as the financial impacts in the reporting year, due to the definition of “short term”. The minimum and maximum financial impacts expected in the medium term (minimum) - (maximum) are both estimated to be half the impact in FY2030, as there are no clear targets for the period corresponding to “medium term”.*

### **(3.6.1.24) Cost to realize opportunity**

400000000000

### **(3.6.1.25) Explanation of cost calculation**

*In its “Management Vision 2.0” announced in November 2021, the Chuden group aims to continue to achieve consolidated ordinary income of at least 250 billion yen in FY2030, as well as securing 80-90 billion yen in sales and power generation businesses, including CO2-free menus. The amount listed in the Potential Financial Impact is the total of sales and power generation, including CO2-free menus, out of the consolidated ordinary income targeted for FY2030. Financial impact in the reporting year: The actual revenue amount by power source is not disclosed due to business confidentiality, so we have entered a value calculated by assuming that the revenue per kWh of non-fossil fuel power generation is 1 yen, regardless of the power source, as a rough estimate. The minimum and maximum financial impacts expected in the short term (minimum) - (maximum) are the same as the financial impacts in the reporting year, due to the definition of “short term”. The minimum and*

maximum financial impacts expected in the medium term (minimum) - (maximum) are both estimated to be half the impact in FY2030, as there are no clear targets for the period corresponding to “medium term”.

### (3.6.1.26) Strategy to realize opportunity

Regarding renewable energy power sources, in November 2021, the Chuden group set a target of expanding renewable energy power generation capacity to more than 3.2 million kW by around 2030, going one step further than its previous target in its “Management Vision 2.0”. We will work to provide value through renewable energy by owning, constructing, and maintaining renewable energy power generation facilities. We are planning to invest around 400 billion yen in businesses centered on renewable energy from fiscal 2021 onwards, and we recognize this as a cost for the realization of opportunities. As indicated in the response to Question 7.55.2, in fiscal 2023 we are steadily advancing initiatives to expand the introduction of renewable energy, such as the commencement of commercial operations at the Aichi Gamagori Biomass Power Plant and the Atsumi Wind Power Plant. In addition to developing renewable energy ourselves, we are also working to expand renewable energy in Japan through investment in funds. In 2018, we will participate in the “Mirai Renewable Energy Fund” and plan to invest up to 5 billion yen in the fund. In addition to this, the Chuden group is working to build a platform that can trade electricity and value derived from renewable energy in various ways, while also meeting the needs of customers who are interested in reducing environmental burden. Specifically, this is a menu that provides 100% renewable energy and zero CO2 emissions electricity produced in the prefecture by adding environmental value to the electricity generated at hydroelectric power plants in each of the five prefectures in the Chubu region through the use of non-fossil certificates from the relevant power plants. We have expanded sales of this to 5.9 billion kWh by fiscal 2023.

## Water

### (3.6.1.1) Opportunity identifier

Select from:

Opp1

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Products and services

Increased sales of existing products and services

### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

Japan

### (3.6.1.6) River basin where the opportunity occurs

Select all that apply

Other, please specify :安部川、長良川など

### (3.6.1.8) Organization specific description

We recognize the opportunity to develop our own products that can meet the various needs of customers who are interested in renewable energy and reducing environmental burden, as hydroelectric power is a renewable energy source that does not emit CO2 when generating power. Since hydroelectric power is one of our main products, we need to strategically develop it. In order to effectively promote the fact that the electricity generated by this hydroelectric power generation does not emit CO2, we developed a new product with a new name and price (CO2-free menu: a menu of electricity with CO2-free value derived from renewable energy sources such as the Company's hydroelectric power generation). We began offering this as an option for electricity rate plans for customers who have contracted for electricity from July 2019, and it has been well received as a way for customers to calculate their CO2 emissions as zero under the Greenhouse Gas Emissions Calculation, Reporting and Publication System of the Act on Promotion of Global Warming Countermeasures (Global Warming Countermeasures Act), reporting and publication system of the 'Law Concerning the Promotion of Measures to Cope with Global Warming' (Global Warming Prevention Act), customers will be able to calculate their CO2 emissions using a CO2 emission coefficient of zero, and this has been well received, with our company working to monetize this plan. In April 2020, we began offering "Shinshu Green Electricity", a CO2-free menu that utilizes the CO2-free value and local production value of hydroelectric power plants in Nagano prefecture, etc., operated by the Nagano Prefecture Enterprise Bureau. In 2021, we expanded this to the five prefectures of the Chubu region, with the launch of "Mie Umashikuni Green Electricity", "Shizuoka Green Electricity", "Gifu Seiryu Green Electricity" and "Aichi Green Electricity". We are working to expand the use of renewable energy by effectively utilizing locally-produced renewable energy generated in each prefecture, delivering 100% renewable energy with zero CO2 emissions to our customers, and promoting the development of renewable energy power sources with a portion of the electricity fees we receive from our customers. In January 2023, we reached a basic agreement with a consortium of six global companies on the construction of a user-participatory renewable energy expansion model for the renovation of existing hydroelectric power plants. This model is a system that allows the consortium to proactively contribute to the expansion of renewable energy by having customers who are strongly interested in "additionality" actively participate in the planning stages of the renovation of existing hydroelectric power plants that Chuden is considering increasing power generation from, and by having them bear the cost of "additionality" when purchasing renewable energy-derived electricity, including the increased power generation resulting from the renovation, through Chubu Electric Power Miraiz Co., Inc. The first project to use this model is planned to be the renovation of the aging facilities of Oigawa Hydroelectric Power Plant Unit 1, and it is expected to increase annual power generation by approximately 1.9 million kWh from 2025. In order to realize a carbon-free society, the Chuden group has set the following targets in its "Zero Emission Challenge 2050": "a reduction of at least 50% in CO2 emissions from electricity sold to customers in 2030 compared to 2013, and a challenge to achieve net zero CO2 emissions across all business operations by 2050". Expanding the use of renewable energy is one of the key strategies for achieving this goal, and we will work actively to achieve "an expansion of renewable energy of more than 3.2 million kW by around 2030" through expanding the sales of CO2-free menus, and we will aim to expand renewable energy sources together with our customers.

### (3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

- Short-term

### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

- Virtually certain (99–100%)

### (3.6.1.12) Magnitude

Select from:

- High

### (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*The use of CO2-free menus is expanding in reports for various systems, including the Act on the Rational Use of Energy, and by providing products that meet customer needs, we expect that these products will contribute to the operating revenue of the electric power business and our company's performance not only in the short term but also in the medium to long term.*

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

- Yes

### (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

80000000000

### (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

90000000000

### **(3.6.1.23) Explanation of financial effect figures**

*The amount stated in the potential impact is an estimate of the ordinary income from the domestic sales and power generation businesses of the Company and its operating companies, including sales of CO2-free menus and power generation from renewable energy, out of the consolidated ordinary income of 250 billion yen targeted for fiscal 2030, which was announced in the “Management Vision 2.0” in November 2021.*

### **(3.6.1.24) Cost to realize opportunity**

400000000000

### **(3.6.1.25) Explanation of cost calculation**

*The amount listed under “Anticipated financial effect figure for Realization of Opportunities” is an estimate of the investment amount for renewable energy businesses, including the sale of CO2-free menus and power generation using renewable energy, out of the strategic investment amount of around 1 trillion yen for the period from 2021 to 2030 announced in “Management Vision 2.0” in November 2021.*

### **(3.6.1.26) Strategy to realize opportunity**

*In April 2020, our company started providing “Shinshu Green Electricity”, a CO2-free menu that utilizes the CO2-free value and local production value from the hydroelectric power plants in Nagano prefecture operated by the Nagano Prefecture Enterprise Bureau. In 2021, we expanded to the five prefectures of the Chubu region by starting “Mie Umashikuni Green Electricity”, “Shizuoka Green Electricity”, “Gifu Seiryu Green Electricity”, and “Aichi Green Electricity” respectively. We are working to expand the use of renewable energy by effectively utilizing locally-produced renewable energy generated in each prefecture, delivering 100% renewable energy with zero CO2 emissions to our customers, and promoting the development of renewable energy power sources with a portion of the electricity fees we receive from our customers. In January 2023, we reached a basic agreement with a consortium of six global companies on the construction of a user-participatory renewable energy expansion model for the renovation of existing hydroelectric power plants. This model is a system that allows the consortium to proactively contribute to the expansion of renewable energy by having customers who are strongly interested in “additionality” actively participate in the planning stages of the renovation of existing hydroelectric power plants that Chuden is considering increasing power generation from, and by having them bear the cost of “additionality” when purchasing renewable energy-derived electricity, including the increased power generation resulting from the renovation, through Chubu Electric Power Miraiz Co., Inc. The first project to use this model is planned to be the renovation of the aging facilities of Oigawa Hydroelectric Power Plant Unit 1, and it is expected to increase annual power generation by approximately 1.9 million kWh from 2025. In order to realize a carbon-free society, the Chuden group has set the following targets in its “Zero Emission Challenge 2050”: “a reduction of at least 50% in CO2 emissions from customer sales in 2030 compared to 2013, and a challenge to achieve net zero CO2 emissions across all business operations by 2050”. Expanding the use of renewable energy is one of the key strategies for achieving this goal, and we will work actively to achieve “an expansion of renewable energy of more than 3.2 million kW by around 2030” through expanding the sales of CO2-free menus, and we will aim to expand renewable energy sources together with our customers.*

## **Water**

### (3.6.1.1) Opportunity identifier

Select from:

Opp2

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Products and services

Increased sales of existing products and services

### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

Japan

### (3.6.1.6) River basin where the opportunity occurs

Select all that apply

Unknown

### (3.6.1.8) Organization specific description

*Based on our extensive consulting experience, we work with customers aiming for decarbonization and a sustainable society to solve issues that cannot be solved with existing technologies, such as the 3Rs (reduce, reuse, recycle), energy saving, CO2 reduction, and facility maintenance, from the perspective of technological development. We recognize that developing solutions that anticipate the needs of customers like this is a new opportunity for our company, and we are strategically developing services. We have developed a “high-efficiency fine bubble liquid purification system” that can efficiently remove impurities from cleaning liquids used in automobile factories, etc., using fine bubbles (very small bubbles with diameters of 0.1 to 0.01 mm), and we are proposing this system mainly to customers in automobile factories. By using fine bubbles, it is possible to efficiently remove impurities such as oil and sludge that occur through the continuous use of cleaning liquids (cleaning liquids used in cleaning processes at automobile factories, etc., and coolant liquids used in processing processes), and the separation performance of liquids and impurities has been improved by 70% compared to conventional methods. Up until now, cleaning fluid has needed to be disposed of after use and replaced regularly,*

*but the use of this device has led to a longer lifespan for the cleaning fluid, reducing the amount of fluid replacement and significantly reducing the amount of waste fluid. At an automobile factory where the device was actually introduced, the amount of steam used to condense 1 metric ton of waste fluid was reduced to zero, and the amount of water used to clean the tank was also reduced, leading to the realization of a reduction in the customer's water impact and a reduction in CO2 emissions of 27.5 tons per year. The development of a high-efficiency fine bubble liquid cleaning system for the realization of a recycling-oriented society, which our company carried out in collaboration with Kansai Automation Equipment Co.Ltd., received the "Director-General's Award of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry" in the 2021 Awards for Circular Resource Techniques and Systems (hosted by the Japan Environmental Management Association for Industry, supported by the Ministry of Economy, Trade and Industry). The "Recycling Technology and System Awards" are a system for recognizing excellent businesses and initiatives that contribute to the prevention of waste (reduce), reuse of used products (reuse), and effective use of recycled resources (recycle), and that have advanced technologies or systems that are characteristic of the SDG era, and this device was highly evaluated for its contribution to the realization of a sustainable recycling-oriented society.*

### **(3.6.1.9) Primary financial effect of the opportunity**

Select from:

- Increased revenues resulting from increased demand for products and services

### **(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization**

Select all that apply

- Short-term

### **(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon**

Select from:

- Likely (66–100%)

### **(3.6.1.12) Magnitude**

Select from:

- High

### **(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons**

*The "sales of high-efficiency fine bubble liquid purification equipment" is a solution service for customers seeking to reduce water impact in automobile factories and the realization of a recycling-oriented society, and we aim to increase profits. We expect this product to contribute to electric business operating revenue and our*

company's performance not only in the short term, but also in the medium to long term.

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

### (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

80000000000

### (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

90000000000

### (3.6.1.23) Explanation of financial effect figures

*In its “Management Vision 2.0” announced in November 2021, the Chuden group aims to achieve consolidated ordinary income of at least 250 billion yen in FY2030, with roughly 80-90 billion yen of this to be secured from sales and power generation, including solution services. The amount listed in the Potential Impact section is the total of sales and power generation, including solution services such as sales of high-efficiency fine bubble liquid purification equipment, out of the consolidated ordinary income targeted for FY2030.*

### (3.6.1.24) Cost to realize opportunity

400000000000

### (3.6.1.25) Explanation of cost calculation

*The amount listed under “Costs to realize opportunity” is an estimate of the investment amount, including the “sales of high-efficiency fine bubble liquid purification equipment”, for renewable energy projects, etc., which is part of the strategic investment amount of around 1 trillion yen for the period from 2021 to 2030 announced in “Management Vision 2.0” in November 2021.*

### (3.6.1.26) Strategy to realize opportunity

*We have developed a “high-efficiency fine bubble liquid purification system” that can efficiently remove impurities from cleaning liquids used in automobile factories etc. using fine bubbles (very small bubbles with a diameter of 0.1-0.01 mm), and we are proposing this system mainly to customers in automobile factories. By using fine bubbles, it is possible to efficiently remove impurities such as oil and sludge that occur through the continuous use of cleaning liquids (cleaning liquids used in cleaning*

processes at automobile factories, etc., and coolant liquids used in processing processes), and the separation performance of liquids and impurities has been improved by 70% compared to conventional methods. Up until now, cleaning fluid has needed to be disposed of after use and replaced regularly, but the use of this device has led to a longer lifespan for the cleaning fluid, reducing the amount of fluid replacement and significantly reducing the amount of waste fluid. At an automobile factory where the device was actually introduced, the amount of steam used to concentrate one metric ton of waste fluid was reduced to zero, and the amount of water used to clean the tank was also reduced, leading to the realization of the customer's water impact reduction and a reduction in CO2 emissions of 27.5 tons per year. The development of a high-efficiency fine bubble liquid cleaning system for the realization of a recycling-oriented society, which our company carried out in collaboration with Kansai Automation Equipment Co.,Ltd., received the "Director-General's Award of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry" in the 2021 Awards for Circular Resource Techniques and Systems (hosted by the Japan Environmental Management Association for Industry, supported by the Ministry of Economy, Trade and Industry). The "Recycling Technology and System Awards" are a system for recognizing excellent businesses and initiatives that contribute to waste reduction, reuse of used goods, and effective use of recycled resources, and that have advanced technologies or systems that are characteristic of the SDG era. This device was highly evaluated for its contribution to the realization of a sustainable, recycling-oriented society.

## Climate change

### (3.6.1.1) Opportunity identifier

Select from:

- Opp2

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Energy source

- Use of low-carbon energy sources

### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

- Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- India
- Germany
- Viet Nam
- United Kingdom of Great Britain and Northern Ireland

- Sri Lanka
- Mozambique

### **(3.6.1.8) Organization specific description**

*In its “Management Vision 2.0” released in November 2021, with an eye on 2050, the Chuden group has positioned its global business as a “new growth area”. By forming an optimal portfolio by combining four areas (green area, blue area, retail, transmission and distribution, and new services area, frontier area), expanding investment in global businesses that lead to decarbonization, centered on Europe, Asia and the Pacific region, and strengthening its revenue base and increasing profits, contribute to the realization of a carbon-free society. In March 2020, we acquired Eneco, an integrated energy company in Europe, jointly with Mitsubishi Corporation. We are positioning Eneco as a strategic platform for our business in Europe, and are developing our renewable energy and retail businesses centered on Eneco. We are also working to improve our corporate value by applying the knowledge we have gained from Eneco's initiatives in Japan. In November 2021, we acquired shares in Bitexco Power Corporation, which is developing a renewable energy business centered on hydropower in Vietnam, and as a business partner of the company, we are accelerating the development of renewable energy and contributing to business expansion. In September 2022, we acquired shares in OMC Power Private Limited, which operates distributed power generation and grid businesses\*1 in India, and we are supporting the efficient operation of the company's business while contributing to decarbonization and the well-being\*2 of local people through the supply of clean electricity. Furthermore, in October 2022, we acquired shares in Eavor, a Canadian geothermal technology development company, and are seeking to expand our opportunities to acquire knowledge related to geothermal projects and to participate in investments in projects that the company is working on overseas, while also considering the domestic deployment of the company's technology in the future. In other major overseas projects, we are involved in projects such as submarine power transmission for offshore wind farms in the UK and Germany, a project to improve power distribution losses in Mozambique, and a project to improve capacity in Sri Lanka to realize the country's power sector master plan, and we will continue to contribute to the realization of a carbon-free society.*

*\*1 A general term for small-scale power generation facilities and power transmission and distribution facilities that do not connect to existing large-scale power transmission systems, but instead perform their own power generation, transmission, and distribution.*

*\*2 A state of happiness and fulfillment in all aspects of life, including physical, mental, and social well-being.*

### **(3.6.1.9) Primary financial effect of the opportunity**

Select from:

- Returns on investment in low-emission technology

### **(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization**

Select all that apply

- Medium-term

### **(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon**

Select from:

Likely (66–100%)

### (3.6.1.12) Magnitude

Select from:

High

### (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*In its “Management Vision 2.0” released in November 2021, with an eye on 2050, the Chuden group has positioned its global business as a “new growth area”. By forming an optimal portfolio by combining four areas (green area, blue area, retail, transmission and distribution, and new services area, frontier area), expanding investment in global businesses that lead to decarbonization, centered on Europe, Asia, and the Pacific region, and strengthening its revenue base and increasing profits, we will contribute to the realization of a carbon-free society. To achieve this, we will continue to make investments toward fiscal 2030, which will have a negative impact on investment cash flow in the medium term.*

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

### (3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

400000000000

### (3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

400000000000

### (3.6.1.23) Explanation of financial effect figures

*We aim to invest a total of 400 billion yen by fiscal 2030 in global businesses that lead to decarbonization, with a focus on Europe, Asia, and the Pacific region.*

### (3.6.1.24) Cost to realize opportunity

400000000000

### (3.6.1.25) Explanation of cost calculation

The cost for the realization of the opportunity is the cumulative amount of investment in global business from FY2021 to FY2030 (excluding JERA) based on our management vision 2.0.

### (3.6.1.26) Strategy to realize opportunity

**【Business Field】** The Chuden group has set “contributing to a carbon-free society” as one of its management pillars, and has announced “Zero Emission Challenge 2050” as a target to achieve net zero CO2 emissions by 2050. In global business, we will expand investment in businesses that lead to decarbonization even further than before, and by restructuring our business strategy, we will promote the further strengthening and expansion of our overseas revenue base. Specifically, we will organize the various businesses we operate in each country into the following four areas, and by actively investing while carefully examining the feasibility of commercialization, we will create an optimal business portfolio. 1) “Green” area related to renewable energy and grid management 2) “Blue” area related to decarbonization, such as ammonia and hydrogen businesses, and CCUS (Carbon dioxide Capture, Utilization and Storage) 3) “Retail, transmission and distribution, and new services” 4) “Frontier new technology” area, such as utilizing sea energy, such as tidal power generation

**【Areas】** Divided into “Europe” and “Asia”, and will focus on developing major businesses in each region. (Europe) - Position Eneco as the platform for our European strategy, and develop businesses centered on Eneco in the areas of renewable energy and retail. In addition to working on power transmission and distribution and hydropower, which are outside Eneco's business domain, we are also looking into business development in Eastern Europe. (Asia) - Through renewable energy and power distribution businesses, we are developing social issue solution-type service businesses (improving wellbeing\*) such as electrification in unelectrified areas. \*A state of happiness and fulfillment in all aspects of life, physical, mental and social.

## Climate change

### (3.6.1.1) Opportunity identifier

Select from:

Opp3

### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Products and services

Development of new products or services through R&D and innovation

#### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

- Direct operations

#### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- Japan

#### (3.6.1.8) Organization specific description

*Chuden is working with its customers to contribute to the realization of a carbon-free society by proposing a three-pronged approach to decarbonization and low-carbon services: energy saving, energy creation, and energy activation. Energy saving is an initiative to improve operational efficiency and to make customers' energy use more efficient through integrated development solutions and the conversion of energy sources, such as electrification. Energy creation is an initiative to create new non-fossil energy sources through the construction of new non-fossil power sources and the utilization of unused energy sources, such as waste heat from customers' factories. Energy activation is an initiative to expand the range of energy utilization through local production for local consumption, demand response, and the introduction of storage batteries and EVs. By promoting these initiatives in a three-way partnership, customers can reduce CO2 emissions while also solving their business issues and living a more affluent lifestyle, and we can reduce the CO2 emissions from the electricity we sell to our customers, so there are benefits for both sides and we can contribute to the realization of the Zero Emission Challenge 2050. Furthermore, as demand for our services increases, we can expect to see an increase in our profits. As a specific example of energy saving, the Chuden group, together with Yamato Co., Ltd. (Headquarters: Hirano-ku, Osaka City; President: Ryuta Tsujii; hereinafter "Yamato"), has developed technology that contributes to energy saving, including the development of a high-output L-shaped heater, by developing a new type of electric heater for the aluminum casting process at the head office plant of Yutaka Sangyo Co., Ltd. (Headquarters: Nishi-ku, Kobe City; President: Takahiro Ishikawa; hereinafter "Yutaka Sangyo"). When casting aluminum, Yutaka Sangyo used a combination of burners and heaters as the heat source for the melting and holding furnace to maintain the temperature of the molten metal, but the problem was that they were unable to increase the output of the heaters, so energy saving was not progressing. In order to use a high-output heater, there were also issues to be addressed, such as the need to prevent the heating element from breaking when the molten metal level drops and the heating element is exposed to the air, but we achieved energy savings of 21% in the melting furnace holding section where the newly developed heater was installed.*

#### (3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

#### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

Medium-term

### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

Likely (66–100%)

### (3.6.1.12) Magnitude

Select from:

Medium

### (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*Through Chuden's provision of services related to decarbonization and low-carbon, customers can achieve the realization of a low-carbon society while also solving business issues and improving their quality of life, as well as reducing CO2 emissions and energy costs. When this is accompanied by the electrification of customers, it has an impact on our company as a sustainable increase in revenue through the expansion of the amount of electricity sold and the increase in sales of CO2-free electricity.*

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

### (3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

80000000000

### (3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

90000000000

### (3.6.1.23) Explanation of financial effect figures

*The amount listed under “Anticipated Financial effect” is the total of sales and power generation, including new products and services through R&D and technological innovation, out of the consolidated ordinary income targeted for FY2030.*

### **(3.6.1.24) Cost to realize opportunity**

400000000000

### **(3.6.1.25) Explanation of cost calculation**

*The amount of the investment plan from FY2021 onwards, centered on expanding renewable energy by 3.2 million kW, was entered as the cost for the realization of opportunities.*

### **(3.6.1.26) Strategy to realize opportunity**

*The Chuden group will propose services related to decarbonization and low-carbonization in the three areas of “energy saving”, “energy creation” and “energy activation”, and will work with customers to realize them. Through the development of technology and the accumulation of knowledge through these proposals and implementation projects, we will further improve our proposals and technical capabilities in the areas of “energy saving”, “energy creation” and “energy activation”, and will contribute to the realization of a carbon-free society, as well as to the further resolution of our customers' issues. In addition, we believe that the development of renewable energy will make a significant contribution to the realization of this opportunity.*

## **Water**

### **(3.6.1.1) Opportunity identifier**

Select from:

Opp3

### **(3.6.1.3) Opportunity type and primary environmental opportunity driver**

#### **Products and services**

Reduced impact of product use on water resources

### **(3.6.1.4) Value chain stage where the opportunity occurs**

Select from:

- Direct operations

### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- Japan

### (3.6.1.6) River basin where the opportunity occurs

Select all that apply

- Unknown

### (3.6.1.8) Organization specific description

*In order to solve issues faced by local communities, the Chuden group began providing a telemetering service for water and gas companies in the Chubu District in April 2021, and the service is currently being used by approximately 50 companies for automatic meter reading and other purposes for over 230,000 meters. We are strategically developing this service, as we recognize it as a water-related opportunity in a new growth field that will help solve issues in local communities by leveraging our infrastructure business know-how and DX expertise. This service utilizes the communication functions of our electric power smart meters. The Telemeter Service is a service that solves the issues faced by gas and water utilities by enabling remote acquisition of various data from gas and water meters and centralized monitoring of alerts for leaks and other problems through two-way communication using this power smart meter communication infrastructure. The service also contributes to the effective use of water resources by using the various data acquired through this service to support the improvement of customers' water conservation awareness through the visualization of water usage and the early detection of leaks by local governments. Chubu Electric Power Co., Inc. and Chubu Electric Power Grid Co., Inc. established Chuden Telemetering LLC, a company specializing in telemetering services such as automatic meter reading for gas and water, in February 2023 and transferred their telemetering services to the new company. Through Chuden Telemetering LLC, the companies will expand their market and enhance their services, aiming to increase the number of service users to 500,000 by FY2025.*

### (3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues through access to new and emerging markets

### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

- Short-term

### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

Virtually certain (99–100%)

### (3.6.1.12) Magnitude

Select from:

Medium-high

### (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

*We expect the telemeter service to grow in response to the increasing needs of local governments to promote the effective use of water resources, such as the early detection of water leaks and raising awareness of water conservation. We expect it to be a new growth area that will take advantage of water-related opportunities. We expect it to contribute to our business performance by increasing the profits of Chuden Telemeter Joint Stock Company in the short to medium to long term.*

### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

### (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

20000000000

### (3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

30000000000

### (3.6.1.23) Explanation of financial effect figures

*In its “Management Vision 2.0” announced in November 2021, the Chuden group aims to achieve consolidated ordinary income of at least 250 billion yen in FY2030, with approximately 20-30 billion yen of this to be secured in new growth areas, including automatic meter reading for water smart meters. The amount listed in the Anticipated financial effect is the total for new growth areas, including automatic meter reading for water smart meters, out of the consolidated ordinary income targeted for FY2030.*

### **(3.6.1.24) Cost to realize opportunity**

200000000000

### **(3.6.1.25) Explanation of cost calculation**

*The amount listed under “Costs for the realization of opportunities” is an estimate of the investment amount in new growth areas, including automatic meter reading for water smart meters, out of the strategic investment amount of around 1 trillion yen for the period from 2021 to 2030 announced in “Management Vision 2.0” in November 2021.*

### **(3.6.1.26) Strategy to realize opportunity**

*We are strategically developing our telemetering services, which we see as a new growth area in the water-related sector that can help solve local community issues by leveraging our expertise in the domestic energy business. This service uses two-way communication via the power smart meter communication infrastructure to realize centralized monitoring by remotely acquiring various data from water meters and receiving alerts for things like water leaks, thereby solving issues faced by waterworks operators. Using the various data obtained from smart meters, this service helps to raise customers' awareness of water conservation by making water usage more visible, and supports the early detection of water leaks by local governments, etc., and contributes to the effective use of water resources. In June 2023, we concluded an agreement with the Nagoya City Waterworks Bureau and began a demonstration test for the automatic meter reading of water usage and the utilization of data using the Nagoya City power smart meter communication network . The project is also collecting data on water usage in detached houses, and is testing new value-added services for the effective use of water resources, such as early detection and notification of water leaks and taps left open. In March 2024, Kosai City, our company, Nippo Valve Co., Ltd., and Hino Engineering Inc. announced that they would begin a demonstration experiment on remote opening and closing of water taps using smart meter communication technology. By establishing remote opening and closing technology for smart water valves as soon as possible, we will be able to eliminate the need for on-site visits when water supply contracts begin or end, or when leaks occur in the home, and we will consider initiatives that will contribute to solving issues in the water supply services provided by the government and also improve the convenience of water users. In February 2023, Chubu Electric Power Co., Inc. and Chubu Electric Power Grid Co., Inc. established Chuden Telemetering LLC, a company specializing in telemetering services that automatically read gas and water meters. The new company aims to expand the market and enhance services, and it is aiming to increase the number of service users to 500,000 by fiscal 2025.。*

## **(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.**

### **Climate change**

#### **(3.6.2.1) Financial metric**

Select from:

Revenue

### (3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

2961364000000

### (3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

81-90%

### (3.6.2.4) Explanation of financial figures

*Since opportunities regarding environmental issues affect the overall revenue from electricity sales in the electric power industry, the amount of the financial indicator is the operating revenue of the electric power business in FY2023. In addition, the percentage of the total is the percentage of the consolidated sales of the Company.*

## Water

### (3.6.2.1) Financial metric

Select from:

Revenue

### (3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

120000000000

### (3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

41-50%

### (3.6.2.4) Explanation of financial figures

*The amount of the financial indicator is the total of the estimated ordinary income from the domestic sales and power generation businesses of the Company and its operating companies, including sales of CO2-free menus, power generation using renewable energy, and solution services, as well as the estimated ordinary income from new growth areas, including automatic meter reading for water smart meters, which was announced in “Management Vision 2.0” in November 2021 as the consolidated ordinary income target for fiscal 2030, as described in 3.6.1. . The total amount of the financial indicators is the total amount of the estimated consolidated ordinary income for fiscal 2030, which was announced in “Management Vision 2.0” in November 2021.*

## C4. Governance

### (4.1) Does your organization have a board of directors or an equivalent governing body?

#### (4.1.1) Board of directors or equivalent governing body

Select from:

Yes

#### (4.1.2) Frequency with which the board or equivalent meets

Select from:

More frequently than quarterly

#### (4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

Executive directors or equivalent

Independent non-executive directors or equivalent

#### (4.1.4) Board diversity and inclusion policy

Select from:

Yes, and it is publicly available

#### (4.1.5) Briefly describe what the policy covers

*In order to ensure the fairness and transparency of the selection of directors (including directors who are Audit and Supervisory Committee Members), the Board of Directors makes decisions on each candidate after deliberations at a personnel meeting composed of the Chairman, the President, other representative directors, and standing audit and other committee members, as well as at a nomination and compensation review meeting composed of the President and independent outside directors (including directors who are Audit and Supervisory Committee Members) appointed by the President. In addition, the consent of the Audit and Supervisory Committee is required for candidates for directors who are Audit and Supervisory Committee Members. Candidates for directors are selected based on a comprehensive consideration of their character, insight, and experience, as well as their ability to solve various management issues, their ability to conduct management that is trusted*

by stakeholders and contributes to the enhancement of corporate value, and their diversity in terms of gender, internationality, and work experience.

#### (4.1.6) Attach the policy (optional)

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#### (4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	Select from: <input checked="" type="checkbox"/> Yes
Water	Select from: <input checked="" type="checkbox"/> Yes
Biodiversity	Select from: <input checked="" type="checkbox"/> Yes

#### (4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

##### Climate change

#### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

President

#### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

- No

#### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

- Scheduled agenda item in some board meetings – at least annually

#### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- Reviewing and guiding annual budgets
- Overseeing and guiding major capital expenditures
- Monitoring the implementation of a climate transition plan
- Overseeing and guiding the development of a business strategy
- Overseeing and guiding acquisitions, mergers, and divestitures
- Overseeing and guiding the development of a climate transition plan

#### (4.1.2.7) Please explain

*Chuden holds a board of directors meeting once a month in principle, and as one of its top priorities, it deliberates and decides on important matters related to management, including those related to global warming, and supervises the execution of duties by receiving reports on the status of execution of duties from directors. In addition, in order to strengthen the supervisory function, we have introduced outside directors, and as of the end of fiscal 2023, four of the nine directors are outside directors. Reports by directors are made twice a year as a comprehensive report on the overall plan, and in these reports, we report on the progress of renewable energy development plans, as well as our efforts to combat climate change and realize a carbon-free society. From fiscal 2021, the Zero Emissions Committee, chaired by the president, was established to deliberate on targets, action plans, and initiatives aimed at achieving net zero CO2 emissions across the entire Chuden group's business operations by 2050. In fiscal 2023, the committee met twice, including with major group companies, and discussed initiatives to expand renewable energy power sources, etc.*

## Water

#### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

President

#### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

No

#### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

Scheduled agenda item in some board meetings – at least annually

#### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- Monitoring progress towards corporate targets
- Overseeing and guiding the development of a business strategy
- Overseeing and guiding major capital expenditures
- Reviewing and guiding annual budgets

#### (4.1.2.7) Please explain

*Chuden holds a board of directors meeting once a month in principle, where it deliberates and decides on important matters related to nuclear power generation, biomass power generation, hydraulic power generation, and water supply business, including water-related issues (for example, matters related to large-scale capital spending and annual budgets for water security, risk management policies, business strategies, and performance targets). In order to strengthen the supervisory function, we have introduced outside directors, and currently four of the nine directors are outside directors. Directors' reports are made twice a year as a comprehensive report on the overall plan, and in these reports, the progress of business plans such as the development and operation of renewable energy is reported as important matters, including water-related issues. In fiscal 2023, the following reports to the Board of Directors were made on water-related issues*

*(Agenda for the Board of Directors' Meeting Report on Water-Related Issues in FY2023)*

- FY2022: Status of management and income/expenses of the Company and its operating companies, etc., and future outlook*
- FY2023 1st half: Status of management and income/expenses of the Company and its operating companies, etc., and future outlook*
- FY2023 1st half: Status of management and income/expenses of Chubu Electric Power Grid Co., Inc., and future outlook*
- FY2023 1st half: Status of management and income/expenses of Chubu Electric Power Miraiz Co., Inc., and future outlook*
- FY2023 1st half: Status of business and income/expenses of the Renewable Energy Company and future outlook business and financial situation and future prospects of the Renewable Energy Company*

## Biodiversity

### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

President

### (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

No

### (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

Scheduled agenda item in some board meetings – at least annually

### (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

Monitoring progress towards corporate targets

### (4.1.2.7) Please explain

*The Chuden group's basic policy on environmental conservation includes the following statement on coexistence with nature: "We will carry out our business activities with consideration for the sustainability of diverse ecosystems and water resources in order to protect the rich natural environment." When making investment decisions on the development and construction of large-scale facilities, the management executive committee and board of directors discuss policies on biodiversity and water resource protection. Prior to the start of development and construction of large-scale facilities, the Environmental Impact Assessment Law requires the implementation of an environmental impact assessment (assessment), and the assessment includes an evaluation of the impact on animals, plants and ecosystems. Furthermore, the Chuden group also conducts voluntary assessments for small-scale development. The implementation of the countermeasures required as a result of the assessment is directed at the executive officer level. The implementation status of these countermeasures is supervised by the Executive Committee and Board of Directors.*

## (4.2) Does your organization's board have competency on environmental issues?

## Climate change

### (4.2.1) Board-level competency on this environmental issue

Select from:

- Yes

### (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- Integrating knowledge of environmental issues into board nominating process
- Having at least one board member with expertise on this environmental issue

### (4.2.3) Environmental expertise of the board member

#### Experience

- Executive-level experience in a role focused on environmental issues
- Management-level experience in a role focused on environmental issues
- Experience in an academic role focused on environmental issues
- Experience in an organization that is exposed to environmental-scrutiny and is going through a sustainability transition

## Water

### (4.2.1) Board-level competency on this environmental issue

Select from:

- Yes

### (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- Having at least one board member with expertise on this environmental issue

### (4.2.3) Environmental expertise of the board member

#### Experience

- Executive-level experience in a role focused on environmental issues
- Management-level experience in a role focused on environmental issues
- Experience in an academic role focused on environmental issues
- Experience in an organization that is exposed to environmental-scrutiny and is going through a sustainability transition

### (4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	Select from: <input checked="" type="checkbox"/> Yes
Water	Select from: <input checked="" type="checkbox"/> Yes
Biodiversity	Select from: <input checked="" type="checkbox"/> Yes

### (4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

#### Climate change

#### (4.3.1.1) Position of individual or committee with responsibility

##### Executive level

- President

#### (4.3.1.2) Environmental responsibilities of this position

##### Dependencies, impacts, risks and opportunities

- Assessing environmental dependencies, impacts, risks, and opportunities
- Managing environmental dependencies, impacts, risks, and opportunities

##### Policies, commitments, and targets

- Measuring progress towards environmental corporate targets

##### Strategy and financial planning

- Conducting environmental scenario analysis

#### (4.3.1.4) Reporting line

Select from:

- Reports to the board directly

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- Half-yearly

#### (4.3.1.6) Please explain

*Chuden recognizes climate change as a critical issue that requires management decisions in its business activities. For this reason, the president, who is a member of the board of directors and the chief executive officer, carries out business operations based on resolutions made at board of directors' meetings, and also monitors the progress of initiatives related to the assessment and management of climate-related risks and opportunities. Specifically, a target-setting monitoring committee has been established, which is made up of the chairman, president, vice president, executive officers, and presidents of operating companies, and is chaired by the president.*

*In principle, the committee meets once a quarter to manage the progress of management plans and business plans set by operating companies, including responses to related national policies such as the Basic Energy Plan and the GX Promotion Bill, as well as to identify and assess important risks associated with climate change, and to discuss the optimization of management while respecting the autonomous management of each business. In addition, the content of the discussions at the committee are reported to the Board of Directors once every six months.*

## **Water**

### **(4.3.1.1) Position of individual or committee with responsibility**

#### **Executive level**

- President

### **(4.3.1.2) Environmental responsibilities of this position**

#### **Dependencies, impacts, risks and opportunities**

- Assessing environmental dependencies, impacts, risks, and opportunities
- Managing environmental dependencies, impacts, risks, and opportunities

#### **Policies, commitments, and targets**

- Measuring progress towards environmental corporate targets

#### **Strategy and financial planning**

- Conducting environmental scenario analysis

### **(4.3.1.4) Reporting line**

*Select from:*

- Reports to the board directly

### **(4.3.1.5) Frequency of reporting to the board on environmental issues**

*Select from:*

- Half-yearly

#### (4.3.1.6) Please explain

*Chuden recognizes water-related issues as important issues that require management decisions in its business activities. For this reason, the president, who is a member of the Board of Directors and the chief executive officer, carries out business operations based on resolutions made at Board of Directors meetings, and also monitors the progress of initiatives related to the assessment and management of water-related risks and opportunities. Specifically, a target-setting monitoring committee has been established, consisting of the chairman, president, vice president, executive officers, and presidents of operating companies, with the president as the committee chair. In principle, the committee meets once a quarter to discuss the optimization of management while respecting the autonomous management of each business, through monitoring that focuses on integrated management of risk, as well as the management of business plans set by operating companies, including the management of water-related issues such as reducing the amount of water taken when constructing power plants that use water, ensuring water quality, and protecting the sea ecosystem. In addition, the content of the discussions at the committee are reported to the Board of Directors once every six months.*

### **Biodiversity**

#### (4.3.1.1) Position of individual or committee with responsibility

##### **Executive level**

- President

#### (4.3.1.2) Environmental responsibilities of this position

##### **Dependencies, impacts, risks and opportunities**

- Assessing environmental dependencies, impacts, risks, and opportunities
- Managing environmental dependencies, impacts, risks, and opportunities

##### **Strategy and financial planning**

- Conducting environmental scenario analysis

#### (4.3.1.4) Reporting line

Select from:

- Reports to the board directly

#### (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

Half-yearly

**(4.3.1.6) Please explain**

*Chuden recognizes that, in carrying out its business activities, it must consider the sustainability of the ecosystems of diverse living things and water resources in order to protect the rich natural environment, and it recognizes this as an important issue that requires management decisions in its own business activities. To this end, the president, who is a member of the Board of Directors and the chief executive officer, carries out business operations based on resolutions made at Board of Directors meetings, and also monitors the progress of initiatives related to the assessment and management of risks and opportunities regarding biodiversity in business activities. Specifically, a target-setting monitoring committee has been established, which is made up of the chairman, president, vice president, executive officers in charge, and presidents of operating companies, and is chaired by the president. In principle, the committee meets once a quarter, and in addition to monitoring the progress of the business plans set out by the operating companies and the management plan for protecting the ecosystem, which takes into account the characteristics of each region, such as the transplantation of plants to avoid the disappearance of existing rare species and changes to construction processes and helicopter flight routes to protect birds of prey, the committee also discusses the optimization of management while respecting the autonomous management of each business through monitoring that focuses on integrated risk management. In addition, the content of the discussions at the committee are reported to the board of directors once every six months.*

**(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?**

	Provision of monetary incentives related to this environmental issue	% of total C-suite and board-level monetary incentives linked to the management of this environmental issue	Please explain
Climate change	Select from: <input checked="" type="checkbox"/> Yes	10	The company has established a performance-linked stock compensation system for directors as an incentive to improve performance and increase corporate value over the medium to long term, including measures to counter climate change. The proportion of performance-linked stock compensation in the total compensation of representative directors and executive directors is set at around 10% when management targets are achieved.
Water	Select from: <input checked="" type="checkbox"/> No, and we do not plan to introduce them in the next two years	Numeric input [must be between [0 - 100]	Our company does not offer financial incentives for water-related issues.

**(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).**

## **Climate change**

### **(4.5.1.1) Position entitled to monetary incentive**

#### **Board or executive level**

Director on board

### **(4.5.1.2) Incentives**

*Select all that apply*

Shares

### **(4.5.1.3) Performance metrics**

#### **Emission reduction**

Reduction in absolute emissions

### **(4.5.1.4) Incentive plan the incentives are linked to**

*Select from:*

Long-Term Incentive Plan, or equivalent, only (e.g., contractual multi-year bonus)

### **(4.5.1.5) Further details of incentives**

*The stock-based compensation system is designed to function as an incentive for improving medium- to long-term business performance and increasing corporate value, and consists of fixed points determined according to position and points linked to business performance. These points are granted each fiscal year. However, the points linked to business performance are determined every four fiscal years, and are determined based on the degree of achievement of the management target of consolidated ordinary income at the end of fiscal 2025 and the Company's medium- to long-term priority measures of CO2 emissions (GX League registered fiscal 2025 target). Outside directors and directors who are audit and other committee members are only granted fixed points for their position.*

### (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

*By providing incentives for directors regarding decarbonization targets, we believe that we can strengthen the oversight of directors regarding the consistency of each management measure with decarbonization targets, and promote initiatives related to decarbonization targets.*

### (4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from: <input checked="" type="checkbox"/> Yes

### (4.6.1) Provide details of your environmental policies.

#### Row 1

#### (4.6.1.1) Environmental issues covered

*Select all that apply*

Climate change

#### (4.6.1.2) Level of coverage

*Select from:*

Organization-wide

#### (4.6.1.3) Value chain stages covered

Select all that apply

- Direct operations
- Upstream value chain
- Downstream value chain

#### (4.6.1.4) Explain the coverage

In addition to establishing the “Chubu Electric Power Group Basic Environmental Policy” as a policy that includes initiatives for the realization of a carbon-free society as a Chuden group, the “Chubu Electric Power Group Basic Procurement Policy” also establishes a policy that includes the realization of a carbon-free society and environmentally friendly procurement activities for suppliers upstream and downstream in the value chain.

#### (4.6.1.5) Environmental policy content

##### Environmental commitments

- Commitment to a circular economy strategy

##### Climate-specific commitments

- Commitment to net-zero emissions

#### (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- Yes, in line with the Paris Agreement

#### (4.6.1.7) Public availability

Select from:

- Publicly available

#### (4.6.1.8) Attach the policy

*chudenGR2024\_all.pdf*

**Row 3**

#### (4.6.1.1) Environmental issues covered

Select all that apply

Water

#### (4.6.1.2) Level of coverage

Select from:

Organization-wide

#### (4.6.1.3) Value chain stages covered

Select all that apply

Direct operations

Upstream value chain

Downstream value chain

#### (4.6.1.4) Explain the coverage

*In order to clearly state the importance of water in our business activities as a corporate policy, in March 2021 we revised the “Chubu Electric Power Group Basic Environmental Policy”, which is based on the “Chubu Electric Power Group CSR Declaration” and sets out our basic policy on environmental conservation. The policy also states that the company will contribute to the realization of a society in harmony with nature by taking into consideration the sustainability of water resources, and that it will deepen communication with local communities regarding the environment and energy, and foster human resources who can voluntarily take environmentally friendly action, in order to raise environmental awareness, including that regarding water resources. The Chubu Electric Power Group CSR Declaration states that the Chuden Group “will continue to grow as a corporate group that meets all energy needs, and will contribute to the development of a sustainable society by making the most of its individual strengths, demonstrating its integrated energy company capabilities, prioritizing safety, and working to conserve the global environment while ensuring a stable supply of energy”. For this reason, the scope of the Environmental Basic Policy is also set as the entire Chuden Group based on the same declaration. In accordance with the policy's stipulation to “consider the sustainability of water resources”, all of our power plants measure and monitor wastewater quality based on the Water Pollution Prevention Act and agreements with local governments, with the goal of ensuring that there are no violations of laws or agreements at each business establishment. We also consider the amount of water used per employee in offices across the company to be an indicator of whether or not we have achieved our goal of keeping this figure at the same level as the previous fiscal year. In order to raise environmental awareness, including water resources, under this policy, the Chuden group is developing the “Chuden Group ECO Social Contribution Activities”, which include activities such as coastal conservation activities in cooperation with environmental NPOs, etc., by Chuden group employees and their families, and activities to raise awareness of the conservation of aquatic life such as loggerhead turtles, etc. In addition, the “Chuden Forester”. We also actively carry out educational and awareness-raising activities for local communities and employees, such as providing environmental law education on our business to all employees, regularly sending out information to all employees with the aim of raising each employee's environmental awareness, and posting notices on our company website to encourage employees to save water. As part of our efforts to ensure the sustainability of*

water resources, we are focusing on the “water resource recharge function”, which is the ability of forests to nurture water, and are working with Nagoya University on a joint research project to visualize the water recharge function of our Uchigatani forest, which is our company-owned forest, and to standardize the method for evaluating the amount of water stored in forest watersheds. We are also conducting research into water neutrality, which aims to ensure that the amount of water used in business activities is equal to the amount of water produced. We also support the Ministry of the Environment’s “Plastic Smart Campaign,” which aims to accelerate efforts to solve the problem of marine plastic waste that affects the marine environment. In addition to the energy business, the Chuden group is accelerating the commercialization of new growth areas and expanding into new areas of regional infrastructure business, such as resource recycling, water and sewage, and local transportation, to create and accelerate the provision of a “new form of community” that improves the quality of life for customers, including safe and managed water, sewage, and sanitation (WASH) services in local communities.

#### (4.6.1.5) Environmental policy content

##### Environmental commitments

- Commitment to comply with regulations and mandatory standards
- Commitment to take environmental action beyond regulatory compliance
- Commitment to stakeholder engagement and capacity building on environmental issues

##### Water-specific commitments

- Commitment to reduce water consumption volumes
- Commitment to reduce water withdrawal volumes
- Commitment to reduce or phase out hazardous substances
- Commitment to control/reduce/eliminate water pollution
- Commitment to safely managed WASH in local communities
- Commitment to the conservation of freshwater ecosystems

#### (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- Yes, in line with the Paris Agreement

#### (4.6.1.7) Public availability

Select from:

- Publicly available

#### (4.6.1.8) Attach the policy

**(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?**

**(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?**

Select from:

Yes

**(4.10.2) Collaborative framework or initiative**

Select all that apply

Task Force on Climate-related Financial Disclosures (TCFD)

Other, please specify : Electricity Business Council for a Low-Carbon Society, GX League, Keidanren Declaration on Biodiversity

**(4.10.3) Describe your organization's role within each framework or initiative**

*In each initiative in which we participate, we support the initiatives' stated goals and are also active as members in an autonomous manner.*

**(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?**

**(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment**

Select all that apply

Yes, we engaged directly with policy makers

Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

**(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement**

## activities in line with global environmental treaties or policy goals

Select from:

Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

### (4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

Paris Agreement

### (4.11.4) Attach commitment or position statement

[zeroemi\\_challenge.pdf](#)

### (4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

No

### (4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

*In order to ensure that the Chuden group is able to respond in a timely manner to policies related to climate change and water-related issues, matters related to government and industry, and trends that may affect the business activities of power companies, the content of reports from the Federation of Electric Power Companies of Japan is shared with the management team at the Senior Executive Committee on a monthly basis, and the content of reports from the Japan Electric Power Information Center is shared with the management team at the Executive Committee on a timely basis by Chubu Electric Power Grid Co., Inc. In addition to these management-level efforts, we are also working to improve communication with the Federation of Electric Power Companies of Japan at the operational level, and have put in place a system to enable us to respond in a timely manner. Meanwhile, with regard to the GX League, the content of communication between the GX League Secretariat and our operational level, as well as our response measures, are shared with the Corporate Planning & Strategy Division, and reported to the management level as necessary, where they are examined for response.*

### (4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

## Row 1

### (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

*GX League (A place for government, academia and finance to work together to promote voluntary initiatives to drive the transformation of the entire economic and social system (GX: Green Transformation) to achieve carbon neutrality as quickly as possible, in order to realize carbon neutrality in Japan and contribute to the realization of carbon neutrality worldwide, while also seeing the measures needed to achieve this as an opportunity for growth and enhancing industrial competitiveness) including emissions trading*

### (4.11.1.2) Environmental issues the policy, law, or regulation relates to

*Select all that apply*

Climate change

### (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

#### **Environmental impacts and pressures**

Emissions – CO2

Emissions – methane

Emissions – other GHGs

### (4.11.1.4) Geographic coverage of policy, law, or regulation

*Select from:*

National

### (4.11.1.5) Country/area/region the policy, law, or regulation applies to

*Select all that apply*

Japan

### (4.11.1.6) Your organization's position on the policy, law, or regulation

*Select from:*

- Support with minor exceptions

#### **(4.11.1.7) Details of any exceptions and your organization's proposed alternative approach to the policy, law, or regulation**

*In the event of a power supply shortage in a region, we may procure fossil fuel power sources as emergency measures, but only when and to the extent that it is unavoidable for ensuring a stable supply.*

#### **(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation**

*Select all that apply*

- Participation in working groups organized by policy makers

#### **(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)**

0

#### **(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement**

*The GX League's efforts to realize a society that achieves carbon neutrality are shared with our company's efforts to achieve carbon neutrality by 2050, as set out in our Zero Emission Challenge 2050, and the goals are the same.*

#### **(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals**

*Select from:*

- Yes, we have evaluated, and it is aligned

#### **(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation**

*Select all that apply*

- Paris Agreement

**(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.**

**Row 1**

**(4.11.2.1) Type of indirect engagement**

*Select from:*

- Indirect engagement via a trade association

**(4.11.2.4) Trade association**

**Asia and Pacific**

- Japan Business Federation (Keidanren)

**(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position**

*Select all that apply*

- Climate change
- Water

**(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with**

*Select from:*

- Consistent

**(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year**

Select from:

- Yes, we publicly promoted their current position

#### (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

*The Japan Business Federation announced its "Carbon Neutral Action Plan" in 2021, and is promoting initiatives aimed at achieving carbon neutrality in the business world by 2050. Chuden is aiming to achieve carbon neutrality by 2050 through the expansion of renewable energy and the use of nuclear power, etc., under its "Zero Emission Challenge 2050", and its position on this issue is in line with that of the Japan Business Federation.*

#### (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

#### (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

#### (4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

### Row 2

#### (4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

#### (4.11.2.4) Trade association

## Asia and Pacific

Other trade association in Asia and Pacific, please specify : The Federation of Electric Power Companies of Japan

### (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

Water

### (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

### (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

### (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

*The Federation of Electric Power Companies of Japan has declared that "in order to realize carbon neutrality by 2050, we will work towards the simultaneous achievement of the 'S Plus 3E' goals, and will actively take on the challenge of decarbonization of power sources on the supply side and the maximum promotion of electrification on the demand side, bringing together all the technology and knowledge we have at our disposal." Chuden aims to achieve carbon neutrality by 2050 through a combination of measures on both the supply and demand sides, including the decarbonization of power sources through the expansion of renewable energy and the use of nuclear power, as well as the three-pronged approach of energy saving, energy creation and energy activation, and its position on this issue is in line with that of the Federation of Electric Power Companies of Japan.*

### (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

#### (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

#### (4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

### Row 3

#### (4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

#### (4.11.2.4) Trade association

##### Asia and Pacific

- Other trade association in Asia and Pacific, please specify :送配電網協議会

#### (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

#### (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

**(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year**

Select from:

Yes, we publicly promoted their current position

**(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position**

*The Transmission and Distribution Grid Council is working to build a next-generation electric power network that will realize carbon neutrality by 2050 through measures such as "upgrading the grid to make renewable energy a major power source" and "upgrading supply-demand adjustment and grid stabilization technology". The Chuden group aims to achieve carbon neutrality by 2050 through measures such as "strengthening the ability to coordinate widely distributed renewable energy" and "enhancing and expanding supply and demand operations" under the "Zero Emission Challenge 2050", and its stance on this issue is in agreement with that of the Transmission and Distribution Grid Council.*

**(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)**

0

**(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals**

Select from:

Yes, we have evaluated, and it is aligned

**(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation**

Select all that apply

Paris Agreement

**(4.12.1) Provide details on the information published about your organization’s response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.**

## Row 1

### (4.12.1.1) Publication

Select from:

- In mainstream reports

### (4.12.1.3) Environmental issues covered in publication

Select all that apply

- Climate change
- Water

### (4.12.1.4) Status of the publication

Select from:

- Complete

### (4.12.1.5) Content elements

Select all that apply

- Governance
- Risks & Opportunities
- Strategy
- Emissions figures
- Emission targets

### (4.12.1.6) Page/section reference

Annual Securities Report for FY2023 - Related Pages : P13-25, 46-66

#### (4.12.1.7) Attach the relevant publication

100yuho.pdf

#### (4.12.1.8) Comment

Status of Corporate Governance: P46-66 Management Policy, Management Environment and Issues to be Addressed, etc.: P13-14 Business and Other Risks: P21-25 Approach to and Initiatives for Sustainability : P15-20

### Row 2

#### (4.12.1.1) Publication

Select from:

- In voluntary communications

#### (4.12.1.3) Environmental issues covered in publication

Select all that apply

- Climate change
- Water
- Biodiversity

#### (4.12.1.4) Status of the publication

Select from:

- Complete

#### (4.12.1.5) Content elements

Select all that apply

- Strategy
- Governance
- Emission targets
- Dependencies & Impacts
- Biodiversity indicators
- Water accounting figures

- Emissions figures
- Risks & Opportunities

- Water pollution indicators

#### (4.12.1.6) Page/section reference

*Chubu Electric Power Group Report 2024 - Related Sections : P38-45*

#### (4.12.1.7) Attach the relevant publication

*chudenGR2024\_all.pdf*

#### (4.12.1.8) Comment

*“Implementing management that takes into account climate change, natural capital, etc.” and ‘disclosure of information based on TCFD and TNFD recommendations’ (governance, risk management, strategy, indicators and targets)P38-45*

### Row 3

#### (4.12.1.1) Publication

*Select from:*

- In voluntary communications

#### (4.12.1.3) Environmental issues covered in publication

*Select all that apply*

- Climate change
- Water
- Biodiversity

#### (4.12.1.4) Status of the publication

*Select from:*

- Underway - previous year attached

#### (4.12.1.5) Content elements

Select all that apply

- Strategy
- Governance
- Emissions figures
- Value chain engagement
- Dependencies & Impacts
- Biodiversity indicators
- Content of environmental policies
- Other, please specify : **Resource Recycling-Related Data**

#### (4.12.1.6) Page/section reference

*Environmental Communication Book*

#### (4.12.1.7) Attach the relevant publication

*env\_report2023\_full.pdf*

#### (4.12.1.8) Comment

*“Basic Environmental Policy”: p.3, ‘Environmental Management System’: p.4, ‘Realization of a Carbon-Free Society’ (strategy, emission figures, emission targets): p.5-10, ‘Harmony with Nature’ (biodiversity-related indicators, value chain engagement): p.11-18, ‘Realization of a Recycling-Oriented Society’ (resource recycling-related data): p.19-22*

### Row 4

#### (4.12.1.1) Publication

Select from:

- In voluntary communications

#### (4.12.1.3) Environmental issues covered in publication

Select all that apply

- Climate change

- Water
- Biodiversity

#### (4.12.1.4) Status of the publication

Select from:

- Complete

#### (4.12.1.5) Content elements

Select all that apply

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Strategy               | <input checked="" type="checkbox"/> Dependencies & Impacts            |
| <input checked="" type="checkbox"/> Governance             | <input checked="" type="checkbox"/> Biodiversity indicators           |
| <input checked="" type="checkbox"/> Emissions figures      | <input checked="" type="checkbox"/> Water accounting figures          |
| <input checked="" type="checkbox"/> Risks & Opportunities  | <input checked="" type="checkbox"/> Water pollution indicators        |
| <input checked="" type="checkbox"/> Value chain engagement | <input checked="" type="checkbox"/> Content of environmental policies |

#### (4.12.1.6) Page/section reference

TNFD Report

#### (4.12.1.7) Attach the relevant publication

TNFD.pdf

#### (4.12.1.8) Comment

*"Basic Environmental Policy": P4-5, 'Governance': P8-9, 'Strategy' (Dependencies and Impacts, Risks and Opportunities, Strategy, Value Chain Engagement): P10-16, 'Indicators and Targets' (Biodiversity-related indicators, emission figures, water accounting data, water pollution-related indicators): P17*

### Row 5

#### (4.12.1.1) Publication

Select from:

- In voluntary communications

#### (4.12.1.3) Environmental issues covered in publication

Select all that apply

- Climate change
- Water

#### (4.12.1.4) Status of the publication

Select from:

- Complete

#### (4.12.1.5) Content elements

Select all that apply

- Emissions figures
- Water accounting figures
- Water pollution indicators

#### (4.12.1.6) Page/section reference

*ESG Data 2024*

#### (4.12.1.7) Attach the relevant publication

*environment.pdf*

#### (4.12.1.8) Comment

*E: Environmental Data*

## C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

### Climate change

#### (5.1.1) Use of scenario analysis

Select from:

Yes

#### (5.1.2) Frequency of analysis

Select from:

Annually

### Water

#### (5.1.1) Use of scenario analysis

Select from:

Yes

#### (5.1.2) Frequency of analysis

Select from:

Annually

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

### Climate change

### (5.1.1.1) Scenario used

#### Climate transition scenarios

- IEA APS

### (5.1.1.3) Approach to scenario

Select from:

- Qualitative and quantitative

### (5.1.1.4) Scenario coverage

Select from:

- Organization-wide

### (5.1.1.5) Risk types considered in scenario

Select all that apply

- Policy
- Market
- Reputation
- Technology
- Liability

### (5.1.1.6) Temperature alignment of scenario

Select from:

- 1.5°C or lower

### (5.1.1.7) Reference year

2018

### (5.1.1.8) Timeframes covered

Select all that apply

- 2025
- 2030
- 2040
- 2050

### (5.1.1.9) Driving forces in scenario

#### Finance and insurance

- Cost of capital

#### Stakeholder and customer demands

- Consumer attention to impact

#### Regulators, legal and policy regimes

- Level of action (from local to global)
- Other regulators, legal and policy regimes driving forces, please specify : NDC, Sixth Basic Energy Plan, Act on Sophisticated Methods of Energy Supply Structures, etc.

### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*In May 2019, Chuden expressed its support for the aims of the TCFD final report and is conducting climate change scenario analysis. By referring to published data from organizations such as the International Energy Agency (IEA), we selected the “2°C scenario” (IEA: Net Zero by 2050 (NZE scenario), WEO2021 (APS scenario), Sixth Basic Energy Plan, etc.) for transition risks and the “4°C scenario” (IPCC/RCP8.5 scenario) for physical risks, and based on these, we assessed the impact of business operations due to transition risks and opportunities and physical risks with the middle of this century in mind and disclosed the results in the Chubu Electric Power Group Report 2022 in September 2022. In the scenario analysis, we referred to Japan's NDC (46% reduction compared to FY2013) for FY2030, etc., and assumed that we would comply with the requirements of environmental regulations, such as achieving the non-fossil fuel power generation ratio (44% in FY2030) under the Act on Sophisticated Methods of Energy Supply Structures as a power retailer. Through the analysis, we recognized that further efforts are needed to increase the ratio of non-fossil fuel energy, including hydropower, toward the realization of a carbon-free society. In order to address these issues, the “Chubu Electric Power Group Management Vision 2.0” sets out goals such as contributing to the expansion of renewable energy sources, including hydroelectric power generation and biomass power generation, to more than 3.2 million kW by around 2030, while making the most of the Hamaoka Nuclear Power Station, and these goals are incorporated into the medium-term management plan and annual business plan.*

### (5.1.1.11) Rationale for choice of scenario

*In conducting scenario analysis, Chuden and its operating companies decided that it would be appropriate to use the findings published by the International Energy Agency (IEA), an international organization that conducts research on energy, as a basis for examining transition risks from the perspective of the affinity with their own business, and decided to refer to the Net Zero Emission 2050 scenario, a 1.5 degree scenario published by the IEA.*

## Water

### (5.1.1.1) Scenario used

#### Climate transition scenarios

- IEA APS

### (5.1.1.3) Approach to scenario

*Select from:*

- Qualitative and quantitative

### (5.1.1.4) Scenario coverage

*Select from:*

- Organization-wide

### (5.1.1.5) Risk types considered in scenario

*Select all that apply*

- Policy
- Market
- Reputation
- Technology
- Liability

### (5.1.1.6) Temperature alignment of scenario

Select from:

- 1.5°C or lower

#### (5.1.1.7) Reference year

2018

#### (5.1.1.8) Timeframes covered

Select all that apply

- 2025
- 2030
- 2040
- 2050

#### (5.1.1.9) Driving forces in scenario

##### Local ecosystem asset interactions, dependencies and impacts

- Climate change (one of five drivers of nature change)

##### Finance and insurance

- Cost of capital

#### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*In May 2019, Chuden expressed its support for the aims of the TCFD final report and is conducting climate change scenario analysis. By referring to published data from the International Energy Agency (IEA) and other sources, we selected the “2°C scenario” (IEA: Net Zero by 2050 (NZE scenario), WEO2021 (APS scenario), Sixth Basic Energy Plan, etc.) and the “4°C scenario” (IPCC RCP8.5 scenario), and based on these, we assessed the transition risks and opportunities and the business impact of physical risks with a focus on the middle of this century, and disclosed the results in the Chubu Electric Power Group Report 2022 in September 2022. In the scenario analysis, we referred to Japan's NDC (46% reduction compared to FY2013) for FY2030, etc., and assumed that we would comply with the requirements of environmental regulations, such as achieving the non-fossil fuel power generation ratio (44% in FY2030) under the Act on Sophisticated Methods of Energy Supply Structures as a power retailer. Through the analysis, we recognized that further efforts are needed to increase the ratio of non-fossil energy, including hydropower, toward the realization of a carbon-free society. In order to address these issues, the “Chubu Electric Power group management vision 2.0” sets out goals such as contributing to the expansion of renewable energy sources, including hydroelectric power generation and biomass power generation, to more than 3.2 million kW by around 2030, while making the most of the Hamaoka nuclear power*

station, and these are incorporated into the medium-term management plan and annual business plan.

### (5.1.1.11) Rationale for choice of scenario

*In conducting scenario analysis, Chuden and its operating companies decided that it would be appropriate to use the findings published by the International Energy Agency (IEA), an international organization that conducts research on energy, as a basis for examining transition risks from the perspective of the affinity with their own business, and decided to refer to the Net Zero Emission 2050 scenario, a 1.5 degree scenario published by the IEA.*

## Climate change

### (5.1.1.1) Scenario used

#### Physical climate scenarios

RCP 8.5

### (5.1.1.2) Scenario used    SSPs used in conjunction with scenario

Select from:

SSP5

### (5.1.1.3) Approach to scenario

Select from:

Qualitative and quantitative

### (5.1.1.4) Scenario coverage

Select from:

Organization-wide

### (5.1.1.5) Risk types considered in scenario

Select all that apply

Acute physical

- Chronic physical

#### (5.1.1.6) Temperature alignment of scenario

Select from:

- 4.0°C and above

#### (5.1.1.7) Reference year

2018

#### (5.1.1.8) Timeframes covered

Select all that apply

- 2100

#### (5.1.1.9) Driving forces in scenario

##### Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature

#### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*In May 2019, Chuden expressed its support for the aims of the TCFD final report and is conducting climate change scenario analysis. By referring to published data from the International Energy Agency (IEA) and other sources, we selected the “2°C scenario” (IEA: Net Zero by 2050 (NZE scenario), WEO2021 (APS scenario), Sixth Basic Energy Plan, etc.) and the “4°C scenario” (IPCC RCP8.5 scenario), and based on these, we assessed the transition risks and opportunities and the business impact of physical risks with a focus on the middle of this century, and disclosed the results in the Chubu Electric Power Group Report 2022 in September 2022. In the scenario analysis, we referred to Japan's NDC (46% reduction compared to FY2013) for FY2030, etc., and assumed that we would comply with the requirements of environmental regulations, such as achieving the non-fossil fuel power generation ratio (44% in FY2030) under the Act on Sophisticated Methods of Energy Supply Structures as a power retailer. Through the analysis, we recognized that further efforts are needed to increase the ratio of non-fossil energy, including hydropower, toward the realization of a carbon-free society. In order to address these issues, the “Chubu Electric Power Group Management Vision 2.0” sets out goals such as contributing to the expansion of renewable energy sources, including hydroelectric power generation and biomass power generation, to more than 3.2 million kW by around 2030, as well as the maximum utilization of the Hamaoka Nuclear Power Station, and these are incorporated into the medium-term management plan and annual business plan.*

*(5.1.1.11) Rationale for choice of scenario*

*In conducting scenario analysis, Chuden and its operating companies decided to refer to RCP8.5, a 4°C scenario in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which has accumulated extensive knowledge on climate change, for physical risks.*

## **Water**

### **(5.1.1.1) Scenario used**

#### **Physical climate scenarios**

RCP 8.5

### **(5.1.1.2) Scenario used    SSPs used in conjunction with scenario**

*Select from:*

SSP5

### **(5.1.1.3) Approach to scenario**

*Select from:*

Qualitative and quantitative

### **(5.1.1.4) Scenario coverage**

*Select from:*

Organization-wide

### **(5.1.1.5) Risk types considered in scenario**

*Select all that apply*

Acute physical

Chronic physical

### **(5.1.1.6) Temperature alignment of scenario**

*Select from:*

- 4.0°C and above

#### (5.1.1.7) Reference year

2018

#### (5.1.1.8) Timeframes covered

Select all that apply

- 2100

#### (5.1.1.9) Driving forces in scenario

##### Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature

#### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*In May 2019, Chuden expressed its support for the aims of the TCFD final report and is conducting climate change scenario analysis. By referring to published data from the International Energy Agency (IEA) and other sources, we selected the “2°C scenario” (IEA: Net Zero by 2050 (NZE scenario), WEO2021 (APS scenario), Sixth Basic Energy Plan, etc.) and the “4°C scenario” (IPCC RCP8.5 scenario), and based on these, we assessed the transition risks and opportunities and the business impact of physical risks with a focus on the middle of this century, and disclosed the results in the Chubu Electric Power Group Report 2022 in September 2022. With regard to transition risks, we referred to Japan's NDC for FY2030 (46% reduction compared to FY2013) and other factors, and assumed that we would comply with the requirements of environmental regulations, such as achieving the non-fossil fuel power source ratio (44% in FY2030) under the Act on Sophisticated Methods of Energy Supply Structures as a power retailer. Through the analysis, we recognized that further efforts are needed to increase the ratio of non-fossil energy, including hydropower, toward the realization of a carbon-free society. In order to address these issues, the “Chubu Electric Power Group Management Vision 2.0” sets out goals such as making the most of the Hamaoka Nuclear Power Station and contributing to the expansion of renewable energy sources, including hydroelectric power and biomass power generation, to more than 3.2 million kW by around 2030, and these goals are incorporated into the medium-term management plan and annual business plan. With regard to physical risks, we have identified the need to strengthen our resilience in terms of facilities and systems, in light of the intensification of storms associated with rising temperatures (increase in severe typhoons, etc., and intensification of flooding and sediment disasters).*

#### (5.1.1.11) Rationale for choice of scenario

*In conducting scenario analysis, Chuden and its operating companies decided to refer to RCP8.5, a 4°C scenario in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which has accumulated extensive knowledge on climate change, for physical risks.*

## Water

### (5.1.1.1) Scenario used

#### Water scenarios

- WRI Aqueduct

### (5.1.1.3) Approach to scenario

Select from:

- Qualitative and quantitative

### (5.1.1.4) Scenario coverage

Select from:

- Organization-wide

### (5.1.1.5) Risk types considered in scenario

Select all that apply

- Acute physical
- Chronic physical

### (5.1.1.7) Reference year

2019

### (5.1.1.8) Timeframes covered

Select all that apply

- 2025
- 2030

### (5.1.1.9) Driving forces in scenario

#### Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature

### (5.1.1.10) Assumptions, uncertainties and constraints in scenario

*According to the Aqueduct assessment by the World Resources Institute (WRI), our power plants are located in areas that are at maximum medium-high risk (20-40%) and some are at low risk (less than 10%) on an annual basis. Therefore, we have determined that there are currently no power plants in areas with high water stress, and we have determined that there is no water intake from areas with high water stress.*

### (5.1.1.11) Rationale for choice of scenario

*Chuden and its operating companies are referring to WRI Aqueduct, a highly reliable data tool with a wealth of data, for scenario analysis and mapping the impact of water stress on the company's power generation facilities.*

## (5.1.2) Provide details of the outcomes of your organization's scenario analysis.

### Climate change

#### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

*Select all that apply*

- Risk and opportunities identification, assessment and management
- Strategy and financial planning
- Resilience of business model and strategy
- Capacity building
- Target setting and transition planning

#### (5.1.2.2) Coverage of analysis

*Select from:*

- Organization-wide

### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

*Chubu Electric Power and its operating companies selected the “1.5°C scenario” and the “4°C scenario” (see IPCC RCP8.5 scenario) for their scenario analysis, and based on these scenarios, they assessed the transition risks and opportunities and the business impact of physical risks with a focus on the middle of this century, and disclosed the results in the Chubu Electric Power Group Report 2023 in September 2023. In assessing “risks and opportunities related to the transition to a carbon-free society”, we selected the “1.5°C Scenario” based on the Net Zero by 2050 (NZE Scenario) and WEO2022 (APS Scenario) of the International Energy Agency (IEA), an international organization that conducts research on energy, from the perspective of its affinity with our own business. In the analysis, we referred to Japan's NDC for FY2030 (46% reduction compared to FY2013) and the Sixth Basic Energy Plan, etc., and assumed that we would comply with environmental regulations, such as achieving the non-fossil fuel power generation ratio (44% in FY2030) under the Act on Sophisticated Methods of Energy Supply Structures (Sophistication Act) as an electricity retailer. Meanwhile, with regard to “physical risks related to climate change”, such as extreme weather events, we have selected the “4°C Scenario” based on RCP8.5 from the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which has accumulated extensive knowledge on climate change. With regard to the time frames for the “1.5 degree scenario” and the “4 degree scenario”, the Chuden group has considered long-term analysis, as it is mainly engaged in the energy supply business over the long term. At the same time, in order to analyze the impact of transition risks on annual demand, sales, procurement plans, power source plans, business plans, and medium-term management plans, short-term and medium-term time frames are also covered. In scenario analysis, impact assessments are conducted by considering both quantitative and qualitative content. As a result of the scenario analysis, in terms of responding to “risks and opportunities related to the transition to a carbon-free society”, we recognized the need for further efforts to expand renewable energy, including hydropower, and to increase the ratio of non-fossil energy, in light of the risks associated with the realization of a carbon-free society and the achievement of the non-fossil power generation ratio target under the Act on the Promotion of Advanced Measures to Address Global Warming, as well as the introduction of carbon pricing. Furthermore, we recognized the growing needs of customers for the use of decarbonized energy due to the increased use of renewable energy and environmental awareness as an opportunity related to the transition. In the 4°C scenario, we identified the need to strengthen resilience in terms of facilities and systems, as physical risks associated with rising temperatures include more intense storms (more powerful typhoons, more severe flooding and landslides). The Chuden group recognizes the climate change risks and opportunities identified through scenario analysis as essential elements of our business strategy. The results of the scenario analysis on “transition risks and opportunities for a carbon-free society” showed that we need to expand renewable energy and increase the non-fossil fuel ratio. In addition, the expansion of the need for renewable energy-derived electricity, including hydropower, which is one of our main products, was evaluated as having a high impact, and the need for a business strategy that responds to the diversifying needs of customers, strategically develops products, and prepares for the increase in important water-related opportunities became clear. In addition, the results of scenario analysis on “physical risk” showed that the short-term financial impact of increased facility countermeasure costs and increased restoration costs would be a decrease in profits of around 5 billion yen. In order to respond to these climate change risks and opportunities and to aim for the realization of a decarbonized society, the Chubu Electric Power Group management vision 2.0 sets out a target of expanding renewable energy sources, including hydroelectric power generation and biomass power generation, to over 3.2 million kW by around 2030, as well as the maximum utilization of the Hamaoka nuclear power station, and these details are incorporated into the medium-term management plan and annual business plan. As a specific investment plan, we have incorporated into our plan around 400 billion yen over the 10 years from FY2021 to FY2030, focusing on renewable energy businesses including hydroelectric power generation, as strategic investment in growth areas based on the acceleration of policies for decarbonization, etc. As a business strategy to respond to the growing needs of customers for decarbonized energy, Chubu Electric Power Miraiz Co., Inc. is promoting the diversification of CO2-free menus that also utilize the company's own non-fossil fuel power sources, and is providing “Miraiz Green Electricity” that meets customer needs, such as CO2-free menus that are designated as locally produced in the five prefectures of the Chubu region. In fiscal 2023, the company plans to sell approximately 5.9 billion kWh, and is aiming to increase profits by responding to the needs of customers who are interested in reducing environmental burden. In terms of physical risks, such as dealing with large-scale disasters such as unprecedented typhoons, floods, earthquakes and tsunamis, we have created a group-wide BCP (Business Continuity Plan) to ensure that we can continue to carry out the work that needs to be done even in the event of a disaster, and we are also working to maintain and improve our ability to respond to emergency disasters through a BCM (Business Continuity Management) system that is continually being improved. In addition to measures for large-scale earthquakes and storm surges, the BCM*

Committee also incorporates appropriate measures for natural disasters that occur each year and new findings, and we carry out annual monitoring and we are working to improve our level of preparedness. In addition, we are working to enhance the resilience of our power infrastructure and create disaster-resistant facilities to ensure a stable supply of power. We have conducted damage assessments for a tsunami caused by a Nankai Trough earthquake, and are implementing facility measures such as installing waterproof walls on substation equipment and raising transformers, circuit breakers, etc.

## Water

### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- Risk and opportunities identification, assessment and management
- Strategy and financial planning
- Resilience of business model and strategy
- Capacity building
- Target setting and transition planning

### (5.1.2.2) Coverage of analysis

Select from:

- Organization-wide

### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

Chubu Electric Power and its operating companies selected the “1.5°C scenario” and the “4°C scenario” (see IPCC RCP8.5 scenario) for their scenario analysis, and based on these scenarios, they assessed the transition risks and opportunities and the business impact of physical risks with a focus on the middle of this century, and disclosed the results in the Chubu Electric Power Group Report 2023 in September 2023. In assessing “risks and opportunities related to the transition to a carbon-free society”, we selected the “1.5°C Scenario” based on the Net Zero by 2050 (NZE Scenario) and WEO2022 (APS Scenario) of the International Energy Agency (IEA), an international organization that conducts research on energy, from the perspective of its affinity with our own business. In the analysis, we referred to Japan's NDC for FY2030 (46% reduction compared to FY2013) and the Sixth Basic Energy Plan, etc., and assumed that we would comply with environmental regulations, such as achieving the non-fossil fuel power generation ratio (44% in FY2030) under the Act on Sophisticated Methods of Energy Supply Structures (Sophistication Act) as an electricity retailer. Meanwhile, with regard to “physical risks” such as abnormal weather, we have selected the “4°C scenario” based on RCP8.5 from the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which has accumulated extensive knowledge on climate change. With regard to the time frames of the “1.5 degree scenario” and the “4 degree scenario”, the Chuden group has considered long-term analysis, as it is mainly engaged in the energy supply business over the long term. At the same time, in order to analyze the impact of transition risks on annual demand, sales, procurement plans, power source plans, business plans, and medium-term management plans, short-term and medium-term time frames are also covered. In scenario analysis, impact assessments are conducted considering both quantitative and qualitative content. As a result of the scenario analysis, in terms of responding to “risks and opportunities related to the

transition to a carbon-free society”, we recognized the need for further efforts to expand renewable energy, including hydropower, and increase the ratio of non-fossil energy, in light of the risks associated with the realization of a carbon-free society and the achievement of the non-fossil power generation ratio target under the Act on the Promotion of Advanced Measures to Cope with Global Warming, as well as the introduction of carbon pricing. Furthermore, we recognized the growing needs of customers for the use of decarbonized energy due to the increased use of renewable energy and environmental awareness as opportunities related to the transition. In the 4°C scenario, we identified the need to strengthen resilience in terms of facilities and systems, as physical risks such as intensification of storms (increase in severe typhoons, etc., and intensification of floods and sediment disasters) due to rising temperatures were recognized. The Chuden group recognizes the climate change risks and opportunities identified through scenario analysis as essential elements of its business strategy. The results of the scenario analysis on “risks and opportunities related to the transition to a carbon-free society” showed that we need to expand the use of renewable energy and increase the non-fossil fuel ratio. In addition, the expansion of the need for electricity derived from renewable energy, including hydropower, which is one of our main products, was evaluated as having a high impact, and the need for a business strategy that responds to the diversifying needs of customers, strategically develops products, and prepares for the increase in important water-related opportunities became clear. In addition, the results of scenario analysis on “physical risk” showed that the short-term financial impact of increased facility maintenance costs and restoration costs would be a decrease in profits of around 5 billion yen. In order to respond to these climate change risks and opportunities and to aim for the realization of a decarbonized society, the Chubu Electric Power Group management vision 2.0 sets out a target of expanding renewable energy sources, including hydroelectric power generation and biomass power generation, to more than 3.2 million kW by around 2030, as well as the maximum utilization of the Hamaoka nuclear power station, and these details are incorporated into the medium-term management plan and annual business plan. As a specific investment plan, we have incorporated into our plan around 400 billion yen over the 10 years from FY2021 to FY2030, focusing on renewable energy businesses including hydroelectric power generation, as strategic investment in growth areas based on the acceleration of policies for decarbonization, etc. As a business strategy to meet the growing needs of customers for decarbonized energy, Chubu Electric Power Miraiz Co., Inc. is promoting the diversification of CO2-free menus that also utilize the company's own non-fossil fuel power sources, and is providing “Miraiz Green Electricity” that meets customer needs, such as CO2-free menus that are designated as locally produced in the five prefectures of the Chubu region. In fiscal 2023, the company plans to sell approximately 5.9 billion kWh, and is aiming to increase profits by meeting the needs of customers who are interested in reducing environmental burden. In terms of physical risks, such as dealing with large-scale disasters such as unprecedented typhoons, floods, earthquakes and tsunamis, we have created a group-wide BCP (Business Continuity Plan) to ensure that we can continue to carry out the work that needs to be done even in the event of a disaster, and we are also working to maintain and improve our ability to respond to emergency disasters through a BCM (Business Continuity Management) system that is continually being improved. In addition to measures for large-scale earthquakes and storm surges, the BCM Committee also incorporates appropriate measures for natural disasters that occur each year and new findings, and we carry out annual monitoring and we are working to improve our level of preparedness. In addition, we are working to enhance the resilience of our power infrastructure and create disaster-resistant facilities to ensure a stable supply of power. We have conducted damage assessments for a tsunami caused by a Nankai Trough earthquake, and are implementing facility measures such as installing waterproof walls on substation equipment and raising transformers, circuit breakers, etc.

## **(5.2) Does your organization’s strategy include a climate transition plan?**

### **(5.2.1) Transition plan**

Select from:

- Yes, we have a climate transition plan which aligns with a 1.5°C world

### (5.2.3) Publicly available climate transition plan

Select from:

Yes

### (5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

No, and we do not plan to add an explicit commitment within the next two years

### (5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

*In Japan, given the progress of electrification and the move towards digitalization in the lead-up to carbon neutrality by 2050, there is a high possibility that future electricity demand will grow significantly. In order to achieve our "Zero Emission Challenge 2050" while ensuring a stable supply of energy in the future, we believe it is important to continue to appropriately promote the transition towards decarbonization, while expanding renewable energy and making the most of nuclear power generation, and also while monitoring the trends of new technologies for hydrogen and ammonia, with the aim of achieving zero emissions from thermal power generation. In particular, thermal power generation plays a very important role in ensuring the supply capacity necessary for a stable supply and the balancing capacity essential for the expansion of renewable energy. The Chuden group believes that it is necessary to maintain a certain level of thermal power generation, including existing thermal power, and to promote zero-emission thermal power generation by making the most of innovations such as the use of CO<sub>2</sub>-free hydrogen and ammonia and CCUS.*

### (5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

We have a different feedback mechanism in place

### (5.2.8) Description of feedback mechanism

*The Chuden group holds a management plan briefing session once a year as an opportunity for communication with shareholders regarding the management plan. We use these briefings to obtain valuable feedback from our shareholders regarding our management targets, as well as our roadmap towards achieving the Zero-Emission Challenge 2050 and information disclosure based on the TCFD recommendations. In addition to the management plan briefings, we also regularly (approximately once a quarter) hold opportunities for dialogue with our shareholders regarding our overall business activities, including our response to climate change, and report the feedback and suggestions we receive to the Board of Directors, where they are shared with management, and reflected in our management, including the following year's management plan.*

## (5.2.9) Frequency of feedback collection

Select from:

More frequently than annually

## (5.2.10) Description of key assumptions and dependencies on which the transition plan relies

*In formulating a transition plan aimed at limiting the rise in temperature to 1.5 degrees or less, Chuden took into account the contribution to earnings that power generation businesses using these technologies would make, based on the premise of technological progress and innovation in decarbonization technologies, such as renewable energy power generation technologies and the low-carbonization of thermal power generation using hydrogen and ammonia as fuel, as well as the practical application of innovative technologies.*

## (5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

*We have achieved the operational start of 920,000 kW, which is equivalent to 29% of the target, and are contributing to earnings, with regard to the expansion target for renewable energy power generation set for around 2030, which was formulated based on the transition plan aimed at limiting the rise in temperature to 1.5 degrees or less.*

## (5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

*vision2.pdf*

## (5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

Water

## (5.2.14) Explain how the other environmental issues are considered in your climate transition plan

*The Chuden group recognizes the climate change risks and opportunities identified through scenario analysis as essential elements of our business strategy. The results of our scenario analysis of “transition risks and opportunities related to a carbon-free society” have shown that we need to expand renewable energy and increase the non-fossil fuel ratio. In addition, we have assessed that the growing need for electricity derived from renewable energy sources, including hydropower, which is one of our core products, will have a significant impact, and we have identified the need for a business strategy that will respond to the diversifying needs of our customers, strategically develop products, and prepare for the increase in important water-related opportunities. In order to respond to these climate change risks and opportunities and aim for the realization of a decarbonized society, the Chubu Electric Power Group management vision 2.0 sets out a target of expanding renewable energy sources, including hydroelectric power generation and biomass power generation, to more than 3.2 million kW by around 2030, while making the most of the Hamaoka nuclear power station, and these details are incorporated into the medium-term management plan and annual business plan. As a specific investment plan, we have incorporated*

into our plan around 400 billion yen over the 10 years from FY2021 to FY2030, mainly for renewable energy businesses including hydroelectric power generation, as strategic investment in growth areas based on the acceleration of policies for decarbonization, etc. As a business strategy to respond to the growing needs of customers for decarbonized energy, Chubu Electric Power Miraiz Co., Inc. is promoting the diversification of CO2-free menus that also utilize the company's own non-fossil fuel power sources, and is providing "Miraiz Green Electricity" that meets customer needs, such as CO2-free menus that are designated as locally produced in the five prefectures of the Chubu region. In fiscal 2022, the company plans to sell approximately 8.7 billion kWh, aiming to expand its earnings by responding to the needs of customers who are interested in reducing environmental burden.

### **(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?**

#### **(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning**

Select from:

- Yes, both strategy and financial planning

#### **(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy**

Select all that apply

- Products and services
- Upstream/downstream value chain
- Investment in R&D
- Operations

### **(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.**

#### **Products and services**

##### **(5.3.1.1) Effect type**

Select all that apply

- Risks
- Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

- Climate change
- Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*At the same time as addressing the risks of introducing carbon pricing, the Chuden group is working to achieve the non-fossil fuel power generation ratio targets (44% in FY2030 and interim targets) of the Act on Sophisticated Methods of Energy Supply Structures, and is promoting the development of renewable energy power sources, while also working to utilize the Hamaoka nuclear power station with safety as a major consideration (annual CO2 reduction effect of approx. 10 million t-CO2 if all units are restarted) . These initiatives contributed to a reduction in the emission factor of the electricity we sell. We expect that the operation of the Seinaiji Hydroelectric Power Plant (5,630 kW), which began commercial operation on October 6, 2023, will avoid approximately 13,000 tons of CO2 emissions per year. At the same time, we have assumed that, as we move towards 2050, efforts towards “decarbonization” and the progress of DX will lead to a “self-distributed and circular” society, and that there will be a growing need for “resilience (safety and security)”. In order to contribute to this transformation of social systems, we have announced “Management Vision 2.0”, which aims to accelerate the provision of “new community models” and contribute to the realization of a “safe, secure, and resilient society that is easy to live in”. As part of our efforts to realize a “new form of community,” we are also working to expand the scope of our community-based services, including e-mobility power, which provides an EV charging environment. In addition, we are working with our customers to realize a carbon-free society, and in the electricity business we are preparing a range of options, including a “CO2-free menu” and a “solar power self-consumption service.” As a specific example, since the launch of “Shinshu Green Electricity” in April 2020, a CO2-free menu that utilizes the CO2-free value and local production value from the hydroelectric power plants operated by the Nagano Prefecture Enterprise Bureau in Nagano prefecture, we have expanded sales of “Mie Umashikuni Green Electricity”, “Shizuoka Green Electricity”, “Gifu Seiryu Green Electricity”, and “Aichi Green Electricity”, and in FY2023, we expanded sales to 5.9 billion kWh. We are also working to support the spread of EVs and PHVs in order to realize a carbon-free society. As a specific example, the Fleet EV Initiative, a limited liability company established jointly with Marubeni Corporation, began a demonstration project in April 2021 in Iida City, Nagano Prefecture, to operate an EV bus that has achieved virtually zero CO2 emissions. In this demonstration project, Chubu Electric Power Miraiz Co., Inc. will provide electricity with a non-fossil certificate derived from a solar power plant in Iida City as a CO2-free menu, and a “CO2 zero-emission bus” with virtually zero CO2 emissions will be operated. For customers in the Chubu District who purchase EVs or PHVs, the “EV/PHV Plan” has been available since March 2021, providing one-stop installation of EV charging equipment and 100% renewable energy electricity supply. In addition, Chubu Electric Power Miraiz Co., Inc. is working with customers to contribute to the realization of a decarbonized society by proposing a three-pronged approach to decarbonization and low-carbon services: energy conservation, energy creation, and energy activation. Energy saving is an initiative to improve operational efficiency and to make customers' energy use more efficient through integrated development solutions and the conversion of energy sources, such as electrification. Energy creation is an initiative to create new non-fossil energy sources through the construction of new non-fossil power sources and the utilization of unused energy sources, such as waste heat from customers' factories. Energy activation is an initiative to expand the range of energy utilization through local production for local consumption, demand response, and the introduction of storage batteries and EVs. By promoting these initiatives in a three-way partnership, customers can reduce CO2 emissions while also solving their business issues and living a richer life, and our company can reduce the CO2 emissions from the electricity we sell to our customers, so there are benefits for both sides that will contribute to the realization of the Zero Emission Challenge 2050. Furthermore, it is expected that the demand for our services, which will provide these benefits, will increase, leading to an expansion of our company's earnings.*

### Upstream/downstream value chain

### (5.3.1.1) Effect type

Select all that apply

- Risks
- Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

- Climate change
- Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*For the Chuden group, which is involved in the electricity business, making the electricity it procures as low-carbon as possible is an initiative that it recognizes as being necessary in order to contribute to the realization of a carbon-free society as a response to climate change through its business activities and to ensure the continuation of its business. For this reason, when procuring power sources, we are actively working to procure power from high-efficiency facilities with low CO2 emissions, such as the No. 7 series of the Nishi-Nagoya Thermal Power Station owned by JERA Co. In Question 3.1.1, we mentioned the increased severity of natural disasters such as typhoons due to the effects of climate change as a short-term risk, but in the event of a natural disaster, it is important to work in partnership with road-related organizations, important infrastructure providers, etc. in order to respond to recovery. Specifically, we are working to build cooperative frameworks with various external organizations, such as by concluding agreements, in areas such as transport support, communication support, securing recovery bases and accommodation facilities, and securing fuel and relief supplies. Regarding information sharing with local governments, etc., from the perspective of “information sharing at the appropriate time and content”, we are working to clarify the role of liaisons dispatched from our company to the government and the Self-Defense Forces, and to develop action plans.*

## Investment in R&D

### (5.3.1.1) Effect type

Select all that apply

- Risks
- Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

Climate change

Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*The Chuden group is pursuing an optimal energy mix from the perspective of “S Plus 3E”, which aims to simultaneously achieve energy security, economic efficiency and environmental compliance, with safety as a major consideration. In this context, we are working towards the realization of a low-carbon society through our energy business, which encompasses everything from power generation to transmission and distribution and sales, including the continued use of nuclear power generation and the promotion of the use of renewable energy such as solar and wind power. At the same time, the structure of the future electricity supply and demand is expected to change significantly, with the diversification of power sources and the expansion of the introduction of renewable energy and storage batteries. In this changing environment, the Chuden group is working to create stable and resilient communities by building and operating electric power network facilities that can utilize distributed resources efficiently and stably, and by providing new services to customers. Specifically, we are developing products and systems that contribute to energy saving and CO2 emissions reduction, as well as technologies that make more efficient and stable use of renewable energy. We are also building an efficient and stable supply system by promoting the electrification of vehicles used by logistics and transportation companies, etc., and connecting storage batteries, such as by creating an environment for EVs that makes use of the latest digital technology and data. Through these new businesses, we aim to create sustainable communities and reduce CO2 emissions.*

## Operations

### (5.3.1.1) Effect type

*Select all that apply*

Risks

Opportunities

### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

*Select all that apply*

Climate change

Water

### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

*Amid the ongoing expansion of renewable energy, the Chuden group is working to maintain the frequency by matching supply and demand in the Chubu District through measures such as adjusting the output of pumped storage power generators connected to the power grid. In addition, in order to grasp and adjust the increasingly complex flow of electricity due to the spread of distributed power sources centered on demand-side grids, the company is working to install next-generation power*

distribution equipment (such as new types of automatic switches and automatic voltage regulators with communication functions, and smart meters) and to enhance system operation using ICT and other means. In order to strengthen wide-area coordination, the Hida Conversion Station (900,000 kW), which links the 50 Hz area (East Japan) and the 60 Hz area (West Japan), will begin operations in March 2021, expanding the amount of flexibility between the 50 Hz and 60 Hz areas to 2.1 million kW. We are working to ensure power quality and rationalize facility formation, while also promoting advanced response to output control of renewable energy power generation facilities, etc.

## **(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.**

### **Row 1**

#### **(5.3.2.1) Financial planning elements that have been affected**

*Select all that apply*

- Revenues
- Capital allocation
- Access to capital
- Assets
- Liabilities

#### **(5.3.2.2) Effect type**

*Select all that apply*

- Risks
- Opportunities

#### **(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements**

*Select all that apply*

- Climate change

#### **(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements**

*(Sales) Due to intensifying competition in sales and changes in the market environment, we expect to face a very challenging financial situation, but Chuden aims to realize the management targets of its medium-term management plan (consolidated ordinary income of at least 180 billion yen in FY2025, ROIC of at least 3.0%) by promoting initiatives such as strategic investment in renewable energy. (Capital allocation, acquisitions) While promoting ESG management to sustainably enhance corporate value across the Chuden group, Chuden is aiming for the realization of a carbon-free society by taking all possible measures to reduce CO2 emissions in all areas of its value chain, from power generation to sales. As a specific initiative, we plan to invest around 400 billion yen from fiscal 2021 onwards, mainly in renewable energy businesses, as strategic investment in growth areas in response to rising demand for CO2-free menus and other factors. Furthermore, we aim to contribute to energy saving and low-carbonization by responding to the needs of society through the creation of customer-oriented community support infrastructure, while also striving to create rational facilities and operations through digitization that enables the optimal use of energy. We plan to invest approximately 100 billion yen in total over the five years from FY2019 to FY2023 in new growth areas, including the creation of community support infrastructure. As a specific example of this initiative, our company and Toho Gas Co., Ltd. (Headquarters: Atsuta-ku, Nagoya City; President: Yoshiro Tominari; hereinafter "Toho Gas") have agreed to invest in Kumamoto Forest Power Generation, LLC (hereinafter "the project company"), which was established by Envision Co., Ltd. (Headquarters: Chikusa-ku, Nagoya City; President: Yasufumi Suto; hereinafter "Envision"), and have concluded a project finance loan agreement. The company aims to construct and operate the Yatsushiro biomass power plant, which will be dedicated to wood-fired power generation with an output of 75,000 kW, in Yatsushiro city, Kumamoto prefecture, with the aim of starting operations in June 2024. Furthermore, in 2019, Chuden acquired Eneco, an integrated energy company operating in Europe, for approximately 4.1 billion euros through Diamond Chubu Europe B.V. (Chuden's investment ratio: 20%), a joint venture with Mitsubishi Corporation. Eneco is an advanced integrated energy company that is actively developing renewable energy and also providing customer-focused services that utilize digital technology in its retail business. We are working to build the "community support infrastructure" set out in the Chuden group management vision. With the keywords of "digitalization", "customer-centricity" and "low-carbon", we aim to contribute to solving social issues and to enhance our value as an integrated energy company by delivering "value that expands through connections" together with energy services. By participating in Eneco, which is implementing advanced initiatives in the European market, which is ahead of Japan in terms of electricity deregulation, and by bringing together the knowledge of both Chuden and Eneco and evolving our business models together, we aim to create synergies in the energy business both in Japan and overseas. Amid the transformation of the electricity business brought about by the increasing number of small-scale distributed power sources accompanying the spread of renewable energy, the development of storage batteries and digital technology, and other factors, MC and Chuden aim to contribute to the resolution of social issues such as the transition to a low-carbon society and global environmental conservation by supporting the infrastructure of people's lives through the growth of Eneco, an advanced integrated energy company that develops renewable energy and provides customer-focused services that utilize AI and IoT. (Access to capital) As ESG investment is rapidly expanding in Japan, Chuden recognizes that there has been an increase in recent years in the trend of engagement, in which institutional investors and other shareholders promote long-term growth through dialogue with operating companies. Chuden understands engagement as one of the creative approaches to enhancing corporate value, and we are actively engaged in dialogue with investors and information disclosure to contribute to stable financing. In addition, in May 2019, Chuden endorsed the recommendations of the TCFD, and in September 2023, we disclosed information in line with the TCFD recommendations in the Chuden Group Report 2023. (Assets) Chuden has formulated business plans that are consistent with Japan's NDC and current energy policy, and has been building facilities accordingly. In this context, with regard to renewable energy, we are working to increase the ratio of non-fossil power sources, with the aim of expanding renewable energy capacity to more than 3.2 million kW by around 2030, in order to meet the growing demand for low-carbon options, as well as to achieve the non-fossil power source ratio targets (44% in FY2030 and interim targets) set out in the Act on Sophisticated Methods of Energy Supply Structures. The current Basic Energy Plan and the long-term strategy of the Paris Agreement both indicate that renewable energy will become a major source of power by 2050, and we recognize that our asset formation is in line with these medium- to long-term energy policies. The feasibility of other options, such as hydrogen power generation through technological innovation, remains unknown, and we believe that the trend towards expanding renewable energy will continue among the options available using existing technologies, and that this will not have a significant impact on our current strategies and plans for asset formation. (Liabilities) The Chuden group has formulated a business plan that is consistent with Japan's Sixth Basic Energy Plan, which was formulated in October 2021, and is proceeding with capital investment. However, we believe that there is a potential risk that the construction of renewable energy power generation facilities, in which investment has been made, may not progress as planned in the future. When risks become apparent, there is a concern that the debt ratio will deteriorate due to the burden of the cost of responding to the situation, so*

we are continuously monitoring the progress of investment projects.

## Row 2

### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

- Assets
- Revenues
- Liabilities
- Direct costs
- Indirect costs
- Capital expenditures

### (5.3.2.2) Effect type

Select all that apply

- Risks
- Opportunities

### (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

- Water

### (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

*In order to realize a carbon-free society, the business plan incorporates the construction of power plants that use renewable energy, and since the construction of power plants requires a large amount of money, these development costs are also incorporated into the financial plan. Specifically, the financial plan incorporates the promotion and development costs of the development of the Tohyama River, Abekawa, Uchigatani, and other hydroelectric power stations. In order to promote such initiatives, we are diversifying our funding by utilizing green bonds and other instruments that limit the use of procured funds to environmental improvement projects such as the development of renewable energy. In January 2023, we reached a basic agreement with a consortium of six global companies on the establishment of a user-participatory renewable energy expansion model for the renovation of existing hydroelectric power plants. The consortium is a mechanism that allows Chuden to proactively contribute to the expansion of renewable energy by having customers who are strongly interested in “additionality” actively participate in the planning stages of the refurbishment of existing hydroelectric power plants that Chuden is considering increasing power generation from, and by having them bear the cost of*

“additionality” when purchasing renewable energy-derived electricity, including the increased power generation resulting from the refurbishment, through Chubu Electric Power Miraiz Co., Inc. As the first project to use this model, we are planning to apply it to the renovation of the aging facilities at our Oigawa Hydroelectric Power Plant Unit 1, and we expect to increase annual power generation by approximately 1.9 million kWh. The Renewable Energy Company has introduced the Toyota Production System (TPS) and is implementing initiatives to improve productivity. With the goal of “tripling productivity through new ideas that break free from existing concepts”, a total of 298 projects have been launched as of the end of March 2024. In addition, by creating a system that allows for the centralized management of renewable energy projects, the company was able to demonstrate the mobility of its hydroelectric power centers through rapid restoration activities in the torrential rains of 2019, and minimize financial losses from unexpected water risks.

**(5.4) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?**

	Identification of spending/revenue that is aligned with your organization’s climate transition	Methodology or framework used to assess alignment with your organization’s climate transition
	Select from: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Other methodology or framework

**(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization’s climate transition.**

**Row 1**

**(5.4.1.1) Methodology or framework used to assess alignment**

Select from:

Other, please specify : Self-evaluation method for the amount of CO2-free electricity sold in electricity sales

**(5.4.1.5) Financial metric**

Select from:

**(5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)**

0

**(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)**

5

**(5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)**

0

**(5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)**

0

**(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition**

*The products that can be included in the Chuden group's 1.5 degree world-aligned sales are electricity with a CO2 emission factor of 0. This type of electricity is available as a contract menu for customers from extra high voltage to low voltage. The ratio of the amount of electricity sold under this specification to the total amount of electricity sold is used as an indicator. The amount that is consistent with the selected financial evaluation criteria for FY2023 corresponds to the sales amount of the CO2-free menu in the electric power business revenue, but the unit price of the CO2-free menu varies depending on the conditions, including the contract voltage. While the amount of electricity sold through the CO2-free menu is disclosed, the amount is not disclosed together with the amount of electricity sold, as this would lead to the assumption of a wrong "unit price" for the CO2-free menu, and the amount is set to zero. In addition, the percentage (%) of the selected financial evaluation criteria that are scheduled to be consistent with the fiscal years 2025 and 2030 was set to zero because the company has not formulated or disclosed any management target values.*

**(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

**(5.5.1) Investment in low-carbon R&D**

Select from:

Yes

## (5.5.2) Comment

*The Chuden group is pursuing an optimal energy mix from the perspective of “S Plus 3E”, which aims to simultaneously achieve energy security, economic efficiency, and environmental compliance, with safety as a major consideration. In this context, we are working towards the realization of a carbon-free society through our energy business, which encompasses everything from power generation to transmission and distribution to sales, including the continued use of nuclear power generation and the promotion of the use of renewable energy such as solar and wind power. At the same time, the structure of the future electricity supply and demand is expected to change significantly, with the diversification of power sources and the expansion of the introduction of renewable energy and storage batteries. In this changing environment, we are working to create stable and resilient communities by building and operating electric power network facilities that can utilize distributed resources efficiently and stably, and by providing new services to customers. Specifically, we are developing products and systems that contribute to energy saving and CO2 emissions reduction, as well as technologies that make more efficient and stable use of renewable energy. We are also building an efficient and stable supply system by promoting the electrification of vehicles used by logistics and transportation companies, etc., and the connection of storage batteries, such as by creating an environment for EVs that makes use of the latest digital technology and data. Through these new businesses, we are contributing to the creation of sustainable communities and the realization of a carbon-free society.*

## (5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

### Row 1

#### (5.5.7.1) Technology area

Select from:

Other, please specify : Development of energy-saving equipment

#### (5.5.7.2) Stage of development in the reporting year

Select from:

Small scale commercial deployment

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

5

**(5.5.7.5) Average % of total R&D investment planned over the next 5 years**

15

**(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan**

*Development and research on hot water HP built-in washing machines Research on air conditioning and ventilation control using air quality information in factories*

**Row 2**

**(5.5.7.1) Technology area**

Select from:

Solar energy generation

**(5.5.7.2) Stage of development in the reporting year**

Select from:

Applied research and development

**(5.5.7.3) Average % of total R&D investment over the last 3 years**

5

**(5.5.7.5) Average % of total R&D investment planned over the next 5 years**

5

**(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan**

*Research on next-generation power system stabilization for large-scale renewable energy introduction, research on EV chargers and energy storage systems*

### Row 3

#### (5.5.7.1) Technology area

Select from:

Wind energy generation

#### (5.5.7.2) Stage of development in the reporting year

Select from:

Applied research and development

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

5

#### (5.5.7.5) Average % of total R&D investment planned over the next 5 years

5

#### (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

*Research on the practical application of drone inspections of wind power generation facilities, and the development of common element technologies for low-cost floating offshore wind power generation systems*

### Row 4

#### (5.5.7.1) Technology area

Select from:

Other, please specify : Microgrid

#### (5.5.7.2) Stage of development in the reporting year

Select from:

Full/commercial-scale demonstration

**(5.5.7.3) Average % of total R&D investment over the last 3 years**

5

**(5.5.7.5) Average % of total R&D investment planned over the next 5 years**

10

**(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan**

*Iida Microgrid Demonstration Test, Research on the Construction of an EMS (Energy Management System) for the Odaka Grid Demonstration Facility*

**(5.7) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.**

**Coal – hard**

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have any power generation facilities that use coal as fuel. In addition, there are no plans to make any investments in acquiring such facilities in the next five years.*

#### **Lignite**

### **(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

### **(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

### **(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have any power generation facilities that use lignite as fuel. In addition, there are no plans to make any investments in acquiring such facilities in the next five years.*

#### **Oil**

### **(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

### **(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden's business establishment had one 400kW oil-fired thermal power station for backup use in case of disruption in supply to remote islands (one transmission line), but this was decommissioned in FY2023. There are no plans to invest in acquiring one in the future.*

## **Gas**

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have any power generation facilities that use natural gas as fuel. In addition, there are no plans to make any investments in acquiring such facilities in the next five years.*

## **Sustainable biomass**

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies are planning to invest 100 billion yen in renewable energy from FY2022 to FY2025, and 450 billion yen in renewable energy projects from FY2022 onwards. As the amount of investment for each type of renewable energy power source has not been specified for these investments, the CAPEX for renewable energy power sources for the next five years is listed as a lump sum for hydroelectric power, and the amount for FY2022 and beyond is listed separately. In addition, the actual amount of capital investment for each type of power source for power generation in the reporting year is not disclosed due to business confidentiality. As an alternative, the total amount of capital investment, including IT facilities, etc., at Chuden is listed as the amount of investment in non-fossil power sources as a lump sum for hydroelectric power.*

**Other biomass**

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power**

## generation over the next 5 years

0

## (5.7.5) Explain your CAPEX calculations, including any assumptions

*Chuden and its operating companies do not have any power generation facilities that use unsustainable biomass as fuel. In addition, there are no plans to make any investments in acquiring such facilities in the next five years.*

## Waste (non-biomass)

### (5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

### (5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

### (5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

## (5.7.5) Explain your CAPEX calculations, including any assumptions

*Chuden and its operating companies do not have power generation facilities that use waste as fuel. In addition, the company plans to invest 100 billion yen in renewable energy from FY2022 to FY2025, and 450 billion yen in renewable energy businesses from FY2022 onwards. As the amount of investment for each type of renewable energy power source has not been specified for these investments, the CAPEX for renewable energy power sources for the next five years is listed as a lump sum for hydroelectric power, and the amount for FY2022 and beyond is listed separately. In addition, the actual amount of capital investment for each type of power source for power generation in the reporting year is not disclosed due to business confidentiality. As an alternative, the total amount of capital investment, including IT facilities at Chuden, is listed as the amount of investment in non-fossil fuel power sources, and is listed as a lump sum for hydroelectric power.*

## Nuclear

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden owns one nuclear power station with three reactors. Two of these reactors are currently undergoing inspection by the Nuclear Regulation Authority, which is necessary for them to be restarted. The results of this inspection will determine the scale and content of the necessary facility upgrades. For this reason, the amount and ratio of CAPEX for nuclear power generation facilities over the next five years cannot be specified at this time, so we have entered 0.*

## **Geothermal**

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have geothermal power generation facilities. In addition, the company plans to invest 100 billion yen in renewable energy from FY2022 to FY2025, and 450 billion yen in renewable energy businesses from FY2022 onwards. As the amount of investment for each type of renewable energy power source has not been specified for these investments, the CAPEX for renewable energy power sources for the next five years is listed as a lump sum for hydroelectric power, and the amount for FY2022 and beyond is listed separately. In addition, the actual amount of capital investment for each type of power source for power generation in the reporting year is not disclosed due to business confidentiality. As an alternative, the total amount of capital investment, including IT facilities at Chuden, is listed as the amount of investment in non-fossil fuel power sources, and is listed as a lump sum for hydroelectric power.*

## **Hydropower**

### **(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

79635000000

### **(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

100

### **(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

100

### **(5.7.4) Most recent year in which a new power plant using this source was approved for development**

2023

### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have power generation facilities that use fossil fuels. In addition, there are no plans to make any investments in the next five years. Therefore, all of Chuden's investments in power generation facilities in the reporting year and the next five years are for non-fossil fuel power sources. Chuden's capital investment includes IT facilities as well as power generation facilities, but the amount of investment for each individual type of facility is not disclosed due to business confidentiality. As an alternative, the total amount of Chuden's capital investment is listed as the amount invested in non-fossil fuel power sources, lumped together as hydroelectric power generation.*

## Wind

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have power generation facilities that use fossil fuels. In addition, there are no plans to make any investments in the next five years. Therefore, all of Chuden's investments in power generation facilities in the reporting year and the next five years are for non-fossil fuel power sources. Chuden's capital investment includes IT facilities as well as power generation facilities, but the amount of investment for each individual type of facility is not disclosed due to business confidentiality. As an alternative, the total amount of Chuden's capital investment is listed as the amount invested in non-fossil fuel power sources, lumped together as hydroelectric power generation.*

## Solar

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

### **(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have power generation facilities that use fossil fuels. In addition, there are no plans to make any investments in the next five years. Therefore, all of Chuden's investments in power generation facilities in the reporting year and the next five years are for non-fossil fuel power sources. Chuden's capital investment includes IT facilities as well as power generation facilities, but the amount of investment for each individual type of facility is not disclosed due to business confidentiality. As an alternative, the total amount of Chuden's capital investment is listed as the amount invested in non-fossil fuel power sources, lumped together as hydroelectric power generation.*

## **Marine**

### **(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

### **(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

### **(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have power generation facilities that use fossil fuels. In addition, there are no plans to make any investments in the next five years. Therefore, all of Chuden's investments in power generation facilities in the reporting year and the next five years are for non-fossil fuel power sources. Chuden's capital investment includes IT facilities as well as power generation facilities, but the amount of investment for each individual type of facility is not disclosed due to business confidentiality. As an alternative, the total amount of Chuden's capital investment is listed as the amount invested in non-fossil fuel power sources, lumped together as hydroelectric power generation.*

## Fossil-fuel plants fitted with CCS

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

**(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have fossil fuel power plants equipped with CCS. In addition, there are no plans to invest in acquiring such facilities in the next five years.*

## **Other renewable (e.g. renewable hydrogen)**

**(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

**(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

**(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

#### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have other renewable fuel power generation facilities. Chuden and its operating companies do not have power generation facilities that use fossil fuels, and there are no plans to make investments in acquiring such facilities in the next five years. Therefore, all of Chuden's investments in power generation facilities in the reporting year and the next five years are investments in non-fossil fuel power generation facilities. Chuden's capital investments include IT facilities as well as power generation facilities, but the amount of investment for each individual type of facility is not disclosed due to business confidentiality. As an alternative, the total amount of Chuden's capital investment is listed as investment in non-fossil power sources, lumped together under hydroelectric power.*

#### **Other non-renewable (e.g. non-renewable hydrogen)**

#### **(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)**

0

#### **(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year**

0

#### **(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years**

0

#### **(5.7.5) Explain your CAPEX calculations, including any assumptions**

*Chuden and its operating companies do not have any non-renewable fuel power generation facilities other than those mentioned above. In addition, there are no plans to make any investments in acquiring such facilities in the next five years.*

#### **(5.7.1) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).**

## Row 1

### (5.7.1.1) Products and services

Select from:

Smart grid

### (5.7.1.2) Description of product/service

*In order to realize a smart grid, we will grasp the increasingly complex trends and develop and introduce a voltage control system that enables remote and timely voltage adjustment. The CAPEX and percentage of the total planned CAPEX are values from the 2024 plan of the Chubu Electric Power Grid Co., Inc., which was decided in FY2022.*

### (5.7.1.3) CAPEX planned for product/service

8700000000

### (5.7.1.4) Percentage of total CAPEX planned for products and services

4

### (5.7.1.5) End year of CAPEX plan

2048

## Row 2

### (5.7.1.1) Products and services

Select from:

Smart grid

### (5.7.1.2) Description of product/service

*In order to realize a smart grid, the company is working to develop and introduce next-generation smart meters that contribute to remote and automated meter reading and the visualization of electricity usage. These meters will contribute to a new era as a platform for decarbonization through the expansion of renewable energy. The*

CAPEX and percentage of the total planned CAPEX are values from the 2024 plan for Chubu Electric Power Grid Co., Inc., which was decided in FY2022.

**(5.7.1.3) CAPEX planned for product/service**

2200000000

**(5.7.1.4) Percentage of total CAPEX planned for products and services**

1

**(5.7.1.5) End year of CAPEX plan**

2034

**(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?**

**(5.9.1) Water-related CAPEX (+/- % change)**

-7.06

**(5.9.2) Anticipated forward trend for CAPEX (+/- % change)**

3.33

**(5.9.3) Water-related OPEX (+/- % change)**

-15.79

**(5.9.4) Anticipated forward trend for OPEX (+/- % change)**

0.09

### (5.9.5) Please explain

The amounts of capital investment and operating expenses related to water are the total amounts of capital investment and operating expenses, respectively, at our company. As we do not have the resources to calculate the percentage of water-related capital investment to total investment and the percentage of water-related operating expenses to total operating expenses, and as the scope of this response covers nuclear power and renewable energy (biomass and hydropower), which account for almost all of our facilities, we will respond by providing the total amount of capital investment and operating expenses, and will disclose as much of the financial situation related to water as possible. The above amounts include capital investment and operating expenses for the realization of our water-related business opportunities, such as “the provision of CO2-free menus derived from renewable energy sources such as hydropower generation,” “user-participatory renewable energy expansion models,” “solution services using high-efficiency fine bubble liquid purification equipment,” and “automatic water meter reading services.” In addition, we do not have the resources to specifically calculate the water-related capital investment and operating costs for the next reporting year, but we believe that this response is valid because our business plan will not change significantly. Capital investment decreased slightly compared to the previous fiscal year. This was because we worked to invest in non-fossil power sources such as hydropower, nuclear power and wind power, and also made maximum efforts to streamline our facilities and improve management efficiency, while ensuring a stable supply of electricity and public safety across the entire Group. Operating costs also decreased compared to the previous fiscal year. This was due to factors such as the decrease in power procurement prices and the decrease in costs related to supply and demand adjustments.

### (5.10) Does your organization use an internal price on environmental externalities?

	Use of internal pricing of environmental externalities	Environmental externality priced
	Select from: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Carbon

#### (5.10.1) Provide details of your organization’s internal price on carbon.

##### Row 1

#### (5.10.1.1) Type of pricing scheme

Select from:

- Shadow price

### (5.10.1.2) Objectives for implementing internal price

Select all that apply

- Stress test investments

### (5.10.1.3) Factors considered when determining the price

Select all that apply

- Price/cost of voluntary carbon offset credits
- Other, please specify : CO2 price by scenario in WEO

### (5.10.1.4) Calculation methodology and assumptions made in determining the price

Chuden refers to the published policy scenario (STEPS) and announced pledge scenario (APS) of the WEO. STEPS: 5,000 yen/t-CO2 (FY2030), 10,500 yen/t-CO2 (FY2050)

### (5.10.1.5) Scopes covered

Select all that apply

- Scope 1
- Scope 3, Category 3 - Fuel- and energy-related activities (not included in Scope 1 or 2)

### (5.10.1.6) Pricing approach used – spatial variance

Select from:

- Uniform

### (5.10.1.8) Pricing approach used – temporal variance

Select from:

- Evolutionary

### (5.10.1.9) Indicate how you expect the price to change over time

*It is based on the WEO2022 scenario, and assumes that the carbon price will continue to rise towards 2050.*

#### **(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)**

5000

#### **(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)**

16000

#### **(5.10.1.12) Business decision-making processes the internal price is applied to**

*Select all that apply*

- Capital expenditure
- Procurement

#### **(5.10.1.13) Internal price is mandatory within business decision-making processes**

*Select from:*

- Yes, for some decision-making processes, please specify : Power supply investment and decision-making regarding power procurement contracts

#### **(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers**

91

#### **(5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives**

*Select from:*

- Yes

#### **(5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives**

*By quantifying environmental value as an internal carbon price, it becomes possible to evaluate the economics of power source investment and power procurement contracts, including environmental value. We have set an internal carbon price that reflects the future growth of environmental value, and we believe that this contributes to positive decision-making aimed at achieving environmental goals.*

**(5.11) Do you engage with your value chain on environmental issues?**

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	Select from: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Climate change <input checked="" type="checkbox"/> Water
Customers	Select from: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Climate change <input checked="" type="checkbox"/> Water
Investors and shareholders	Select from: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Climate change <input checked="" type="checkbox"/> Water
Other value chain stakeholders	Select from: <input checked="" type="checkbox"/> Yes	Select all that apply <input checked="" type="checkbox"/> Climate change <input checked="" type="checkbox"/> Water

**(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?**

**Climate change**

**(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment**

Select from:

Yes, we assess the dependencies and/or impacts of our suppliers

#### **(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment**

Select all that apply

Contribution to supplier-related Scope 3 emissions

#### **(5.11.1.3) % Tier 1 suppliers assessed**

Select from:

Less than 1%

#### **(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment**

*We have confirmed that the amount of power generated by the thermal power sources we procure is related to the impact of our suppliers on climate change. As an approach to assessing the impact of our suppliers on climate-related issues, we have implemented an “evaluation of the percentage of the total operating costs of the electricity business accounted for by the amount of transactions,” and have identified suppliers with the largest percentage of transactions as “suppliers with a significant impact on climate-related issues.”*

#### **(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment**

Select from:

Less than 1%

#### **(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment**

1

### **Water**

#### **(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment**

Select from:

- Yes, we assess the dependencies and/or impacts of our suppliers

### **(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment**

Select all that apply

- Basin/landscape condition
- Dependence on water
- Impact on water availability
- Impact on pollution levels

### **(5.11.1.3) % Tier 1 suppliers assessed**

Select from:

- Less than 1%

### **(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment**

*We have confirmed that the amount of electricity generated by the thermal power source used, the degree of water dependency of the supplier, the degree of impact on the availability of water, and the degree of impact on water quality are related. As an approach to evaluating the impact of suppliers on water-related issues, we have implemented an “evaluation of the percentage of the total operating costs of the power generation business accounted for by the transaction amount,” and have identified suppliers with the largest percentage of transaction amount as “suppliers that have a significant impact on water-related issues.”*

### **(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment**

Select from:

- Less than 1%

### **(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment**

## (5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

### Climate change

#### (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

- Yes, we prioritize which suppliers to engage with on this environmental issue

#### (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- Procurement spend
- Regulatory compliance
- Reputation management
- Business risk mitigation
- Leverage over suppliers
- In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change

#### (5.11.2.4) Please explain

*More than 90% of the CO2 emissions from the Chuden group's business activities come from the procurement of thermal power sources, which account for more than 60% of the electricity sold. In addition, the amount of business with JERA, one of the suppliers of thermal power sources, accounts for 53% of the operating costs of the entire electricity business. For this reason, JERA, which accounts for the majority of thermal power source procurement, was selected as the target of engagement. The percentage of suppliers is not disclosed because the number of suppliers is business confidentiality, and 1 is entered for JERA Co. In addition, the percentage of supplier-related Scope 3 emissions reported in 5.11.7 is almost equivalent to the percentage of thermal power source procurement, and is not disclosed because it is business confidentiality, and 1 is entered.*

### Water

#### (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

- Yes, we prioritize which suppliers to engage with on this environmental issue

**(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue**

Select all that apply

- Procurement spend
- Regulatory compliance
- Reputation management
- Business risk mitigation
- Leverage over suppliers
- In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to water

**(5.11.2.4) Please explain**

*In the Chuden group's electricity sales business, JERA, which is the supplier of thermal power sources, is the largest supplier, and the amount of transactions accounts for more than 53% of the operating costs of the entire electricity business. As such, we consider JERA, which is a major supplier of thermal power sources and for which water security is a principal factor in its thermal power generation business, to be a priority engagement target. We have confirmed that the amount of electricity generated by thermal power sources procured from JERA is related to the supplier's water dependency, the degree of impact on water availability, and the degree of impact on water quality. As an approach to assessing the impact of suppliers on water-related issues, we have implemented an "evaluation of the percentage of the total operating costs of the electricity business accounted for by the transaction amount," and have identified the supplier with the largest percentage of the transaction amount as a "priority engagement supplier"*

**(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?**

	Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process	Policy in place for addressing supplier non-compliance
Climate change	Select from: <input checked="" type="checkbox"/> Yes, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts	Select from: <input checked="" type="checkbox"/> Yes, we have a policy in place for addressing non-compliance
Water	Select from:	Select from:

	Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process	Policy in place for addressing supplier non-compliance
	<input checked="" type="checkbox"/> Yes, suppliers have to meet environmental requirements related to this environmental issue, but they are not included in our supplier contracts	<input checked="" type="checkbox"/> Yes, we have a policy in place for addressing non-compliance

**(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization’s purchasing process, and the compliance measures in place.**

### Climate change

#### (5.11.6.1) Environmental requirement

Select from:

Other, please specify :The “Chubu Electric Power Group Basic Procurement Policy” and “CSR Procurement Guidelines” request compliance with “reducing environmental impact”.

#### (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

Second-party verification

#### (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

100%

#### (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

100%

#### **(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement**

Select from:

100%

#### **(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement**

Select from:

100%

#### **(5.11.6.9) Response to supplier non-compliance with this environmental requirement**

Select from:

Other, please specify : We provide feedback on the results of verification and implement requests for improvements.

#### **(5.11.6.10) % of non-compliant suppliers engaged**

Select from:

None

#### **(5.11.6.11) Procedures to engage non-compliant suppliers**

Select all that apply

Providing information on appropriate actions that can be taken to address non-compliance

#### **(5.11.6.12) Comment**

*In our "Request to Partners", we request the following eight items to "reduce environmental impact". (1) Compliance with environmental laws and regulations and prevention of environmental pollution (2) Establishment of an internal environmental management system and implementation of education (3) Conservation of biodiversity (4) Sustainable management and efficient use of water resources (5) Reduction of greenhouse gas emissions and energy consumption (6) Control of resource consumption and strict management of waste, promotion of resource reuse and recycling (7) Strict management of chemical substances and reduction of*

emissions (8) Promotion of green procurement and proposals for improving the environmental friendliness of equipment, materials, construction methods, etc. (energy conservation, recycling, etc.) equipment, construction methods, etc., and proposals for improving their environmental performance (energy conservation, recycling, etc.) In addition, we conduct a questionnaire survey on the status of CSR and ESG initiatives at our major business partners in order to understand the risks of climate change in the supply chain and promote CSR and ESG procurement at our company and our business partners. In this survey, we confirm the initiatives being taken to address climate change and the results of those initiatives, and check the mechanisms in place to make corrections. We quantitatively evaluate the status of initiatives at each supplier based on their responses to the survey questions, using a three-tiered scale. By conducting the survey, evaluating the results, and providing feedback to suppliers on the evaluation results, as well as following up with suppliers, we are working to reduce the risk of climate change across the entire supply chain.

## Water

### (5.11.6.1) Environmental requirement

Select from:

Other, please specify : The “Chubu Electric Power Group Basic Procurement Policy” and “CSR Procurement Guidelines” request compliance with “reducing environmental impact”.

### (5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

Second-party verification

### (5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

100%

### (5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

100%

### (5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

Less than 1%

#### **(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are in compliance with this environmental requirement**

Select from:

Less than 1%

#### **(5.11.6.9) Response to supplier non-compliance with this environmental requirement**

Select from:

Other, please specify : We provide feedback on the results of verification and implement requests for improvements.

#### **(5.11.6.10) % of non-compliant suppliers engaged**

Select from:

None

#### **(5.11.6.11) Procedures to engage non-compliant suppliers**

Select all that apply

Providing information on appropriate actions that can be taken to address non-compliance

#### **(5.11.6.12) Comment**

*In our “CSR Procurement Guidelines”, we request the following eight items to “reduce environmental impact”. (1) Compliance with environmental laws and regulations and prevention of environmental pollution (2) Establishment of an internal environmental management system and implementation of education (3) Conservation of biodiversity (4) Sustainable management and efficient use of water resources (5) Reduction of greenhouse gas emissions and energy consumption (6) Control of resource consumption and strict management of waste, promotion of resource reuse and recycling (7) Strict management of chemical substances and reduction of emissions (8) Promotion of green procurement and proposals for improving the environmental performance of equipment, materials, construction methods, etc. (energy conservation, recycling, etc.) equipment, construction methods, etc., and proposals for improving environmental performance (energy conservation, recycling, etc.) In addition, we conduct a questionnaire on the status of CSR and ESG initiatives for our major business partners in order to understand water risks in the supply chain and promote CSR and ESG procurement for our company and business partners. In this survey, we check the status of initiatives related to water and the mechanisms for confirming and correcting the results of these initiatives. We quantitatively evaluate the status of initiatives at each supplier based on their responses to the survey questions, using a three-tiered scale. By conducting the survey, evaluating the results, and providing feedback to suppliers and following up with them, we are working to reduce water-related risks throughout the supply chain.*

## **(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.**

### **Climate change**

#### **(5.11.7.2) Action driven by supplier engagement**

*Select from:*

- Other, please specify : ㊦ Gather information from suppliers on climate-related risks and opportunities, as well as transition plans

#### **(5.11.7.3) Type and details of engagement**

##### **Information collection**

- Collect climate transition plan information at least annually from suppliers
- Collect environmental risk and opportunity information at least annually from suppliers

#### **(5.11.7.4) Upstream value chain coverage**

*Select all that apply*

- Tier 1 suppliers

#### **(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement**

*Select from:*

- Less than 1%

#### **(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement**

*Select from:*

- Less than 1%

#### **(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action**

More than 90% of the CO2 emissions from the Chuden group's business activities come from the procurement of thermal power sources, which account for more than 60% of the electricity sold. In addition, the amount of business with JERA, one of the suppliers of thermal power sources, in FY2023 accounts for about 53% of the operating expenses of the entire electricity business. For this reason, JERA, which accounts for the majority of thermal power source procurement, is the target of engagement. The percentage of suppliers is not disclosed because the number of suppliers is business confidentiality, and less than 1% is entered for JERA Co. The percentage of supplier-related Scope 3 emissions is almost equivalent to the percentage of thermal power source procurement, and is not disclosed because it is business confidentiality, and less than 1% is entered in the same way.

#### (5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

Yes, please specify the environmental requirement : *The development and implementation of technologies for co-firing and exclusive use of hydrogen and ammonia fuels at thermal power stations will lead to the realization of decarbonization in thermal power generation.*

#### (5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

Yes

### Water

#### (5.11.7.2) Action driven by supplier engagement

Select from:

Total water withdrawal volumes reduction

#### (5.11.7.3) Type and details of engagement

##### Information collection

Other information collection activity, please specify : *At least once a year, collect information from suppliers regarding water management.*

#### (5.11.7.4) Upstream value chain coverage

Select all that apply

- Tier 1 suppliers

#### **(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement**

Select from:

- 76-99%

#### **(5.11.7.7) % tier 1 suppliers with substantive impacts and/or dependencies related to this environmental issue covered by engagement**

Select from:

- 100%

#### **(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action**

*In order to identify water-related risks in the supply chain and promote CSR and ESG procurement for our company and our business partners, we conduct a questionnaire survey on the status of CSR and ESG initiatives for our major business partners. In this survey, we check the status of initiatives related to monitoring and controlling wastewater and reducing the amount of wastewater discharged, as well as initiatives related to the sustainable and efficient use of water, and the mechanisms in place to check and correct the results of these initiatives. We quantitatively evaluate the status of initiatives based on the responses of each supplier to the survey questions on a three-tier scale. By conducting the survey, evaluating the results, and providing feedback to suppliers and following up with them, we aim to reduce water-related risks throughout the supply chain.*

#### **(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue**

Select from:

- Yes, please specify the environmental requirement : *Establishment of a system to monitor and control wastewater, reduce the amount of wastewater discharged, promote the sustainable and efficient use of water, and confirm and correct the results of these efforts.*

#### **(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action**

Select from:

- Yes

## (5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

### Climate change

#### (5.11.9.1) Type of stakeholder

Select from:

- Customers

#### (5.11.9.2) Type and details of engagement

##### Innovation and collaboration

- Run a campaign to encourage innovation to reduce environmental impacts

#### (5.11.9.3) % of stakeholder type engaged

Select from:

- Less than 1%

#### (5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

- Less than 1%

#### (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

*Chubu Electric Power Miraiz Co., Inc. has concluded an agreement (hereafter, “this agreement”) with Somic Ishikawa Inc. (President and Representative Director: Kaname Saito, hereafter, “Somic Ishikawa”) regarding the introduction of an “on-site/off-site combined PPA service” that utilizes the solar power generation facility installed at the Somic Ishikawa Toyooka Plant (Iwata City, Shizuoka Prefecture). This is the first time in Nagano prefecture that an on-site PPA and off-site PPA have been combined into a single service. Since August 2021, Somic Ishikawa has been using the electricity generated by the solar power generation system (approx. 293kW) installed on the roof of its Toyooka Plant through the on-site PPA service (Note 1) provided by Chubu Electric Power Miraiz Co., Inc. In the future, SOMIC Ishikawa and Chubu Electric Power Miraiz Co., Inc. will expand the on-site PPA service based on this agreement and increase the solar power generation facility at the Toyooka Plant from approximately 293 kW to approximately 874 kW. The expanded facility is scheduled to begin operating in November 2023, and the electricity generated will continue to be used at the same plant. In addition, any surplus electricity generated that exceeds the factory’s consumption will be used at Somic Ishikawa’s Tsurumi Factory (Hamamatsu City, Shizuoka Prefecture) based on the off-site PPA service (Note 2) newly introduced under this agreement with Chubu*

*Electric Power Miraiz Co., Inc. (Note 1) A service that purchases electricity from solar power generation facilities installed on the roof of the factory premises, etc. (Note 2) A service that purchases electricity from dedicated solar power generation facilities installed outside the factory premises via power grid facilities*

### **(5.11.9.6) Effect of engagement and measures of success**

*By utilizing the on-site/off-site combined PPA service, Somic Ishikawa can use the electricity generated from the rooftop of the Toyooka Plant to the fullest extent within the company. In addition, the company will reduce its annual CO2 emissions by approximately 350 metric tons. Chubu Electric Power Miraiz Co., Inc. will continue to contribute to the realization of a carbon-free society by promoting the use of electricity derived from renewable energy.*

## **Water**

### **(5.11.9.1) Type of stakeholder**

*Select from:*

Other value chain stakeholder, please specify : *Local residents, universities (academic institutions)*

### **(5.11.9.2) Type and details of engagement**

#### **Innovation and collaboration**

Incentivize collaborative sustainable water management in river basins

### **(5.11.9.3) % of stakeholder type engaged**

*Select from:*

Less than 1%

### **(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement**

*We are developing a variety of environmental conservation activities to raise the environmental awareness of our employees and the local community in relation to water resources. The Chuden group is involved in a number of activities, including the Chuden Group ECO Social Contribution Activities, in which Chuden group employees and their families work with local environmental NPOs to carry out activities such as coastal conservation and raising awareness of the conservation of aquatic life such as loggerhead turtles, and the “Chuden Forester” training program, which aims to develop volunteers who can carry out forest conservation activities such as thinning, which is important for maintaining the water source recharge function of artificial forests of cedar and cypress and preventing sediment disasters. As part of our efforts to promote forest thinning, we are working with other companies and organizations as a supporter of the “Forest Neighborhood Association” to actively support forest thinning in the Chubu region through printed materials. Our company owns approximately 11 million square meters of forest land in Uchigatani, Yamato-*

cho, Gujo-shi, Gifu Prefecture, which we carefully manage as a water source forest. As part of our efforts to ensure the sustainability of water resources, we are focusing on the water resource recharging function of the Uchigatani forest and are working with Nagoya University on a joint research project to visualize the water resource recharging capacity. The water resource recharging function includes (1) the function of storing water in the forest soil, (2) the function of mitigating flooding by equalizing the amount of rainfall that flows into rivers, and (3) the function of purifying water by allowing rainwater to percolate through the soil and underground bedrock. We are also conducting research into the concept of “water neutrality”, which is the idea of ensuring that the amount of water used in business activities is equal to the amount of water resources produced by forests. Achieving water neutrality means that the amount of water used is less than the amount of water produced, and the environmental impact can be seen as net zero. We also believe that by returning the surplus amount of water produced to other business owners and customers, society as a whole can work together to carry out business activities that consider the sustainability of water resources.

**(5.11.9.6) Effect of engagement and measures of success**

We believe that increasing the number of people who can carry out forest conservation activities such as thinning, which is important for maintaining watershed functions and preventing sediment disasters, and increasing the number of people guiding thinning volunteers, etc., will contribute to the sustainability of water resources and prevent sediment disasters, etc., and therefore is important. For this reason, we believe that the number of people being guided by Chuden Foresters in a given year is an indicator of the success of our engagement activities. For each activity, we compile implementation results to assess progress. For the Chuden Forester activities, we have trained a total of 310 foresters since 2005, and in FY2023, a total of 195 foresters provided guidance for thinning volunteers and forest experience activities. With regard to the “Forest Neighborhood Association”, from FY2010 when Chuden became a supporter company to FY2023, Chuden as a whole contributed to the promotion of thinning in forests in Nagano Prefecture covering approximately 100.10 ha (equivalent to about 21 Nagoya Domes). As a result of the engagement in the survey on “water neutrality”, we are aiming to establish a quantitative evaluation method for the forest’s water recharge capacity. Visualizing the amount of water stored in forests, or in other words, quantifying “water production”, is done by analyzing local meteorological and river flow observations and water runoff models. In order to establish a quantitative evaluation method for the forest’s water storage capacity, we are collecting data such as meteorological and river flow observations in the Uchigatani forest, and by the end of fiscal year 2023, we had estimated the maximum storage capacity of the Uchigatani watershed. We are currently working to further improve the accuracy of our estimates.

**(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.**

	Requesting member
Row 1	Select from:

**(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?**

	<b>Environmental initiatives implemented due to CDP Supply Chain member engagement</b>
	<i>Select from:</i> <input checked="" type="checkbox"/> Yes

**(5.13.1) Specify the CDP Supply Chain members that have prompted your implementation of mutually beneficial environmental initiatives and provide information on the initiatives.**

	<b>Requesting member</b>
Row 1	<i>Select from:</i>

## C6. Environmental Performance - Consolidation Approach

### (6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

#### Climate change

##### (6.1.1) Consolidation approach used

Select from:

Other, please specify : We have calculated environmental performance data for Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc., which operate the electric power business that accounts for the majority of consolidated sales (82.4% of operating revenue).

##### (6.1.2) Provide the rationale for the choice of consolidation approach

*Chubu Electric Power's core business is the electric power business, which accounts for more than 80% of its consolidated sales. In the electric power business, power generation, transmission and distribution, and retail electricity sales make up the value chain. For this reason, the scope of the environmental performance data aggregation includes Chubu Electric Power Co., Inc., a listed company that also operates a power generation business, Chubu Electric Power Grid Co., Inc., which operates a transmission and distribution business, and Chubu Electric Power Miraiz Co., Inc., which operates a retail electricity sales business.*

#### Water

##### (6.1.1) Consolidation approach used

Select from:

Other, please specify : We have calculated environmental performance data for Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc., which operate the electric power business that accounts for the majority of consolidated sales (82.4% of operating revenue).

##### (6.1.2) Provide the rationale for the choice of consolidation approach

*Chubu Electric Power Co., Inc. has its core business in the electricity business, which accounts for more than 80% of its consolidated sales. In the electricity business, power generation, transmission and distribution, and retail electricity sales make up the value chain. For this reason, the scope of the data collection for water-related performance data includes the domestic bases of Chubu Electric Power Co., Inc., which is a listed company and also operates a power generation business, Chubu*

*Electric Power Grid Co., Inc., which operates a transmission and distribution business, and Chubu Electric Power Miraiz Co., Inc., which operates a retail electricity sales business.*

## Plastics

### (6.1.1) Consolidation approach used

Select from:

Other, please specify : We have calculated environmental performance data for Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc., which operate the electric power business that accounts for the majority of consolidated sales (82.4% of operating revenue).

### (6.1.2) Provide the rationale for the choice of consolidation approach

*Chubu Electric Power Co., Inc. has its core business in the electric power business, which accounts for more than 80% of its consolidated sales. In the electric power business, power generation, power transmission and distribution, and retail electricity sales make up the value chain. For this reason, the scope of the data collection for water-related performance data includes the domestic bases of Chubu Electric Power Co., Inc., which is a listed company and also operates a power generation business, Chubu Electric Power Grid Co., Inc., which operates a power transmission and distribution business, and Chubu Electric Power Miraiz Co., Inc., which operates a retail electricity sales business.*

## Biodiversity

### (6.1.1) Consolidation approach used

Select from:

Other, please specify : We have calculated environmental performance data for Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc., which operate the electric power business that accounts for the majority of consolidated sales (82.4% of operating revenue).

### (6.1.2) Provide the rationale for the choice of consolidation approach

*Chubu Electric Power Co., Inc. has its core business in the electricity business, which accounts for more than 80% of its consolidated sales. In the electric power business, power generation, power transmission and distribution, and retail electricity sales make up the value chain. For this reason, the scope of the data collection for water-related performance data includes the domestic bases of Chubu Electric Power Co., Inc., which is a listed company and also operates a power generation business, Chubu Electric Power Grid Co., Inc., which operates a power transmission and distribution business, and Chubu Electric Power Miraiz Co., Inc., which operates a retail electricity sales business.*

## C7. Environmental performance - Climate Change

**(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

	Has there been a structural change?
	Select all that apply <input checked="" type="checkbox"/> No

**(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

	Change(s) in methodology, boundary, and/or reporting year definition?
	Select all that apply <input checked="" type="checkbox"/> No

**(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

Select all that apply

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

**(7.3) Describe your organization’s approach to reporting Scope 2 emissions.**

	Scope 2, location-based	Scope 2, market-based	Comment
	Select from: <input checked="" type="checkbox"/> We are reporting a Scope 2, location-based figure	Select from: <input checked="" type="checkbox"/> We are reporting a Scope 2, market-based figure	<i>In Japan, the Act on Promotion of Global Warming Countermeasures and the orders based on this act stipulate that electric power retailers must report the emission factor for each contract menu. Chuden and its operating companies calculate market-based Scope 2 emissions using their own power consumption and the emission factors of their customers, based on actual contract conditions.</i>

**(7.5) Provide your base year and base year emissions.**

**Scope 1**

**(7.5.1) Base year end**

03/31/2020

**(7.5.2) Base year emissions (metric tons CO2e)**

56961.0

**(7.5.3) Methodological details**

*These reported values are Chuden and its operating company's Scope 1 emissions. The main sources of emissions are insulation equipment that uses SF6 gas in power transmission and distribution facilities, and company-owned vehicles.*

## Scope 2 (location-based)

### (7.5.1) Base year end

03/31/2020

### (7.5.2) Base year emissions (metric tons CO2e)

2586938.0

### (7.5.3) Methodological details

*These reported values are Chuden and its operating company's Scope 2 emissions. The main sources of emissions are power consumption in offices and power loss in power transmission and distribution facilities.*

## Scope 2 (market-based)

### (7.5.1) Base year end

03/31/2020

### (7.5.2) Base year emissions (metric tons CO2e)

2582755.0

### (7.5.3) Methodological details

*These reported values are Chuden and its operating company's Scope 2 emissions. The main sources of emissions are power consumption in offices and power loss in power transmission and distribution facilities.*

## Scope 3 category 1: Purchased goods and services

### (7.5.1) Base year end

03/31/2020

## (7.5.2) Base year emissions (metric tons CO2e)

652953.0

## (7.5.3) Methodological details

*Calculated using the emission intensity per unit of money provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

### Scope 3 category 2: Capital goods

## (7.5.1) Base year end

03/31/2020

## (7.5.2) Base year emissions (metric tons CO2e)

513097.0

## (7.5.3) Methodological details

*Calculated using the emission intensity per unit of money provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

### Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

## (7.5.1) Base year end

03/31/2020

## (7.5.2) Base year emissions (metric tons CO2e)

55487065.0

## (7.5.3) Methodological details

*The emissions from the combustion of fuel derived from the electricity purchased for sale are calculated based on the amount purchased, with the emission intensity data for the electricity purchased from suppliers. On the other hand, the emissions from the upstream part of the fuel used by the Chuden group (including fuel mining and transportation, as well as the gas sold and biomass fuel used) were calculated using the emission intensity per unit of money provided by Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry's calculation guidelines ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

## **Scope 3 category 4: Upstream transportation and distribution**

### **(7.5.2) Base year emissions (metric tons CO2e)**

0

### **(7.5.3) Methodological details**

*The majority of the Chuden group's business is power generation, power distribution and power sales. The majority of the upstream logistics in this business is made up of the transportation of fuel for power generation by power generation businesses and the Chuden group itself, but as the CO2 emissions associated with this transportation have already been accounted for in Scope 3 Category 3, the portion that falls under Category 4 is limited to the construction and renovation of power distribution facilities, and is therefore considered to be minimal and insignificant.*

## **Scope 3 category 5: Waste generated in operations**

### **(7.5.1) Base year end**

03/31/2020

### **(7.5.2) Base year emissions (metric tons CO2e)**

8027.0

### **(7.5.3) Methodological details**

*The majority of the Chuden group's business is power generation, power distribution and power sales. Of these, the only power generation that involves the combustion of fuel at our company is the 49MW biomass power generation, so the amount of waste generated by power generation is minimal. As a result, the majority of the waste generated by our business is waste wood and packaging materials generated by the construction, renovation and removal of power distribution facilities.*

## **Scope 3 category 6: Business travel**

### **(7.5.1) Base year end**

03/31/2020

### **(7.5.2) Base year emissions (metric tons CO2e)**

5636.0

### **(7.5.3) Methodological details**

*Calculated using the emission intensity per unit of money provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

## **Scope 3 category 7: Employee commuting**

### **(7.5.1) Base year end**

03/31/2020

### **(7.5.2) Base year emissions (metric tons CO2e)**

10234.0

### **(7.5.3) Methodological details**

*Calculated using the emission intensity per unit of money provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

## **Scope 3 category 8: Upstream leased assets**

### **(7.5.3) Methodological details**

*The majority of leased assets in the Chuden group are company-owned vehicles and office equipment. As the energy consumption of these items is calculated under Scope 1 and 2 (e.g. the fuel used by company-owned vehicles is calculated under Scope 1, and the electricity consumed by office equipment is calculated under Scope 2), we do not calculate Category 8 under Scope 3 in accordance with the calculation guidelines of the Ministry of the Environment and the Ministry of Economy, Trade and Industry.*

## Scope 3 category 9: Downstream transportation and distribution

### (7.5.3) Methodological details

*The electricity sold to customers through the Chuden group's business does not produce any tangible substances as a result of consumption at the customer's premises. For this reason, there is no downstream transportation or distribution in principle.*

## Scope 3 category 10: Processing of sold products

### (7.5.3) Methodological details

*The electricity sold to customers through the Chuden group's business is consumed at the customer's location without being processed into a tangible substance. Therefore, there are no emissions from the processing of the products sold.*

## Scope 3 category 11: Use of sold products

### (7.5.1) Base year end

03/31/2020

### (7.5.2) Base year emissions (metric tons CO2e)

2567696.0

### (7.5.3) Methodological details

*The Chuden group also sells gas to meet customer needs. In this business, CO2 is emitted when the product is used (i.e. gas is burned) at the customer's premises. In this category, we have calculated the emissions associated with the burning of gas by customers.*

## Scope 3 category 12: End of life treatment of sold products

### (7.5.3) Methodological details

*The electricity and gas sold to customers through the Chubu Electric Power Group's business do not leave any physical objects behind after use by the customer due to their characteristics. Therefore, there is nothing to calculate for final disposal.*

## Scope 3 category 13: Downstream leased assets

### (7.5.3) Methodological details

*The electricity and gas sold to customers through the Chuden group's business are consumed by the customer, so there are no tangible substances left as leased assets. Therefore, there are no downstream leased assets to calculate, and Scope 3 Category 13 is not relevant.*

## Scope 3 category 14: Franchises

### (7.5.3) Methodological details

*The Chuden group does not operate a franchise business.*

## Scope 3 category 15: Investments

### (7.5.3) Methodological details

*The Chuden group has confirmed that it has not been engaged in any of the activities in question since fiscal 2018.*

## Scope 3: Other (upstream)

### (7.5.3) Methodological details

*Not calculated as it is an optional category.*

## Scope 3: Other (downstream)

### (7.5.3) Methodological details

*Not calculated as it is an optional category.*

## (7.6) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?

	Gross global Scope 1 emissions (metric tons CO2e)	Methodological details
Reporting year	54521	<i>These reported values are Chuden and its operating company's Scope 1 emissions. The main sources of emissions are insulation equipment that uses SF6 gas in power transmission and distribution facilities, and company-owned vehicles.</i>

**(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

	Gross global Scope 2, location-based emissions (metric tons CO2e)	Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)	Methodological details
Reporting year	2821663	2819780	<i>These reported values are Chuden and its operating company's Scope 2 emissions. The main sources of emissions are power consumption in offices and power loss in power transmission and distribution facilities.</i>

**(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

**(7.8.1) Evaluation status**

Select from:

Relevant, calculated

**(7.8.2) Emissions in reporting year (metric tons CO2e)**

**(7.8.3) Emissions calculation methodology**

Select all that apply

Spend-based method

**(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**(7.8.5) Please explain**

*Calculated using the emission intensity per unit of money provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

**Capital goods****(7.8.1) Evaluation status**

Select from:

Relevant, calculated

**(7.8.2) Emissions in reporting year (metric tons CO2e)**

573312

**(7.8.3) Emissions calculation methodology**

Select all that apply

Spend-based method

**(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

### (7.8.5) Please explain

*Calculated using the emission intensity per unit of money provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### (7.8.1) Evaluation status

Select from:

Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO<sub>2</sub>e)

49896664

### (7.8.3) Emissions calculation methodology

Select all that apply

Supplier-specific method

Average data method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

91

### (7.8.5) Please explain

*The emissions from the combustion of the fuel used to generate the electricity purchased for sale (a) are calculated based on the amount of electricity purchased, with the emission intensity data for the electricity purchased obtained from the supplier. On the other hand, the emissions from the upstream part of the fuel used by the Chuden group (fuel mining and transportation, including gas sold and biomass fuel used) (b) were calculated using the emission intensity per unit of money provided in Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry's calculation guidelines ("emissions intensity for calculating an organization's greenhouse gas emissions, etc. through the supply chain"). The percentage of emissions calculated using data obtained from suppliers or value chain partners is calculated as  $(a)/(a+b)$  based on the values calculated above.*

## Upstream transportation and distribution

### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

### (7.8.5) Please explain

*The bulk of the Chuden group's business is power generation, power transmission and distribution, and power sales. The majority of upstream logistics in this business is made up of the transportation of fuel for power generation by power generation businesses and our own group, but as the CO2 emissions associated with this transportation have already been accounted for in Scope 3 Category 3, the portion that falls under Category 4 is limited to the new construction and maintenance of power generation facilities, and is therefore considered to be minimal and insignificant. In the 2015 analysis, it was less than 0.01% of the total Scope 3 emissions. From FY2019 onwards, due to the transfer of the thermal power generation business to JERA Co., Ltd., the emissions associated with fuel combustion in thermal power generation, which were previously included in Scope 1, are now recorded in Scope 3. As a result, the proportion of Scope 3 at present is even lower than in FY2015, and we judge that the importance of this will further decrease by FY2023.*

## Waste generated in operations

### (7.8.1) Evaluation status

Select from:

Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

5855

### (7.8.3) Emissions calculation methodology

Select all that apply

Waste-type-specific method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### (7.8.5) Please explain

Calculated using the emission intensity per unit quantity provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").

## Business travel

### (7.8.1) Evaluation status

Select from:

Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO2e)

6024

### (7.8.3) Emissions calculation methodology

Select all that apply

Spend-based method

### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### (7.8.5) Please explain

Calculated using the emission intensity per unit quantity provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").

## Employee commuting

### (7.8.1) Evaluation status

Select from:

Relevant, calculated

## (7.8.2) Emissions in reporting year (metric tons CO2e)

12986

## (7.8.3) Emissions calculation methodology

Select all that apply

Spend-based method

## (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

## (7.8.5) Please explain

*Calculated using the emission intensity per unit quantity provided in the calculation guidelines of Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry ("emissions intensity for calculating greenhouse gas emissions of organizations throughout the supply chain").*

## Upstream leased assets

### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

### (7.8.5) Please explain

*The majority of leased assets in the Chuden group are company-owned vehicles and office equipment. As the energy consumption of these items is calculated under Scope 1 and 2 (e.g. the fuel used by company-owned vehicles is calculated under Scope 1, and the electricity consumed by office equipment is calculated under Scope 2), in accordance with the calculation guidelines of the Ministry of the Environment and the Ministry of Economy, Trade and Industry, Scope 3 Category 8 is not relevant.*

## Downstream transportation and distribution

### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

### (7.8.5) Please explain

*The electricity sold to customers through the Chuden group's business does not produce any tangible substances due to its characteristics. Therefore, there is no downstream transportation or logistics in principle, and Scope 3 Category 9 is not relevant.*

## Processing of sold products

### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

### (7.8.5) Please explain

*The electricity sold to customers through the Chuden group's business is consumed at the customer's location without being processed into a tangible substance. Therefore, there are no emissions from the processing of the products sold, and Scope 3 Category 10 is not relevant.*

## Use of sold products

### (7.8.1) Evaluation status

Select from:

Relevant, calculated

### (7.8.2) Emissions in reporting year (metric tons CO<sub>2</sub>e)

3673504

### (7.8.3) Emissions calculation methodology

Select all that apply

Fuel-based method

#### (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

#### (7.8.5) Please explain

*Calculated using the emission intensity per unit of quantity specified in the Greenhouse Gas Emissions Calculation, Reporting and Publication System based on the Act on Promotion of Global Warming Countermeasures by Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry.*

### End of life treatment of sold products

#### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

#### (7.8.5) Please explain

*The electricity and gas sold to customers through the Chuden group's business do not leave any tangible substances behind after use by the customer due to their characteristics. Therefore, there is nothing to calculate in the end-of-life processing, and Scope 3 Category 11 is not relevant.*

### Downstream leased assets

#### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

#### (7.8.5) Please explain

*The electricity and gas sold to customers through the Chuden group's business are consumed by the customer, so there are no tangible substances left as leased assets. Therefore, there are no downstream leased assets to calculate, and Scope 3 Category 13 is not relevant.*

### Franchises

### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

### (7.8.5) Please explain

*The Chuden group does not operate a franchise business, so Scope 3 Category 14 is not relevant.*

## Investments

### (7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

### (7.8.5) Please explain

*The Chuden group has confirmed that it has not been engaged in any of the activities covered since FY2018, so Scope 3 Category 15 is not relevant.*

## Other (upstream)

### (7.8.1) Evaluation status

Select from:

Not evaluated

### (7.8.5) Please explain

*Not calculated due to optional category.*

## Other (downstream)

### (7.8.1) Evaluation status

Select from:

Not evaluated

### (7.8.5) Please explain

Not calculated due to optional category.

### (7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Select from: <input checked="" type="checkbox"/> Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Select from: <input checked="" type="checkbox"/> Third-party verification or assurance process in place
Scope 3	Select from: <input checked="" type="checkbox"/> Third-party verification or assurance process in place

### (7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

#### Row 1

#### (7.9.1.1) Verification or assurance cycle in place

Select from:

Annual process

### (7.9.1.2) Status in the current reporting year

Select from:

Underway but not complete for reporting year – previous statement of process attached

### (7.9.1.3) Type of verification or assurance

Select from:

Limited assurance

### (7.9.1.4) Attach the statement

CDP レター.pdf

### (7.9.1.5) Page/section reference

*Page 1 ESG Data 2023, Chuden group's FY2022 GHG emissions, Scope 1, Scope 2, and Scope 3 Category 3 emissions, which accounts for the majority of emissions, have been independently assured.*

### (7.9.1.6) Relevant standard

Select from:

ISAE3000

### (7.9.1.7) Proportion of reported emissions verified (%)

100

**(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

## Row 1

### (7.9.2.1) Scope 2 approach

Select from:

- Scope 2 market-based

### (7.9.2.2) Verification or assurance cycle in place

Select from:

- Annual process

### (7.9.2.3) Status in the current reporting year

Select from:

- Underway but not complete for reporting year – previous statement of process attached

### (7.9.2.4) Type of verification or assurance

Select from:

- Limited assurance

### (7.9.2.5) Attach the statement

CDP レター.pdf

### (7.9.2.6) Page/ section reference

Page 1 ESG Data 2023, we have obtained third-party assurance for the total amount of Scope 1 and Scope 2 emissions, as well as Category 3 of Scope 3 emissions, which account for the majority of Scope 3 emissions, from the Chuden group in FY2022.

### (7.9.2.7) Relevant standard

Select from:

- ISAE3000

### (7.9.2.8) Proportion of reported emissions verified (%)

100

**(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

#### Row 1

### (7.9.3.1) Scope 3 category

*Select all that apply*

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

### (7.9.3.2) Verification or assurance cycle in place

*Select from:*

Annual process

### (7.9.3.3) Status in the current reporting year

*Select from:*

Underway but not complete for reporting year – previous statement of process attached

### (7.9.3.4) Type of verification or assurance

*Select from:*

Limited assurance

### (7.9.3.5) Attach the statement

*CDP Letter.pdf*

### (7.9.3.6) Page/section reference

Page 1 ESG Data 2023 We have obtained third-party assurance for the total amount of Scope 1 and Scope 2 emissions, as well as Scope 3 Category 3 emissions, which account for the majority of Scope 3 emissions, from the Chuden group in FY2022.

### (7.9.3.7) Relevant standard

Select from:

ISAE3000

### (7.9.3.8) Proportion of reported emissions verified (%)

100

## (7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

Decreased

### (7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

#### Change in renewable energy consumption

### (7.10.1.1) Change in emissions (metric tons CO<sub>2</sub>e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

No change

### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

*There was no change in the amount of renewable energy consumed by Chuden and its operating companies in FY2023.*

## Other emissions reduction activities

### (7.10.1.1) Change in emissions (metric tons CO2e)

225

### (7.10.1.2) Direction of change in emissions

Select from:

Decreased

### (7.10.1.3) Emissions value (percentage)

0.007

### (7.10.1.4) Please explain calculation

*Reduction in fuel consumption due to a review of the allocation of company-owned vehicles. [Change in emissions] Due to a review of the allocation of company-owned vehicles in line with the reorganization of business establishments in line with organizational changes, emissions from the use of company-owned vehicles decreased by 225 t-CO2 from 5,940 t-CO2 in FY2022 to 5,715 t-CO2 in FY2023 compared to the previous fiscal year. [Rate of change in emissions] The above change of 225 t-CO2 from the previous fiscal year is calculated by dividing it by the total scope 12 emissions (3,122,019 t-CO2e) for the previous fiscal year.*

## Divestment

### (7.10.1.1) Change in emissions (metric tons CO2e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

No change

### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

*Chuden and its operating companies have not increased their investments in FY2023.*

## Acquisitions

### (7.10.1.1) Change in emissions (metric tons CO2e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

No change

### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

*Chuden and its operating companies did not acquire any businesses in FY2023.*

## Mergers

### (7.10.1.1) Change in emissions (metric tons CO2e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

No change

### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

*Chuden and its operating companies have not implemented any business mergers in FY2023.*

## Change in output

### (7.10.1.1) Change in emissions (metric tons CO<sub>2</sub>e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

No change

### (7.10.1.3) Emissions value (percentage)

0

### (7.10.1.4) Please explain calculation

*There was no change in emissions due to changes in power generation output at Chuden and its operating companies in FY2023.*

## Change in methodology

### (7.10.1.1) Change in emissions (metric tons CO2e)

49674

### (7.10.1.2) Direction of change in emissions

Select from:

Decreased

### (7.10.1.3) Emissions value (percentage)

1.6

### (7.10.1.4) Please explain calculation

*Due to the update of the applicable emission intensity for biomass power generation. [Change in applicable emission intensity] Emissions decreased due to the change in the applicable emission intensity (CH4 and N2O emissions from the combustion of woody biomass fuel) for biomass power generation at the Yokkaichi Biomass Power Plant in Scope 1 in the current fiscal year and the previous fiscal year. The rate of change in emissions was calculated by dividing the above-mentioned decrease (49,674 t-CO2e) from the previous fiscal year by the total Scope 1 2 emissions for the previous fiscal year (3,122,019 t-CO2e).*

## Change in boundary

### (7.10.1.1) Change in emissions (metric tons CO2e)

0

### (7.10.1.2) Direction of change in emissions

Select from:

No change

### (7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

*Chuden has not changed the boundary for calculating emissions in FY2023.*

#### Change in physical operating conditions

##### (7.10.1.1) Change in emissions (metric tons CO2e)

0

##### (7.10.1.2) Direction of change in emissions

Select from:

No change

##### (7.10.1.3) Emissions value (percentage)

0

#### (7.10.1.4) Please explain calculation

*There were no changes in the physical operating conditions for Chuden and its operating companies in FY2023.*

#### Unidentified

##### (7.10.1.1) Change in emissions (metric tons CO2e)

0

##### (7.10.1.2) Direction of change in emissions

Select from:

No change

##### (7.10.1.3) Emissions value (percentage)

0

#### **(7.10.1.4) Please explain calculation**

*Chuden and its operating companies analyzed the reasons for changes in emissions associated with their operations in FY2023.*

#### **Other**

#### **(7.10.1.1) Change in emissions (metric tons CO2e)**

0

#### **(7.10.1.2) Direction of change in emissions**

*Select from:*

No change

#### **(7.10.1.3) Emissions value (percentage)**

0

#### **(7.10.1.4) Please explain calculation**

*Chuden and its operating companies analyzed the reasons for changes in emissions associated with their operations in FY2023.*

#### **(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

*Select from:*

Market-based

#### **(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

*Select from:*

Yes

### **(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.**

#### **(7.12.1.1) CO2 emissions from biogenic carbon (metric tons CO2)**

365011

#### **(7.12.1.2) Comment**

*Chuden's biomass power generation plant uses wood pellets and Palm Kernel Shell as fuel, so it is related to CO2 emissions from the combustion of biomass (above and below ground). In calculating these emissions, we assumed that the carbon contained in each fuel would be completely combusted, and calculated the amount of each fuel used based on the carbon content of each fuel. The carbon content of wood pellets and palm kernel shells was determined by referring to the paper "A review on biomass as a fuel for boilers" in Renewable and Sustainable Energy Reviews, and was set at 48.10% for wood pellets (wood chips) and 51.0% for palm kernel shells.*

### **(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Select from:

Yes

### **(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).**

#### **Row 1**

#### **(7.15.1.1) Greenhouse gas**

Select from:

CO2

#### **(7.15.1.2) Scope 1 emissions (metric tons of CO2e)**

10312

### (7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

### Row 2

### (7.15.1.1) Greenhouse gas

Select from:

CH4

### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

387

### (7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

### Row 3

### (7.15.1.1) Greenhouse gas

Select from:

N2O

### (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

725

### (7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

## Row 4

### (7.15.1.1) Greenhouse gas

Select from:

HFCs

### (7.15.1.2) Scope 1 emissions (metric tons of CO<sub>2</sub>e)

595

### (7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

## Row 5

### (7.15.1.1) Greenhouse gas

Select from:

SF<sub>6</sub>

### (7.15.1.2) Scope 1 emissions (metric tons of CO<sub>2</sub>e)

42502

### (7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

**(7.15.3) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

**Fugitives**

**(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)**

0

**(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)**

0

**(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)**

2

**(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)**

43097

**Combustion (Electric utilities)**

**(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)**

274

**(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)**

1

**(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)**

0

**(7.15.3.4) Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

909

**Combustion (Gas utilities)**

**(7.15.3.1) Gross Scope 1 CO<sub>2</sub> emissions (metric tons CO<sub>2</sub>)**

0

**(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH<sub>4</sub>)**

0

**(7.15.3.3) Gross Scope 1 SF<sub>6</sub> emissions (metric tons SF<sub>6</sub>)**

0

**(7.15.3.4) Total gross Scope 1 emissions (metric tons CO<sub>2</sub>e)**

0

**Combustion (Other)**

**(7.15.3.1) Gross Scope 1 CO<sub>2</sub> emissions (metric tons CO<sub>2</sub>)**

10038

**(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH<sub>4</sub>)**

0

**(7.15.3.3) Gross Scope 1 SF<sub>6</sub> emissions (metric tons SF<sub>6</sub>)**

0

**(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)**

10038

**Emissions not elsewhere classified**

**(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)**

0

**(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)**

13

**(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)**

0

**(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)**

477

**(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.**

	Scope 1 emissions (metric tons CO2e)
Japan	54521

**(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

Select all that apply

By activity

**(7.17.3) Break down your total gross global Scope 1 emissions by business activity.**

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	<i>Power generation business</i>	5709
Row 2	<i>Electric power transmission and distribution business</i>	42502
Row 3	<i>Operation of vehicles, etc.</i>	6310

**(7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e
Electric utility activities	54521

**(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.**

## Consolidated accounting group

### (7.22.1) Scope 1 emissions (metric tons CO2e)

54521

### (7.22.2) Scope 2, location-based emissions (metric tons CO2e)

2821663

### (7.22.3) Scope 2, market-based emissions (metric tons CO2e)

2819780

### (7.22.4) Please explain

*The figures we have provided are the emissions of Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc. from the Chuden group.*

## All other entities

### (7.22.1) Scope 1 emissions (metric tons CO2e)

0

### (7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

### (7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

### (7.22.4) Please explain

*The figures we have provided do not include emissions from entities other than the group of consolidated companies.*

**(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?**

Select from:

Yes

**(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.**

**Row 1**

**(7.23.1.1) Subsidiary name**

*Chubu Electric Power Grid Co., Inc.*

**(7.23.1.2) Primary activity**

Select from:

Electricity networks

**(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary**

Select all that apply

No unique identifier

**(7.23.1.12) Scope 1 emissions (metric tons CO2e)**

44019

**(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)**

2694873

**(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)**

2694992

**Row 2**

**(7.23.1.1) Subsidiary name**

*Chubu Electric Power Miraiz Co., Inc.*

**(7.23.1.2) Primary activity**

*Select from:*

Electricity networks

**(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary**

*Select all that apply*

No unique identifier

**(7.23.1.12) Scope 1 emissions (metric tons CO2e)**

262

**(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)**

2946

**(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)**

2817

**(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

	Requesting member
Row 1	Select from:

**(7.29) What percentage of your total operational spend in the reporting year was on energy?**

Select from:

More than 0% but less than or equal to 5%

**(7.30) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Select from: <input checked="" type="checkbox"/> Yes
Consumption of purchased or acquired electricity	Select from: <input checked="" type="checkbox"/> Yes
Consumption of purchased or acquired heat	Select from: <input checked="" type="checkbox"/> No
Consumption of purchased or acquired steam	Select from:

	Indicate whether your organization undertook this energy-related activity in the reporting year
	<input checked="" type="checkbox"/> No
Consumption of purchased or acquired cooling	Select from: <input checked="" type="checkbox"/> No
Generation of electricity, heat, steam, or cooling	Select from: <input checked="" type="checkbox"/> Yes

**(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.**

**Consumption of fuel (excluding feedstock)**

**(7.30.1.1) Heating value**

Select from:

HHV (higher heating value)

**(7.30.1.2) MWh from renewable sources**

961081

**(7.30.1.3) MWh from non-renewable sources**

41505

**(7.30.1.4) Total (renewable and non-renewable) MWh**

1002586

## Consumption of purchased or acquired electricity

### (7.30.1.1) Heating value

Select from:

Unable to confirm heating value

### (7.30.1.2) MWh from renewable sources

0

### (7.30.1.3) MWh from non-renewable sources

353874

### (7.30.1.4) Total (renewable and non-renewable) MWh

353874

## Consumption of self-generated non-fuel renewable energy

### (7.30.1.1) Heating value

Select from:

Unable to confirm heating value

### (7.30.1.2) MWh from renewable sources

474

### (7.30.1.4) Total (renewable and non-renewable) MWh

474

## Total energy consumption

### (7.30.1.1) Heating value

Select from:

Unable to confirm heating value

### (7.30.1.2) MWh from renewable sources

961555

### (7.30.1.3) MWh from non-renewable sources

395379

### (7.30.1.4) Total (renewable and non-renewable) MWh

1356934

### (7.30.6) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Select from: <input checked="" type="checkbox"/> Yes
Consumption of fuel for the generation of heat	Select from: <input checked="" type="checkbox"/> No
Consumption of fuel for the generation of steam	Select from: <input checked="" type="checkbox"/> No

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of cooling	Select from: <input checked="" type="checkbox"/> No
Consumption of fuel for co-generation or tri-generation	Select from: <input checked="" type="checkbox"/> No

**(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### Sustainable biomass

#### (7.30.7.1) Heating value

Select from:

HHV

#### (7.30.7.2) Total fuel MWh consumed by the organization

961081

#### (7.30.7.3) MWh fuel consumed for self-generation of electricity

961081

#### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

#### (7.30.7.8) Comment

Chuden's biomass power plants use wood pellets and Palm Kernel Shells as fuel. Of these, the wood pellets, which are used in large quantities, have all been certified as FSC-compliant. The Palm Kernel Shells are currently in a transitional period before certification standards are applied. As a result, our biomass power plants are considered sustainable biomass power generation facilities.

## Other biomass

### (7.30.7.1) Heating value

Select from:

Unable to confirm heating value

### (7.30.7.2) Total fuel MWh consumed by the organization

0

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

### (7.30.7.8) Comment

Chuden and its business establishments do not have any unsustainable biomass power generation plants.

## Other renewable fuels (e.g. renewable hydrogen)

### (7.30.7.1) Heating value

Select from:

Unable to confirm heating value

### (7.30.7.2) Total fuel MWh consumed by the organization

0

**(7.30.7.3) MWh fuel consumed for self-generation of electricity**

0

**(7.30.7.4) MWh fuel consumed for self-generation of heat**

0

**(7.30.7.8) Comment**

*Chuden and its business establishments do not have any facilities that use renewable fuels other than sustainable biomass power generation facilities.*

**Coal**

**(7.30.7.1) Heating value**

Select from:

Unable to confirm heating value

**(7.30.7.2) Total fuel MWh consumed by the organization**

0

**(7.30.7.3) MWh fuel consumed for self-generation of electricity**

0

**(7.30.7.4) MWh fuel consumed for self-generation of heat**

0

**(7.30.7.8) Comment**

*Chuden and its operating companies do not have any facilities that use coal as fuel.*

## Oil

### (7.30.7.1) Heating value

Select from:

HHV

### (7.30.7.2) Total fuel MWh consumed by the organization

39921

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

2405

### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

### (7.30.7.8) Comment

*Chuden's operating companies have one 400kW oil-fired thermal power station for backup use in case of disruption to power supply to remote islands (single transmission line). The fuel consumed at this thermal power station is recorded as "fuel consumed for in-house power generation". Other than this, fuel is used for company-owned vehicles and emergency power sources at business establishments.*

## Gas

### (7.30.7.1) Heating value

Select from:

HHV

### (7.30.7.2) Total fuel MWh consumed by the organization

1583

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

1488

### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

### (7.30.7.8) Comment

*Chuden uses LNG as a fuel to start up biomass power generation. In addition, it uses city gas as necessary for research and development work.*

### Other non-renewable fuels (e.g. non-renewable hydrogen)

### (7.30.7.1) Heating value

Select from:

Unable to confirm heating value

### (7.30.7.2) Total fuel MWh consumed by the organization

0

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

0

### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

### (7.30.7.8) Comment

*Chuden and its operating companies do not have any facilities that use non-renewable fuels other than LNG and city gas.*

### Total fuel

### (7.30.7.1) Heating value

Select from:

HHV

### (7.30.7.2) Total fuel MWh consumed by the organization

1002585

### (7.30.7.3) MWh fuel consumed for self-generation of electricity

964974

### (7.30.7.4) MWh fuel consumed for self-generation of heat

0

### (7.30.7.8) Comment

*The majority of the fuel consumed by Chuden is for sustainable biomass power generation.*

### (7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

#### Japan

### (7.30.16.1) Consumption of purchased electricity (MWh)

353874

### (7.30.16.2) Consumption of self-generated electricity (MWh)

474

### (7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

**(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)**

0

**(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)**

354348.00

**(7.33) Does your electric utility organization have a transmission and distribution business?**

Select from:

Yes

**(7.33.1) Disclose the following information about your transmission and distribution business.**

**Row 1**

**(7.33.1.1) Country/area/region**

Select from:

Japan

**(7.33.1.2) Voltage level**

Select from:

Transmission (high voltage)

**(7.33.1.3) Annual load (GWh)**

128789

**(7.33.1.4) Annual energy losses (% of annual load)**

4.61

#### (7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

Scope 2 (market-based)

#### (7.33.1.6) Emissions from energy losses (metric tons CO2e)

0

#### (7.33.1.7) Length of network (km)

11928

#### (7.33.1.8) Number of connections

6

#### (7.33.1.9) Area covered (km<sup>2</sup>)

39000

#### (7.33.1.10) Comment

*The energy loss through transmission and distribution is 4.61%, and in responding to the survey, we have decided to display the energy loss on the distribution side, which accounts for the majority of the line length, as a single figure, and we have assumed that the annual energy loss related to transmission is zero.*

### Row 2

#### (7.33.1.1) Country/area/region

Select from:

Japan

#### (7.33.1.2) Voltage level

Select from:

Distribution (low voltage)

### (7.33.1.3) Annual load (GWh)

128789

### (7.33.1.4) Annual energy losses (% of annual load)

4.61

### (7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

Scope 2 (market-based)

### (7.33.1.6) Emissions from energy losses (metric tons CO2e)

2666666

### (7.33.1.7) Length of network (km)

136350

### (7.33.1.8) Number of connections

0.0

### (7.33.1.9) Area covered (km<sup>2</sup>)

39000

### (7.33.1.10) Comment

*Energy loss is 4.61% through transmission and distribution, and is displayed as a single figure for the distribution side, which accounts for the majority of line length. As the national average emission intensity for FY2023 has not yet been announced, the national average emission intensity for FY2022 (0.438 kg-CO<sub>2</sub>/kWh) was used as*

a substitute to calculate the emissions (metric tons of CO2 equivalent) due to energy loss.

**(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

**Row 1**

**(7.45.1) Intensity figure**

9.706e-7

**(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

2874301

**(7.45.3) Metric denominator**

Select from:

unit total revenue

**(7.45.4) Metric denominator: Unit total**

2961364000000

**(7.45.5) Scope 2 figure used**

Select from:

Market-based

**(7.45.6) % change from previous year**

2.2

### (7.45.7) Direction of change

Select from:

Increased

### (7.45.8) Reasons for change

Select all that apply

Other emissions reduction activities

### (7.45.9) Please explain

*As a result of reorganizing business establishments in line with organizational changes and reviewing the allocation of company-owned vehicles, Scope 1 emissions decreased due to reductions in electricity consumption and energy consumption from the use of company-owned vehicles. On the other hand, Scope 1.2 combined emissions increased due to an increase in total losses in the power grid.*

**(7.46) For your electric utility activities, provide a breakdown of your Scope 1 emissions and emissions intensity relating to your total power plant capacity and generation during the reporting year by source.**

**Oil**

### (7.46.1) Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)

0

### (7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

Net

**Sustainable biomass**

### (7.46.1) Absolute scope 1 emissions (metric tons CO<sub>2</sub>e)

0

**(7.46.2) Emissions intensity based on gross or net electricity generation**

Select from:

Net

**(7.46.4) Scope 1 emissions intensity (Net generation)**

0.00

**Nuclear**

**(7.46.1) Absolute scope 1 emissions (metric tons CO2e)**

0

**(7.46.2) Emissions intensity based on gross or net electricity generation**

Select from:

Net

**Hydropower**

**(7.46.1) Absolute scope 1 emissions (metric tons CO2e)**

0

**(7.46.2) Emissions intensity based on gross or net electricity generation**

Select from:

Net

**(7.46.4) Scope 1 emissions intensity (Net generation)**

0.00

## Wind

**(7.46.1) Absolute scope 1 emissions (metric tons CO2e)**

0

**(7.46.2) Emissions intensity based on gross or net electricity generation**

Select from:

Net

**(7.46.4) Scope 1 emissions intensity (Net generation)**

0.00

## Solar

**(7.46.1) Absolute scope 1 emissions (metric tons CO2e)**

0

**(7.46.2) Emissions intensity based on gross or net electricity generation**

Select from:

Net

**(7.46.4) Scope 1 emissions intensity (Net generation)**

0.00

## Total

**(7.46.1) Absolute scope 1 emissions (metric tons CO2e)**

0

### (7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

Net

### (7.46.4) Scope 1 emissions intensity (Net generation)

0.00

### (7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

Absolute target

### (7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

#### Row 1

### (7.53.1.1) Target reference number

Select from:

Abs 1

### (7.53.1.2) Is this a science-based target?

Select from:

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

### (7.53.1.4) Target ambition

Select from:

- 1.5°C aligned

### (7.53.1.5) Date target was set

03/23/2021

### (7.53.1.6) Target coverage

Select from:

- Business activity

### (7.53.1.7) Greenhouse gases covered by target

Select all that apply

- Carbon dioxide (CO2)

### (7.53.1.8) Scopes

Select all that apply

- Scope 1
- Scope 3

### (7.53.1.10) Scope 3 categories

Select all that apply

- Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

### (7.53.1.11) End date of base year

03/31/2014

### (7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

64690000

**(7.53.1.16) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)**

0

**(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)**

0.000

**(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

64690000.000

**(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**(7.53.1.37) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

0

**(7.53.1.52) Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

100

**(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**(7.53.1.54) End date of target**

03/31/2031

**(7.53.1.55) Targeted reduction from base year (%)**

50

**(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)**

32345000.000

**(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

0

**(7.53.1.61) Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)**

40810000

**(7.53.1.76) Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

40810000.000

**(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)**

40810000.000

**(7.53.1.78) Land-related emissions covered by target**

Select from:

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

**(7.53.1.79) % of target achieved relative to base year**

73.83

### **(7.53.1.80) Target status in reporting year**

Select from:

Underway

### **(7.53.1.82) Explain target coverage and identify any exclusions**

*In March 2021, the Chuden group set a target to reduce CO2 emissions from electricity sold to customers by more than 50% by FY2030 compared to FY2013. This target is based on the calculation method specified in the Japanese Greenhouse Gas Emissions Calculation, Reporting and Publication System (hereafter, SHK system). When converted to GHG protocol, this corresponds to the portion of Scope 1 emissions related to power generation and the portion of Scope 3 emissions related to power generation among the electricity purchased from other companies (not included in Scope 1 or 2). In the base year, the emissions converted to GHG protocol were not calculated, so the entire amount of emissions in the base year is listed as Scope 1. On the other hand, the emissions corresponding to Scope 1 and Scope 3 are listed for the reporting year. In addition, the subtraction of CO2 emissions through non-fossil certificates, etc., adopted in the SHK system is applied to the values reported as Scope 3. The Chuden group will continue to promote the decarbonization of the electricity it delivers by making the most of non-fossil energy and working on the practical application of hydrogen technology, carbon recycling, etc.*

### **(7.53.1.83) Target objective**

*The Chuden group has set a goal of contributing to the realization of a carbon-free society by challenging to achieve net zero CO2 emissions across all of its business operations by 2050. As a milestone towards this goal, we have set a target to reduce CO2 emissions from electricity sold to customers by 50% or more by FY2030 compared to FY2013.*

### **(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year**

*In order to achieve this goal, it is necessary to increase the total amount of non-fossil power sources. For this reason, the Chuden group is also working to expand non-fossil power sources, and by the end of fiscal 2023, we have expanded our power generation capacity by 930,000 kW compared to fiscal 2017.*

### **(7.53.1.85) Target derived using a sectoral decarbonization approach**

Select from:

No

### **(7.54) Did you have any other climate-related targets that were active in the reporting year?**

Select all that apply

- Net-zero targets
- Other climate-related targets

**(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.**

**Row 1**

**(7.54.2.1) Target reference number**

Select from:

- Oth 1

**(7.54.2.2) Date target was set**

03/23/2021

**(7.54.2.3) Target coverage**

Select from:

- Organization-wide

**(7.54.2.4) Target type: absolute or intensity**

Select from:

- Absolute

**(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)**

**Low-carbon vehicles**

- Percentage of low-carbon vehicles in company fleet

**(7.54.2.7) End date of base year**

03/31/2021

**(7.54.2.8) Figure or percentage in base year**

4

**(7.54.2.9) End date of target**

03/31/2031

**(7.54.2.10) Figure or percentage at end of date of target**

100

**(7.54.2.11) Figure or percentage in reporting year**

11

**(7.54.2.12) % of target achieved relative to base year**

7.291666667

**(7.54.2.13) Target status in reporting year**

Select from:

Underway

**(7.54.2.15) Is this target part of an emissions target?**

*This is part of the 7.54.3 net zero target.*

**(7.54.2.16) Is this target part of an overarching initiative?**

Select all that apply

No, it's not part of an overarching initiative

**(7.54.2.18) Please explain target coverage and identify any exclusions**

*In the Zero Emission Challenge 2050 announced in 2021, Chuden and its operating companies have set a target of achieving 100% electrification of company-owned vehicles by FY2030, excluding special and emergency vehicles that are not suitable for electrification from the perspective of ensuring a stable supply of electricity and resilience. In the figures for the base year, target year and reporting year above, the ratio of the number of vehicles that have been electrified to the total number of vehicles that are eligible for electrification is given. Chuden defines electric vehicles (EVs), plug-in hybrid vehicles (PHVs) and fuel cell vehicles (FCVs) as electrified vehicles.*

### **(7.54.2.19) Target objective**

*As part of our efforts towards carbon neutrality, we are switching as many gasoline-powered vehicles as possible to electric vehicles.*

### **(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year**

*In order to achieve this goal, Chuden and its operating companies have formulated and implemented an electrification plan tailored to the usage patterns of company-owned vehicles. As a result, the electrification rate of company-owned vehicles reached 11.3% in FY2023.*

## **(7.54.3) Provide details of your net-zero target(s).**

### **Row 1**

#### **(7.54.3.1) Target reference number**

Select from:

NZ1

#### **(7.54.3.2) Date target was set**

03/23/2021

#### **(7.54.3.3) Target Coverage**

Select from:

Organization-wide

#### **(7.54.3.4) Targets linked to this net zero target**

Select all that apply

Abs1

### (7.54.3.5) End date of target for achieving net zero

03/31/2051

### (7.54.3.6) Is this a science-based target?

Select from:

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

### (7.54.3.8) Scopes

Select all that apply

Scope 1

Scope 2

Scope 3

### (7.54.3.9) Greenhouse gases covered by target

Select all that apply

Methane (CH<sub>4</sub>)

Sulphur hexafluoride (SF<sub>6</sub>)

Nitrous oxide (N<sub>2</sub>O)

Carbon dioxide (CO<sub>2</sub>)

Perfluorocarbons (PFCs)

Hydrofluorocarbons (HFCs)

### (7.54.3.10) Explain target coverage and identify any exclusions

On March 23, 2021, the Chuden group announced the “Zero-Emissions Challenge 2050”, which aims to achieve “decarbonization” and “safety, stability and efficiency” simultaneously through innovation in energy infrastructure, together with society and customers. Through this initiative, we aim to contribute to the realization of a carbon-free society by challenging ourselves to achieve net zero CO<sub>2</sub> emissions across the entire Chuden group's business operations by 2050. Specifically, we will

*deliver zero-emission electricity by maximizing the use of non-fossil energy sources such as hydropower, wind power, solar power and nuclear power, as well as through the practical application of next-generation technologies that utilize hydrogen and ammonia, and the decarbonization of fossil fuels. We will also work with our customers to promote electrification and improve the efficiency of energy consumption.*

#### **(7.54.3.11) Target objective**

*In order to contribute to the achievement of the Japanese government's 2050 carbon neutrality target, the Chuden group has set a net zero target for all of the Chuden group's business activities.*

#### **(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?**

Select from:

Unsure

#### **(7.54.3.13) Do you plan to mitigate emissions beyond your value chain?**

Select from:

No, and we do not plan to within the next two years

#### **(7.54.3.17) Target status in reporting year**

Select from:

Underway

#### **(7.54.3.19) Process for reviewing target**

*The Chuden group has not yet formulated a target revision process for its net zero target as of the end of fiscal 2023.*

**(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Select from:

Yes

**(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	<i>*Numeric input</i>
To be implemented	3	3380
Implementation commenced	14	503540
Implemented	15	248360
Not to be implemented	0	<i>*Numeric input</i>

**(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.**

**Row 1**

**(7.55.2.1) Initiative category & Initiative type**

**Low-carbon energy generation**

Solid biofuels

**(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)**

161600

**(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur**

Select all that apply

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

#### (7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

#### (7.55.2.7) Payback period

Select from:

No payback

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

>30 years

#### (7.55.2.9) Comment

*The Chuden group began commercial operation of four biomass power plants in FY2023, including the Aichi Gamagori Biomass Power Plant. As a result, the total output of biomass power plants increased by 53,340 kW in that fiscal year. The annual cost reduction and the required investment amount are confidential, so they are not disclosed and zero is entered.*

### Row 2

#### (7.55.2.1) Initiative category & Initiative type

## Low-carbon energy generation

- Small hydropower (<25 MW)

### (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

14020

### (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

- Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

### (7.55.2.4) Voluntary/Mandatory

Select from:

- Voluntary

### (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

### (7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

### (7.55.2.7) Payback period

Select from:

- No payback

### (7.55.2.8) Estimated lifetime of the initiative

Select from:

- >30 years

### (7.55.2.9) Comment

The Chuden group began commercial operation of two hydroelectric power plants in FY2023, including the Seinaiji Hydroelectric Power Plant. As a result, the total output of hydroelectric power plants increased by 5,990 kW in that fiscal year. The amount of annual cost reduction and the amount of necessary investment are classified as confidential, so they are not disclosed and zero is entered.

### Row 3

#### (7.55.2.1) Initiative category & Initiative type

##### Low-carbon energy generation

Solar PV

#### (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

37200

#### (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

#### (7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

### (7.55.2.7) Payback period

Select from:

No payback

### (7.55.2.8) Estimated lifetime of the initiative

Select from:

>30 years

### (7.55.2.9) Comment

*The Chuden group began commercial operation of the Shizugin Solar Park as a renewable energy power plant in 2023. In addition, the Chuden group made the Genex Group, which owns approximately 200 solar power plants, mainly in the five prefectures of the Chubu region, into a subsidiary. As a result, the total output of solar power plants increased by approximately 61,990 kW in the relevant fiscal year. The amount of annual cost reduction and the amount of investment required are classified as confidential, so they are not disclosed and zero is entered.*

## Row 4

### (7.55.2.1) Initiative category & Initiative type

**Low-carbon energy generation**

Wind

### (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

25320

### (7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

#### (7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

#### (7.55.2.7) Payback period

Select from:

No payback

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

>30 years

#### (7.55.2.9) Comment

*The Chuden group began commercial operation of two wind power plants, including the Wind Farm Toyotomi, as renewable energy power plants in FY2023. As a result, the total output of wind power plants increased by 22,100 kW in that fiscal year. The amount of annual cost reduction and the amount of investment required are confidential, so they are not disclosed and zero is entered.*

### (7.55.3) What methods do you use to drive investment in emissions reduction activities?

#### Row 1

#### (7.55.3.1) Method

Select from:

- Dedicated budget for energy efficiency

### (7.55.3.2) Comment

*The Chuden group is working on the development of commercial equipment that supports decarbonization, energy saving and cost saving for customers' facilities in Japan and overseas. As an example, we are developing two types of high-output immersion heaters that contribute to decarbonization by electrification of the heating process in aluminum casting. We are allocating budgets to technological development with the theme of reducing CO2 emissions through energy efficiency improvement, such as integrated development solutions that aim to improve the quality and productivity of products, including these, and energy saving.*

## Row 2

### (7.55.3.1) Method

Select from:

- Partnering with governments on technology development

### (7.55.3.2) Comment

*The Chuden group has invested in Japan CCS Research Co., Ltd., which is carrying out large-scale demonstration tests led by the government. In addition, we are participating in projects run by local governments and other organizations related to the use of hydrogen, such as the low-carbon hydrogen project using renewable energy, in which we are participating together with Toyota Motor Corporation, Toho Gas Co., Ltd., Aichi Prefecture, and others. Furthermore, we are also carrying out a verification project with Toyota Motor Corporation to establish a large-capacity electricity storage system that reuses storage batteries for electric vehicles in response to the expansion of renewable energy.*

## Row 3

### (7.55.3.1) Method

Select from:

- Dedicated budget for energy efficiency

### (7.55.3.2) Comment

*The Chuden group is working on proposals for the optimal use of energy that will lead to energy saving and CO2 reduction for customers, and is focusing its budget on the development of "integrated development solutions" that will work with customers to deeply address the diversifying issues on the ground, and aim to improve energy saving and productivity, including services that visualize the actual use of electricity and gas, and the provision of information on energy saving.*

## Row 4

### (7.55.3.1) Method

Select from:

Internal price on carbon

### (7.55.3.2) Comment

*Chuden sets its internal carbon price by referring to the carbon prices of developed countries in the Stated Policies Scenario and the Announced Pledges Scenario of the latest IEA World Energy Outlook published by the International Energy Agency, as well as the contract and ceiling prices of the non-fossil value trading market, and uses this to evaluate the profitability of power source competitiveness comparisons and renewable energy development investments, etc.*

## Row 5

### (7.55.3.1) Method

Select from:

Compliance with regulatory requirements/standards

### (7.55.3.2) Comment

*The Chuden group is aiming to achieve the targets of the Act on Sophisticated Methods of Energy Supply Structures (a non-fossil fuel ratio of 44% by fiscal 2030), and in addition to expanding its renewable energy business, it is promoting the securing of budgets and investment in initiatives such as the use of nuclear power stations and increasing the power output of existing hydroelectric power stations.*

## **(7.58) Describe your organization's efforts to reduce methane emissions from your activities.**

*The amount of methane emissions from Chuden's biomass power generation is calculated in accordance with the calculation method specified in Appendix 5 (CH4 boiler (wood)) of the calculation, reporting and publication system specified by the Ministry of Economy, Trade and Industry and the Ministry of the Environment, but it is less than 5% of the company's total greenhouse gas emissions, and we believe it is of low importance.*

## **(7.73) Are you providing product level data for your organization's goods or services?**

Select from:

Yes, I will provide data through the CDP questionnaire

**(7.73.2) Complete the following table for the goods/services for which you want to provide data.**

	Requesting member
Row 1	Select from:

**(7.73.5) Have any of the initiatives described in 7.73.4 been driven by requesting CDP Supply Chain members?**

Select from:

Yes

**(7.73.6) Explain which initiatives have been driven by requesting members.**

	Requesting member
Row 1	Select from:

**(7.74) Do you classify any of your existing goods and/or services as low-carbon products?**

Select from:

Yes

## (7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

### Row 1

#### (7.74.1.1) Level of aggregation

Select from:

- Product or service

#### (7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

- The EU Taxonomy for environmentally sustainable economic activities

#### (7.74.1.3) Type of product(s) or service(s)

Power

- Hydropower

#### (7.74.1.4) Description of product(s) or service(s)

*As part of its efforts towards the realization of a carbon-free society, the Chuden group is offering customers who want to purchase CO2-free electricity with a local value, electricity generated from hydroelectric power, which is marketed as “Aichi Green Electricity”, “Gifu Green Electricity”, “Shizuoka Green Electricity”, “Mie Umashikuni Green Electricity”, and “Shinshu Green Electricity”, depending on the prefecture where the power generation facility is located.*

#### (7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

- Yes

#### (7.74.1.6) Methodology used to calculate avoided emissions

Select from:

- Other, please specify : The emission intensity of CO2 at the time of electricity generation for all of these low-carbon products is 0. From this, the difference

between the emission intensity of CO2 for electricity generated from thermal power generation other than these low-carbon products can be evaluated as the amount of avoided emissions for low-carbon products.

#### **(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)**

Select from:

Other, please specify : From the manufacturing of the product to the usage stage

#### **(7.74.1.8) Functional unit used**

*Comparison of CO2 emissions from the generation to consumption of 1kWh of electricity from thermal power generation and hydroelectric power generation*

#### **(7.74.1.9) Reference product/service or baseline scenario used**

*CO2 emissions from the generation to consumption of 1kWh of electricity generated by average thermal power generation*

#### **(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario**

Select from:

Other, please specify : From the manufacturing of the product to the usage stage

#### **(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario**

0.375

#### **(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions**

*The estimated reduction amount uses the average emission intensity for LNG thermal power (combined cycle) from the Agency for Natural Resources and Energy, Advisory Committee for Natural Resources and Energy (November 2015). This estimated avoided emission was calculated by multiplying the annual sales volume of low-carbon products. The unit of the estimated avoided emission is t-CO2/MWh. In the section “of the total sales in the reporting year, the percentage of sales generated from low-carbon products or services”, we answered the percentage of CO2-free electricity, which is a low-carbon product, in the total amount of electricity sold by the electric power industry, as a whole number percentage.*

#### **(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

**(7.79) Has your organization canceled any project-based carbon credits within the reporting year?**

*Select from:*

No

## C9. Environmental performance - Water security

### (9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

No

### (9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

#### Water withdrawals – total volumes

##### (9.2.1) % of sites/facilities/operations

Select from:

100%

##### (9.2.2) Frequency of measurement

Select from:

Continuously

##### (9.2.3) Method of measurement

① Seawater: Calculated based on the operating hours of the pump. ② Fresh water (water purchased from a third party; industrial water, tap water): Calculated based on the bills from local governments, etc. ③ Fresh water (other than the above: river water): Calculated based on the water levels of dams and intake channels and the output of power generators at hydroelectric power stations. At nuclear power stations, the amount of river water intake is measured.

##### (9.2.4) Please explain

The following three types of water are mainly taken in at our business establishments. ① Seawater ② Fresh water (purchased from a third party; industrial water, tap water) ③ Fresh water (other than the above: river water) ① is used to cool the steam used for power generation at nuclear power stations and biomass power generation

stations. ② is used for power generation, etc. at biomass power generation stations, and the amount purchased from a third party is managed. It is also used for drinking water at business establishments, etc., and the amount of industrial water and tap water taken is determined every quarter based on bills from local governments, etc. ③ is used for power generation at hydroelectric power stations, and the water level of dams and intake channels and the output of power generators are constantly measured and monitored. In addition, river water is used for power generation at nuclear power stations, and the amount taken is measured and monitored. There are multiple measurement frequencies, so the main frequency is listed here.

## Water withdrawals – volumes by source

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Continuously

### (9.2.3) Method of measurement

① Seawater: Calculated based on the operating hours of the pump. ② Fresh water (water purchased from a third party; industrial water, tap water): Calculated based on the bills from local governments, etc. ③ Fresh water (other than the above: river water): Calculated based on the water levels of dams and intake channels and the output of power generators at hydroelectric power stations. At nuclear power stations, the amount of river water intake is measured.

### (9.2.4) Please explain

Our business establishments mainly draw the following three types of water. ① Seawater ② Fresh water (purchased from a third party: industrial water, tap water) ③ Fresh water (other than the above: river water) ① is used to cool the steam used to generate power at nuclear power stations and biomass power generation plants. ② is used to generate power at biomass power generation plants, and the amount purchased from third parties is measured and monitored. It is also used for drinking water at business establishments, and the amount of industrial water and tap water taken is determined every quarter based on bills from local governments. ③ is used for power generation at hydroelectric power stations, and the water level of dams and intake channels and the output of power generators are constantly measured and monitored. In addition, river water is used for power generation at nuclear power stations, and the amount taken is measured and monitored. As there are multiple measurement frequencies, the main frequency is listed here.

## Water withdrawals quality

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Continuously

### (9.2.3) Method of measurement

*At a hydroelectric power station, the turbidity of the water is measured using a turbidimeter when it is withdrawn. At a biomass power generation plant, the temperature of the seawater is measured when it is withdrawn. At a nuclear power station, the difference in temperature between the seawater when it is withdrawn and when it is discharged is measured.*

### (9.2.4) Please explain

*At hydroelectric power stations, turbidity meters are used to monitor the clarity of the water as it is drawn in, as required by agreements with local governments. In addition, at nuclear power stations and biomass power generation stations located in coastal areas, the temperature of the seawater is monitored as it is withdrawn. At nuclear power stations, the difference between the temperature of the seawater as it is withdrawn and the temperature of the seawater as it is discharged is determined by the design values in the environmental impact assessment, and power is generated while monitoring the seawater temperature difference to ensure that it remains below a certain temperature. There are multiple measurement frequencies, so here we have listed the main frequency.*

## Water discharges – total volumes

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Daily

### (9.2.3) Method of measurement

*The discharge of fresh water from nuclear power stations is measured using flowmeters and the water level in the drainage tank. The discharge of other water is assumed to be the same as the amount of water withdrawn.*

### (9.2.4) Please explain

*We measure and monitor the amount of wastewater at all power stations and business establishments. - Seawater taken in at nuclear power stations and biomass power stations is used in heat exchangers to cool the steam used for power generation, but it is not consumed. For this reason, the amount of seawater discharged is assumed to be the same as the amount taken in. - The discharge of fresh water from nuclear power stations is measured using flowmeters and the water level in the drainage tank. The discharge of fresh water from biomass power generation plants is assumed to be the same as the amount of water taken in, as measured by flowmeters. At hydroelectric power plants, the water taken from rivers is used for power generation in its entirety, and then discharged, so the discharge amount is assumed to be the same as the amount taken in. There are multiple measurement frequencies, so the main frequency is listed here.*

## Water discharges – volumes by destination

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Daily

### (9.2.3) Method of measurement

*The amount of seawater discharged into the sea is assumed to be the same as the amount withdrawn. The amount of fresh water discharged into the sea is measured using flowmeters and the water level in the drainage tank. The amount of water discharged from biomass power generation plants is assumed to be the same as the amount withdrawn, as measured by flowmeters. The amount of water discharged into rivers is assumed to be the same as the amount withdrawn by hydroelectric power stations.*

### (9.2.4) Please explain

*Our company measures and monitors the amount of wastewater discharged from all power plants and business establishments, by destination. The amount of seawater discharged is assumed to be the same as the amount of seawater taken in, as the seawater taken in is used in heat exchangers to cool the steam used for power generation, but does not involve consumption. As for the amount of water discharged into rivers, at hydroelectric power stations, the amount of river water taken in is assumed to be the same as the amount taken in, as it is only used to turn the waterwheels for power generation and does not involve consumption. As there are multiple measurement frequencies, the main frequency is listed here.*

## **Water discharges – volumes by treatment method**

### **(9.2.1) % of sites/facilities/operations**

Select from:

100%

### **(9.2.2) Frequency of measurement**

Select from:

Daily

### **(9.2.3) Method of measurement**

*The amount of wastewater from nuclear power stations and biomass power generation plants is estimated by measuring and monitoring the flow rate using flowmeters and the water level in the drainage tank, and by assuming that the amount of water taken in is the same as the amount measured by the flowmeter. These figures are then aggregated by treatment method.*

### **(9.2.4) Please explain**

*At nuclear power stations and biomass power generation facilities, wastewater from facility operations is treated using neutralization equipment, filtration equipment, concentration and desalination equipment, etc., while wastewater from employees' daily lives is treated using microbial treatment equipment. In addition, wastewater containing oil is treated using adsorption treatment. Other wastewater is not treated, but the amount of wastewater is measured and monitored. As there are multiple measurement frequencies, the main frequency is listed here.*

## **Water discharge quality – by standard effluent parameters**

### **(9.2.1) % of sites/facilities/operations**

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Monthly

### (9.2.3) Method of measurement

・原子力発電所では pH、COD、SS などを測定しています。

### (9.2.4) Please explain

*The quality of wastewater, measurement frequency and measurement methods are stipulated in the Water Pollution Prevention Act and agreements with local governments. All of our power stations measure and monitor in accordance with these stipulations. Monitoring of water quality at nuclear power stations, we measure pH, COD, SS, etc.*

## Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Yearly

### (9.2.3) Method of measurement

*At nuclear power stations, the concentration of nitrates is measured.*

### (9.2.4) Please explain

*We use nitrites and phosphates to improve the quality of water used in boilers at nuclear power stations and for cooling water in air conditioning systems. We measure the concentration of nitrates once a year to check that there are no problems with wastewater quality.*

## **Water discharge quality – temperature**

### **(9.2.1) % of sites/facilities/operations**

Select from:

100%

### **(9.2.2) Frequency of measurement**

Select from:

Other, please specify : Measured at all times or every day

### **(9.2.3) Method of measurement**

*The temperature of the seawater used at nuclear power stations and biomass power generation plants is measured using thermometers.*

### **(9.2.4) Please explain**

*At nuclear power stations and biomass power generation plants, seawater is used to cool the steam used to generate electricity, and the temperature of the water when it is discharged into the sea is measured and monitored using a thermometer. At nuclear power stations, the difference between the temperature of the seawater when it is withdrawn and the temperature of the seawater when it is discharged is determined by the design values in the environmental impact assessment, and power is generated while monitoring the seawater temperature difference to ensure that it remains below a certain temperature.*

## **Water consumption – total volume**

### **(9.2.1) % of sites/facilities/operations**

Select from:

100%

### **(9.2.2) Frequency of measurement**

Select from:

Yearly

### (9.2.3) Method of measurement

*The amount of water consumed at all of our power plants and business establishments is calculated by subtracting the total amount of water discharged from the total amount of water withdrawn.*

### (9.2.4) Please explain

*We measure and monitor water consumption at all power plants and business establishments. The amount of consumption is the amount consumed by watering at power plants, etc., but we cannot accurately determine the amount. Therefore, the method for measuring water consumption is calculated by the difference between the total amount of water withdrawn and the total amount of water discharged, in accordance with the CDP definition.*

## Water recycled/reused

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Yearly

### (9.2.3) Method of measurement

*The amount of recycled water used at nuclear power stations and biomass power generation plants is assumed to be the same as the amount of water taken, as confirmed by flowmeters and bills.*

### (9.2.4) Please explain

*Nuclear power stations and biomass power plants use fresh water in the power generation process, and the steam used in power generation is cooled using seawater and returned to fresh water, which is then recycled as reactor water and boiler water for power generation. Recycled water that is discharged outside the power generation process is treated as wastewater before being discharged from the power station.*

## The provision of fully-functioning, safely managed WASH services to all workers

### (9.2.1) % of sites/facilities/operations

Select from:

100%

### (9.2.2) Frequency of measurement

Select from:

Daily

### (9.2.3) Method of measurement

*The drinking water used by our employees is provided after the safety of the water has been confirmed by the municipal water bureau, including data on the residual chlorine concentration.*

### (9.2.4) Please explain

*We continuously monitor whether all facilities are providing safe drinking water and sanitary facilities to all employees. We respect the character and individuality of our employees and are committed to providing a good working environment for them. The public water bureau, from which we purchase water, provides drinking water with confirmed data on residual chlorine concentration, etc.*

## (9.2.1) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

### Fulfilment of downstream environmental flows

#### (9.2.1.1) % of sites/facilities/operations measured and monitored

Select from:

100%

### (9.2.1.2) Please explain

*At hydroelectric power plants, river maintenance flows are discharged as necessary to realize environmental flows in the lower reaches of rivers, based on guidelines set by the government. The discharge implementation ratio for river maintenance flows is 100%, and the specified amount of river maintenance flows is always discharged, and monitoring is carried out by monitoring cameras that monitor the discharge facilities and conditions at any time, as well as by checking during on-site patrols.*

### Sediment loading

#### (9.2.1.1) % of sites/facilities/operations measured and monitored

Select from:

100%

#### (9.2.1.2) Please explain

*At hydroelectric power plants, depending on the location, we constantly assess the risk after discharge by measuring the turbidity of the dam water storage and discharge water as necessary. As for the implementation ratio of locations affected by turbid water, 100% of locations are measured at regular times every day, and if necessary, monitoring is strengthened, and turbidity reduction operations are carried out.*

### Other, please specify

#### (9.2.1.1) % of sites/facilities/operations measured and monitored

Select from:

Not relevant

#### (9.2.1.2) Please explain

*There are no other water-related aspects.*

**(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?**

## Total withdrawals

### (9.2.2.1) Volume (megaliters/year)

50823558

### (9.2.2.2) Comparison with previous reporting year

Select from:

About the same

### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The main factor is that the capacity factor of the hydroelectric power plant was almost the same as the previous fiscal year.

### (9.2.2.4) Five-year forecast

Select from:

About the same

### (9.2.2.5) Primary reason for forecast

Select from:

Other, please specify : The capacity factor of a hydroelectric power station fluctuates depending on the amount of water flow, so it is not possible to accurately predict it in advance, but we do not think it will fluctuate greatly. If nuclear power stations start operating in the future, the capacity factor is expected to increase.

### (9.2.2.6) Please explain

*The total amount of water taken is the sum of the following: 1) Seawater taken in by nuclear power stations and biomass power stations; 2) Fresh water purchased from third parties by nuclear power stations, biomass power generation stations and business establishments; 3) Fresh water (river water) taken in by hydroelectric power stations and nuclear power stations.*

## Total discharges

### (9.2.2.1) Volume (megaliters/year)

50823465

### (9.2.2.2) Comparison with previous reporting year

Select from:

About the same

### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The main factor is that the capacity factor of the hydroelectric power plant was almost the same as the previous fiscal year.

### (9.2.2.4) Five-year forecast

Select from:

About the same

### (9.2.2.5) Primary reason for forecast

Select from:

Other, please specify : The capacity factor of a hydroelectric power station fluctuates depending on the amount of water flow, so it is not possible to accurately predict it in advance, but we do not think it will fluctuate greatly. If nuclear power stations start operating in the future, capacity is expected to increase.

### (9.2.2.6) Please explain

*The total discharge value is the sum of the following: 1. Seawater discharged into the sea by nuclear power stations and biomass power stations 2. Treated fresh water discharged into the sea by nuclear power stations and biomass power stations 3. Fresh water (sewage) discharged from business establishments (other than nuclear power stations and biomass power stations) 4. Fresh water (river water) discharged by hydroelectric power stations.*

## Total consumption

### (9.2.2.1) Volume (megaliters/year)

### (9.2.2.2) Comparison with previous reporting year

Select from:

About the same

### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The main reason for this is that the total amount of water withdrawn, and the total amount of water discharged were almost the same.

### (9.2.2.4) Five-year forecast

Select from:

About the same

### (9.2.2.5) Primary reason for forecast

Select from:

Other, please specify :As for the latter, we believe that it may fluctuate depending on whether or not there is a regular maintenance at the nuclear power station.

### (9.2.2.6) Please explain

*The total consumption value is the amount of water withdrawn minus the amount of water discharged. The consumption value is the amount of water consumed by power stations, etc. for purposes such as watering, but as the exact amount is not known, it is assumed and calculated based on the difference between the amount of water withdrawn and discharged, which is continuously monitored.*

**(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.**

### (9.2.4.1) Withdrawals are from areas with water stress

Select from:

No

### (9.2.4.8) Identification tool

Select all that apply

WRI Aqueduct

Other, please specify : Government guidelines

### (9.2.4.9) Please explain

*According to the Aqueduct assessment by the World Resources Institute (WRI), our power stations are located in areas that are at maximum medium-high risk (20-40%) and some areas are at low risk (less than 10%) on an annual basis. Aqueduct defines areas with high water stress as water stress areas, and we have determined that there is no water withdrawal from water stress areas. Our hydroelectric power stations discharge river maintenance flows as necessary based on the guidelines set by the government, so we have determined that they are not experiencing high water stress. In addition, our nuclear power stations and biomass power generation stations draw seawater to cool the steam used for power generation, but as they are located in coastal areas, we have determined that they are not experiencing high water stress.*

## (9.2.7) Provide total water withdrawal data by source.

### Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

#### (9.2.7.1) Relevance

Select from:

Relevant

#### (9.2.7.2) Volume (megaliters/year)

50334181

### (9.2.7.3) Comparison with previous reporting year

Select from:

About the same

### (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The main reason for this is that the capacity factor for the hydroelectric power station was almost the same as the previous fiscal year.

### (9.2.7.5) Please explain

*Our nuclear power generation and hydroelectric power generation both draw fresh water from rivers. Most of the fresh water used in nuclear power generation is pumped up from the groundwater of the Niino River, which is on the west side of the power station, and is used in the power generation process. Therefore, the withdrawal of sufficient quantities of river water is crucially related to the power generation process. In hydroelectric power generation, dams are constructed on rivers in the five prefectures of the Chubu District, or dams belonging to local public bodies are used, and the water is led to the turbines via water pipes and the like to drive them and generate power. For this reason, the withdrawal of sufficient quantities of river water is of great relevance to the power generation process. This value is the total of the amount of water taken from rivers by hydroelectric power stations and the amount of water taken from rivers by nuclear power stations, as reported to the Ministry of Land, Infrastructure, Transport and Tourism.*

## Brackish surface water/Seawater

### (9.2.7.1) Relevance

Select from:

Relevant

### (9.2.7.2) Volume (megaliters/year)

488967

### (9.2.7.3) Comparison with previous reporting year

Select from:

About the same

#### (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :原 This is because there was no significant change in the amount of water taken from nuclear power stations and biomass power generation stations from the previous fiscal year.

#### (9.2.7.5) Please explain

*Our nuclear power stations and biomass power generation stations take in seawater to cool the steam used for power generation. For this reason, taking in sufficient quantities of seawater is of great relevance to the power generation process. This value is the amount of seawater taken in, calculated from the seawater pump capacity and operating hours of the nuclear power station and biomass power generation station. Seawater is used in heat exchangers to cool the steam used for power generation, but it is not consumed.*

### Groundwater – renewable

#### (9.2.7.1) Relevance

Select from:

Not relevant

#### (9.2.7.5) Please explain

*Our company does not have any facilities that use renewable groundwater.*

### Groundwater – non-renewable

#### (9.2.7.1) Relevance

Select from:

Not relevant

#### (9.2.7.5) Please explain

*Our company does not have any equipment that uses non-renewable groundwater.*

## Produced/Entrained water

### (9.2.7.1) Relevance

Select from:

Not relevant

### (9.2.7.5) Please explain

*Our company does not have any facilities that use produced or entrained water.*

## Third party sources

### (9.2.7.1) Relevance

Select from:

Relevant

### (9.2.7.2) Volume (megaliters/year)

410

### (9.2.7.3) Comparison with previous reporting year

Select from:

About the same

### (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The main reason for this is that, although the amount of water used in offices and business establishments decreased, the decrease was only a small amount compared to the total amount of water used.

### (9.2.7.5) Please explain

We use water purchased from a third party for drinking at our business establishments, and we believe that it is important for the execution of business and ensuring occupational health and safety for employees at all business establishments.

## (9.2.8) Provide total water discharge data by destination.

### Fresh surface water

#### (9.2.8.1) Relevance

Select from:

Relevant

#### (9.2.8.2) Volume (megaliters/year)

50334061

#### (9.2.8.3) Comparison with previous reporting year

Select from:

About the same

#### (9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :水力発電所の設備利用率が前年度とほぼ同じであったことが主な要因です。

#### (9.2.8.5) Please explain

*At a hydroelectric power station, water taken from a river is used for power generation and then discharged back into the river. Therefore, the ability to discharge water into the river and onto the ground without restriction is important and relevant to the continuous operation of a hydroelectric power station. The amount of water discharged is assumed to be the same as the amount withdrawn and discharged.*

### Brackish surface water/seawater

### (9.2.8.1) Relevance

Select from:

Relevant

### (9.2.8.2) Volume (megaliters/year)

489061

### (9.2.8.3) Comparison with previous reporting year

Select from:

About the same

### (9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify :The main reason for this is that there was no significant fluctuation in the amount of seawater taken in by the nuclear power station.

### (9.2.8.5) Please explain

*This value is the total amount of seawater and discharge of fresh water used by nuclear power stations and biomass power generation stations. The seawater used at nuclear power stations and biomass power generation plants is used in heat exchangers to cool the steam used for power generation, but it is not consumed. Therefore, the seawater is discharged directly into the sea, and the amount of seawater discharged is the same as the amount of seawater withdrawn. In addition, the fresh water received from rivers at nuclear power stations and the fresh water purchased from third parties at biomass power generation plants is turned into high-temperature, high-pressure steam in the reactor and boiler, and is used to drive turbines and generate power. When the fresh water used is drained, it is drained into the sea after appropriate wastewater treatment. The discharge of fresh water is managed as the same value as the amount of water withdrawn and discharged, as measured and monitored by flowmeters and the water level in the drainage tank. For this reason, in order to continue the efficient operation of nuclear power generation and biomass power generation, it is important and relevant that it is possible to drain seawater and fresh water into the sea.*

## Groundwater

### (9.2.8.1) Relevance

Select from:

Not relevant

### (9.2.8.5) Please explain

*Our company does not have any facilities for infiltrating water into the ground and draining it.*

### Third-party destinations

#### (9.2.8.1) Relevance

Select from:

Relevant

#### (9.2.8.2) Volume (megaliters/year)

343

#### (9.2.8.3) Comparison with previous reporting year

Select from:

About the same

#### (9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The main reason for this is that, although the amount of wastewater from offices and business establishments decreased slightly, it was only a small amount compared to the total amount of water discharged.

#### (9.2.8.5) Please explain

*We discharge domestic wastewater from business establishments other than nuclear power stations and biomass power generation facilities into the sewage system. As we do not accurately keep track of the amount of wastewater, we assume that it is the same as the amount of tap water purchased from a third party. Being able to properly discharge the domestic wastewater generated from these business establishments into the public sewage system prevents the spread of infectious diseases and prevents employees at the business establishment from being unable to carry out their work at the same time. The continuous operation of business establishments other than nuclear power stations and biomass power generation facilities is a core part of our business operations, so even a temporary suspension of operations could have a significant impact on our income and expenditure. For this reason, discharging wastewater into the public sewerage system is important for our continued operations. In addition, nuclear power stations and biomass power generation facilities discharge treated water into the sea.*

**(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.**

**Tertiary treatment**

**(9.2.9.1) Relevance of treatment level to discharge**

Select from:

Relevant

**(9.2.9.2) Volume (megaliters/year)**

8

**(9.2.9.3) Comparison of treated volume with previous reporting year**

Select from:

About the same

**(9.2.9.4) Primary reason for comparison with previous reporting year**

Select from:

Other, please specify : The amount of wastewater from tertiary treatment was the same as in the previous fiscal year. This is because the amount of work requiring tertiary treatment at nuclear power stations was roughly the same. In addition, when comparing with the previous reporting year, if the amount of wastewater increases or decreases by more than 20% compared to the previous year, it is judged to be less or more than the previous year.

**(9.2.9.5) % of your sites/facilities/operations this volume applies to**

Select from:

Less than 1%

**(9.2.9.6) Please explain**

*At nuclear power stations, wastewater generated by the plant during facility operation is treated in concentration and desalination facilities to remove radioactive*

substances and meet the prescribed wastewater quality standards before being discharged into the environment. The wastewater is not subject to primary or secondary treatment because the water used for power generation is taken from rivers and purified to ultra-pure water level by removing impurities in the water through filtration and ion exchange when supplying it to the plant, so there is no need to remove impurities through primary or secondary treatment. On the other hand, wastewater used for washing protective clothing, etc., is treated using filtration equipment such as fiber filters and activated carbon filters to remove suspended solids and COD components, and then discharged into the environment after meeting the prescribed water quality standards. This wastewater is also not subject to primary or secondary treatment, as the impurities in the water are removed by filtration or ion exchange, so there is no need to remove impurities through primary or secondary treatment. Wastewater quality is measured and monitored for pH, COD, SS, etc., based on the standards set by the national and local governments.

## Secondary treatment

### (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

### (9.2.9.2) Volume (megaliters/year)

97

### (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

About the same

### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The amount of wastewater from secondary treatment was 102 megaliters, almost the same as the previous fiscal year. This is because the amount of wastewater from the office was almost the same as the previous fiscal year.

### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

Less than 1%

### (9.2.9.6) Please explain

he wastewater from employees' daily lives at nuclear power stations is treated by microorganism in a septic tank. In addition, business establishments located in areas without sewage systems have septic tanks installed to treat wastewater, but as the amount of wastewater is not measured, it is assumed to be 10% of the total amount of wastewater from the business establishment. The standard values for wastewater quality from these business establishments are set by the Septic Tank Law, and wastewater is discharged after being treated to meet the standard values set by the law.

## Primary treatment only

### (9.2.9.1) Relevance of treatment level to discharge

Select from:

Not relevant

### (9.2.9.6) Please explain

As wastewater that needs to be treated at our power stations and business establishments is treated to at least "secondary treatment" level, or is otherwise treated (e.g., pH adjustment), none of it falls under the category of "primary treatment only".

## Discharge to the natural environment without treatment

### (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

### (9.2.9.2) Volume (megaliters/year)

50823028

### (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

About the same

### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The amount of wastewater discharged into the natural environment without treatment increased by less than 1% from the previous fiscal year (50,759,708 megaliters), and we judge that it was almost the same. This is because the capacity factor of the hydroelectric power station was almost the same as the previous fiscal year.

#### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

100%

#### (9.2.9.6) Please explain

*The seawater used at nuclear power stations and biomass power generation plants is only used to cool the steam used for power generation, and as there is no change in the quality of the water, the wastewater is discharged directly into the sea. The temperature of the seawater when it is discharged into the sea is measured and monitored using thermometers on a regular or daily basis. At nuclear power stations, the difference between the temperature of the seawater when it is withdrawn and when it is discharged is determined by the design values in the environmental impact assessment, and power is generated while monitoring to ensure that the difference in seawater temperature does not exceed a certain temperature. On the other hand, the river water that is withdrawn at a hydroelectric power station is only used to turn the water wheel, and as there is no change in the water quality, it is discharged directly back into the river.*

### Discharge to a third party without treatment

#### (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

#### (9.2.9.2) Volume (megaliters/year)

313

#### (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

About the same

#### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The amount of wastewater discharged to a third party without treatment was 335 megaliters in the previous fiscal year, and we judge that it is almost the same. This is because the amount of wastewater discharged from business establishments other than nuclear power stations and biomass power stations was almost the same as in the previous fiscal year.

### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

Less than 1%

### (9.2.9.6) Please explain

*The wastewater from business establishments other than nuclear power stations and biomass power stations is mainly discharged into the sewage system. As the exact amount of this wastewater is not measured, it is assumed by subtracting the amount of secondary treatment mentioned above from the amount of water purchased from a third party. The wastewater quality is discharged through the necessary procedures based on the current legal standards of the Sewerage Law. In addition, the Yokkaichi Biomass Power Plant, our only biomass power generation plant, is located on the premises of the JERA Co. Yokkaichi Thermal Power Station, and all wastewater generated by the power station is sent to JERA's wastewater treatment facilities and discharged from the premises of the power station. Therefore, all wastewater generated by the biomass power generation plant is treated by JERA. Wastewater quality is measured and monitored based on standards set by the national or local government, and treated accordingly.*

## Other

### (9.2.9.1) Relevance of treatment level to discharge

Select from:

Relevant

### (9.2.9.2) Volume (megaliters/year)

19

### (9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

Higher

#### (9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

Other, please specify : The other amount of wastewater was 13 megaliters, which was slightly higher than the previous fiscal year. This was due to an increase in the amount of water needed to dilute the wastewater containing chemicals generated at the nuclear power station in order to comply with the wastewater standards.

#### (9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

Less than 1%

#### (9.2.9.6) Please explain

*At nuclear power stations, they measure the radioactivity of seawater, marine life, seabed soil, etc., to confirm that there is no impact on the surrounding environment due to radiation from the power station operations. The wastewater, including chemicals, generated during this process is drained after pH adjustment. Wastewater quality is measured and monitored for pH, COD, SS, etc., based on the standards set by the national and local governments.*

#### (9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

##### (9.2.10.1) Emissions to water in the reporting year (metric tons)

0.18

##### (9.2.10.2) Categories of substances included

Select all that apply

Nitrates

Phosphates

#### (9.2.10.4) Please explain

*At our nuclear power stations, nitrates are contained in wastewater such as cooling water for equipment, and phosphates are contained in wastewater from boilers. As the amount of emissions is not directly measured, the amount of emissions is assumed and calculated based on the weight used and the concentration in the wastewater. The concentration of nitrates is measured once a year to confirm that there are no problems with the wastewater quality. Furthermore, there is no wastewater containing nitrates or phosphates in water-stressed areas.*

### (9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

#### Direct operations

##### (9.3.1) Identification of facilities in the value chain stage

Select from:

Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

##### (9.3.2) Total number of facilities identified

1

##### (9.3.3) % of facilities in direct operations that this represents

Select from:

Less than 1%

##### (9.3.4) Please explain

*The facility with water-related risks that could have a significant impact on the business in terms of finance or strategy is the Hamaoka Nuclear Power Station. All units at the Hamaoka Nuclear Power Station are currently out of operation, and we are steadily implementing measures based on the new regulatory standards, while Units 3 and 4 are undergoing a review by the Nuclear Regulation Authority to confirm their compliance with the new regulatory standards. The current power being generated at the Hamaoka Nuclear Power Station is 0 kWh.*

#### Upstream value chain

### (9.3.1) Identification of facilities in the value chain stage

Select from:

Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

### (9.3.2) Total number of facilities identified

1

### (9.3.4) Please explain

*In April 2019, we integrated our existing thermal power generation business into JERA Co., Ltd., and power generation businesses such as JERA have become important suppliers of the electricity we sell. The wastewater generated by the operation of these power stations is subject to the Water Pollution Prevention Act and agreements with local governments, which stipulate the quality of the wastewater, measurement frequency and measurement methods. Measurements and monitoring are carried out in accordance with these stipulations, and consideration is given to reducing the impact on the surrounding environment. In addition, it is essential to secure a sufficient amount of high-quality fresh water at power stations, but the biggest problem in securing fresh water is the water shortage (drought) caused by the synergistic effect of the decrease in the amount of water held in water sources in summer and the increase in the amount of water used for industrial and domestic purposes. In preparation for a shortage of industrial water, power stations have freshwater tanks, and some thermal power stations have installed groundwater pumping pumps and set up receiving lines to accept treated water from adjacent wastewater treatment centers for use. Despite the risk of water shortages, we believe that the necessary equipment and operational systems are in place to mitigate these risks. The suppliers that provide electricity to our company also use recycled water in their power generation processes, such as thermal power generation. In this power generation process, fresh water is treated to remove impurities from the water, and the water is used to drive turbines, and is then recycled as steam to drive the turbines, thereby contributing to the reduction of the amount of fresh water used. As such, we consider recycled water to be the same as the aforementioned freshwater risks, as it is treated fresh water. In terms of responding to large-scale water-related disasters such as typhoons, storm surges, earthquakes and tsunamis, JERA, our largest supplier, is included in the monitoring of the aforementioned BCM Committee. Based on the estimated damage from a Nankai Trough earthquake, we are implementing measures to make our facilities more disaster-resistant, such as taking measures to protect the facilities that receive fuel for thermal power generation from tsunamis. As a result of the above, although there are water-related risks in the value chain, we have the necessary systems in place in terms of facilities and operations to mitigate these risks, and we have determined that they do not meet our definition of a significant risk (evaluated based on financial impact over a 10-year period, etc., and exceeding a certain scale), so we believe that we are not exposed to water risks that could have a significant impact on our finances or strategy.*

**(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.**

**Row 1**

### (9.3.1.1) Facility reference number

Select from:

Facility 1

### (9.3.1.2) Facility name (optional)

*Hamaoka Nuclear Power Station*

### (9.3.1.3) Value chain stage

Select from:

Direct operations

### (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

Risks

### (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

Yes, withdrawals and discharges

### (9.3.1.7) Country/Area & River basin

**Japan**

Other, please specify : Niino River

### (9.3.1.8) Latitude

34.6

### (9.3.1.9) Longitude

138.1

**(9.3.1.10) Located in area with water stress**

Select from:

No

**(9.3.1.11) Primary power generation source for your electricity generation at this facility**

Select from:

Nuclear

**(9.3.1.13) Total water withdrawals at this facility (megaliters)**

410758

**(9.3.1.14) Comparison of total withdrawals with previous reporting year**

Select from:

About the same

**(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

120

**(9.3.1.16) Withdrawals from brackish surface water/seawater**

410571

**(9.3.1.17) Withdrawals from groundwater - renewable**

0

**(9.3.1.18) Withdrawals from groundwater - non-renewable**

0

**(9.3.1.19) Withdrawals from produced/entrained water**

0

**(9.3.1.20) Withdrawals from third party sources**

67

**(9.3.1.21) Total water discharges at this facility (megaliters)**

410666

**(9.3.1.22) Comparison of total discharges with previous reporting year**

Select from:

About the same

**(9.3.1.23) Discharges to fresh surface water**

95

**(9.3.1.24) Discharges to brackish surface water/seawater**

410571

**(9.3.1.25) Discharges to groundwater**

0

**(9.3.1.26) Discharges to third party destinations**

0

**(9.3.1.27) Total water consumption at this facility (megaliters)**

92

### (9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

About the same

### (9.3.1.29) Please explain

*All units at the Hamaoka Nuclear Power Station are currently out of operation, and we are steadily implementing measures based on the new regulatory standards, while Units 3 and 4 are undergoing a review by the Nuclear Regulation Authority to confirm their compliance with the new regulatory standards. There has been no significant change in the total amount of water withdrawn, the total amount of water discharged, or the total amount of water consumed from the previous fiscal year.*

**(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?**

### Water withdrawals – total volumes

#### (9.3.2.1) % verified

Select from:

Not verified

#### (9.3.2.3) Please explain

*We have not undergone third-party verification of our water withdrawals.*

### Water withdrawals – volume by source

#### (9.3.2.1) % verified

Select from:

Not verified

#### (9.3.2.3) Please explain

*We have not undergone a third-party verification of the amount of water withdrawals by water source.*

## **Water withdrawals – quality by standard water quality parameters**

### **(9.3.2.1) % verified**

*Select from:*

Not verified

### **(9.3.2.3) Please explain**

*The water quality has not been verified by a third party for each standard water quality parameter.*

## **Water discharges – total volumes**

### **(9.3.2.1) % verified**

*Select from:*

Not verified

### **(9.3.2.3) Please explain**

*We have not undergone a third-party verification of our water discharge volume.*

## **Water discharges – volume by destination**

### **(9.3.2.1) % verified**

*Select from:*

Not verified

### **(9.3.2.3) Please explain**

*We have not undergone a third-party verification of the amount of wastewater discharged by destination.*

## Water discharges – volume by final treatment level

### (9.3.2.1) % verified

Select from:

Not verified

### (9.3.2.3) Please explain

*We have not undergone third-party verification of our discharge volume by final treatment level.*

## Water discharges – quality by standard water quality parameters

### (9.3.2.1) % verified

Select from:

Not verified

### (9.3.2.3) Please explain

*We have not undergone third-party verification of wastewater quality by standard water quality parameters.*

## Water consumption – total volume

### (9.3.2.1) % verified

Select from:

Not verified

### (9.3.2.3) Please explain

*We have not undergone third-party verification of our water consumption.*

**(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?**

Select from:

No, CDP supply chain members do not buy goods or services from facilities listed in 9.3.1

**(9.4.1) Indicate which of the facilities referenced in 9.3.1 could impact a requesting CDP supply chain member.**

	Requesting member
Row 1	Select from:

**(9.5) Provide a figure for your organization's total water withdrawal efficiency.**

**(9.5.1) Revenue (currency)**

2961364000000

**(9.5.2) Total water withdrawal efficiency**

58267.55

**(9.5.3) Anticipated forward trend**

*A substantial proportion of the total water withdrawal volume for our company is accounted for by water withdrawal for hydroelectric power generation. In order to maximize the value of our management resources, we are optimizing the operation of our hydroelectric power stations, and we are implementing initiatives to increase the amount of electricity generated and sales revenue while maintaining the current total water withdrawal volume. These initiatives are contributing to improvements (reductions) in the relevant basic unit indicators. Specifically, when renewing our hydroelectric power generation facilities, we are reviewing them to make them more suitable for the flow conditions of the river, raising the operational water level of the dam, etc. In addition, in the operation of our hydroelectric power stations, we are working to increase the amount of electricity generated by optimizing the operation of the water system, etc., by using AI technology. Through these initiatives, we*

believe that we will be able to improve the efficiency of water withdrawal in our hydroelectric power generation, which is our main power source and accounts for the majority of our water withdrawal volume. In the future, we expect that the efficiency of our total withdrawal volume will improve, as we believe that the increase in the amount of electricity generated by our hydroelectric power plants due to the progress of these initiatives will lead to an increase in the amount of electricity we sell and an increase in sales. Sales figures are based on the operating revenue from the electricity business in our consolidated income statement.

## **(9.7.1) Provide the following intensity information associated with your electricity generation activities.**

### **Row 1**

#### **(9.7.1.1) Water intensity value (m3/denominator)**

6963

#### **(9.7.1.2) Numerator: water aspect**

Select from:

Total water withdrawals

#### **(9.7.1.3) Denominator**

Select from:

MWh

#### **(9.7.1.4) Comparison with previous reporting year**

Select from:

About the same

#### **(9.7.1.5) Please explain**

*(Reason for the water intensity not changing from the previous reporting year) The water-related intensity indicators are almost the same as the previous fiscal year. This is because the total withdrawal volume and the amount of electricity generated were both almost the same as in the previous fiscal year. In addition, when comparing with the previous fiscal year, we judge that it is almost the same as the previous fiscal year if there is no increase or decrease of more than 10%. (Internal use of water intensity and strategies for reduction) The water-related intensity index that we measure and manage is the value obtained by dividing the total withdrawal*

volume by the amount of electricity generated. In addition, hydroelectric power accounts for approximately 95% of the power generated by our company in FY2023, and is our main source of power. By using water intensity, we can understand how much water is needed for each amount of power generated by our company, and we believe that this will enable us to consider more efficient ways of using water and reduce costs. Our company is working to optimize the operation of our hydroelectric power stations in order to maximize the value of our management resources, and we are implementing initiatives to increase the amount of power generated per water withdrawal volume. This initiative is contributing to improvements (reductions) in the relevant basic unit indicators. Specifically, when renewing hydroelectric power generation facilities, we are reviewing them to ensure they are the most suitable for the flow conditions of the river, and raising the operational water level of dams, etc. In addition, in the operation of hydroelectric power stations, we are working to increase the amount of electricity generated by optimizing the operation of river systems over the long and short term, using AI technology, etc. We have started developing a system that uses AI to predict river flow and formulate power generation plans, and we are aiming to put it into operation. In January 2023, we established a consortium of six global companies and a user-participatory renewable energy expansion model for the renovation of existing hydroelectric power stations. The consortium is a system that allows customers with a strong interest in “additionality” to proactively participate in the planning stages of the refurbishment of existing hydroelectric power stations that Chuden is considering increasing power generation from, and to contribute to the expansion of renewable energy by purchasing renewable energy-derived electricity, including the additional power generated by the refurbishment, through Chubu Electric Power Miraiz Co., Inc. As the first project to use this model, we are planning to apply it to the renovation of the aging facilities at our Oigawa Hydroelectric Power Station Unit 1, and we expect to increase annual power generation by approximately 1.9 million kWh from 2025. Through this kind of initiative, we believe we can promote the efficient use of water in hydroelectric power generation, which is our main power source and accounts for the majority of our withdrawal volume. We are also preparing to continue using the Hamaoka Nuclear Power Station as an important power source, as we can also contribute to improving (reducing) the relevant basic unit index. To this end, we are steadily implementing thoroughgoing initiatives to improve the safety of the Hamaoka Nuclear Power Station, and we are making our best efforts to respond sincerely to the Nuclear Regulation Authority's inspections and to have the new regulatory standards confirmed, as well as striving to gain the understanding of the local community and society at large regarding safety improvement measures, etc. (Future trends in water intensity) As for future trends in water intensity, we expect to see a decrease due to progress in initiatives to increase the amount of electricity generated by hydroelectric power stations, and we also believe that there will be a significant decrease if nuclear power stations start operating.

**(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?**

	Products contain hazardous substances	Comment
	Select from: <input checked="" type="checkbox"/> No	Our company does not produce any products that contain substances classified as harmful by regulatory authorities.

**(9.14) Do you classify any of your current products and/or services as low water impact?**

### (9.14.1) Products and/or services classified as low water impact

Select from:

Yes

### (9.14.2) Definition used to classify low water impact

*The definition used to classify a service as having a low impact on water is based on whether (1) the customer's water usage is reduced by introducing our service in addition to their existing usage, or (2) the quality of the water is improved by introducing our service. The criteria are applied when introducing the service we provide to our customers in our value chain, and are applied to the customer's water usage and wastewater quality, including cleaning fluid.*

### (9.14.4) Please explain

*We have developed a “high-efficiency fine bubble liquid purification system” that can efficiently remove impurities from cleaning liquids used in automobile factories etc. using fine bubbles (extremely small bubbles with diameters of 0.1-0.01 mm), and we are proposing this system mainly to customers in automobile factories. By using fine bubbles, it is possible to efficiently remove impurities such as oil and sludge that occur due to the continuous use of cleaning liquids (cleaning liquids used in cleaning processes at automobile factories, etc., and coolant liquids used in processing processes), and the separation performance of liquids and impurities has been improved by 70% compared to conventional methods. Up until now, cleaning fluid has needed to be disposed of after use and replaced regularly, but the use of this equipment has led to a longer lifespan for the cleaning fluid, reducing the amount of fluid that needs to be replaced and significantly reducing the amount of waste fluid, realizing a reduction in the water impact on customers. The effects of introducing the service vary depending on the actual water usage at the factory where it is introduced, but it has achieved a significant reduction in water usage. In the factories where the service has been introduced so far, it has achieved results such as halving the amount of waste liquid produced by the factory as a whole by making it possible to reuse cleaning liquid that could not be reused before, and reducing the use of steam, which was used to concentrate waste liquid, from 1.2 metric tons to zero. Together with our customers, we are deeply involved in the diverse issues faced in the field and are developing “integrated development solutions” that aim to achieve energy savings and improved productivity. In this context, the “development of a high-efficiency fine bubble liquid cleaning device for the realization of a recycling-oriented society” that we implemented with Kansai Automation Equipment Co.,Ltd. received the “Director-General's Award of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry” in the 2021 Awards for Circular Resource Techniques and Systems (hosted by the Japan Environmental Management Association for Industry, supported by the Ministry of Economy, Trade and Industry). The “Recycling Technology and System Awards” are a system for recognizing excellent businesses and initiatives that contribute to waste reduction, reuse of used goods, and effective use of recycled resources, and that feature advanced technology or innovative systems in the era of the SDGs. This system highly evaluates the fact that this device contributes to the realization of a sustainable recycling-oriented society. Based on our extensive consulting experience, we are working with customers who are aiming for decarbonization and a sustainable society to solve issues such as the 3Rs, energy saving, CO2 reduction, and facility maintenance, and we will continue to develop various solution services that meet the needs of our customers.*

### (9.15) Do you have any water-related targets?

Select from:

Yes

**(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.**

	Target set in this category
Water pollution	Select from: <input checked="" type="checkbox"/> Yes
Water withdrawals	Select from: <input checked="" type="checkbox"/> Yes
Water, Sanitation, and Hygiene (WASH) services	Select from: <input checked="" type="checkbox"/> Yes
Other	Select from: <input checked="" type="checkbox"/> Yes

**(9.15.2) Provide details of your water-related targets and the progress made.**

**Row 1**

**(9.15.2.1) Target reference number**

Select from:

Target 1

**(9.15.2.2) Target coverage**

Select from:

Site/facility

### (9.15.2.3) Category of target & Quantitative metric

#### Water pollution

Increase in the proportion of wastewater that is safely treated

### (9.15.2.4) Date target was set

04/01/2023

### (9.15.2.5) End date of base year

03/31/2023

### (9.15.2.6) Base year figure

0

### (9.15.2.7) End date of target year

03/31/2024

### (9.15.2.8) Target year figure

100

### (9.15.2.9) Reporting year figure

100

### (9.15.2.10) Target status in reporting year

Select from:

Achieved and maintained

### (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

Other, please specify : The goal is to comply with the Water Pollution Prevention Act and agreements with local governments.

### (9.15.2.13) Explain target coverage and identify any exclusions

*This applies to facilities in the Chuden group that discharge wastewater, and there are no exclusions.*

### (9.15.2.15) Actions which contributed most to achieving or maintaining this target

*The target indicator is the percentage (%) of wastewater that is safely treated. There were no violations of laws and regulations regarding wastewater at Chuden group business establishments in FY2023. The quality of wastewater, measurement frequency, and measurement methods are stipulated in the Water Pollution Prevention Act and agreements with local governments. All of our power stations measure and monitor wastewater quality in accordance with these regulations. The goal at business establishments is to ensure that there are no violations of laws or agreements, and at the head office level, the goal is to ensure that there are no violations of laws or agreements at each business establishment. In the event of an environmental problem, such as a violation of the law, a system has been established to notify the head office and the relevant government authorities, and the head office monitors whether there are any violations of laws or agreements at business establishments.*

### (9.15.2.16) Further details of target

*Target values are set for each fiscal year.*

## Row 2

### (9.15.2.1) Target reference number

Select from:

Target 2

### (9.15.2.2) Target coverage

Select from:

Site/facility

### (9.15.2.3) Category of target & Quantitative metric

#### Water withdrawals

Other water withdrawals, please specify : Prevention of over-extraction of water

### (9.15.2.4) Date target was set

04/01/2023

### (9.15.2.5) End date of base year

03/31/2023

### (9.15.2.6) Base year figure

0

### (9.15.2.7) End date of target year

03/31/2024

### (9.15.2.8) Target year figure

100.0

### (9.15.2.9) Reporting year figure

100

### (9.15.2.10) Target status in reporting year

Select from:

Achieved and maintained

### (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

Other, please specify : Operate in a way that does not exceed the maximum withdrawal volume under the River Act.

### (9.15.2.13) Explain target coverage and identify any exclusions

*The target scope is our company's hydroelectric power stations that are subject to the River Act. In addition, temporary excesses in the withdrawal volume during times of high-water flow that are dealt with appropriately in accordance with the rules for managing the withdrawal volume set out by the Working Group for Examining Measures for the Effective Use of Hydroelectric Energy are excluded from the scope.*

### (9.15.2.15) Actions which contributed most to achieving or maintaining this target

*In terms of water withdrawal at our hydroelectric power stations, we operate while controlling the intake so that it does not exceed the maximum withdrawal volume stipulated in the River Act. The maximum withdrawal volume is the optimal amount that we design and submit when building a new hydroelectric power station in order to maintain the environment and flow rate of each river, and we monitor the actual withdrawal volume to ensure that it does not exceed the maximum withdrawal volume stipulated.*

### (9.15.2.16) Further details of target

*Target values are set for each fiscal year.*

## Row 3

### (9.15.2.1) Target reference number

Select from:

Target 3

### (9.15.2.2) Target coverage

Select from:

Product level

### (9.15.2.3) Category of target & Quantitative metric

#### Water, Sanitation, and Hygiene (WASH) services

Other WASH, please specify : Expansion of the number of users of telemetering services, including services that contribute to the effective use of water

resources by using the various data obtained from smart meters to improve water conservation awareness through the visualization of water usage and supporting the early detection of leaks by local governments, etc.

**(9.15.2.4) Date target was set**

12/20/2022

**(9.15.2.5) End date of base year**

12/20/2022

**(9.15.2.6) Base year figure**

120000

**(9.15.2.7) End date of target year**

03/31/2026

**(9.15.2.8) Target year figure**

500000

**(9.15.2.9) Reporting year figure**

230000

**(9.15.2.10) Target status in reporting year**

Select from:

Underway

**(9.15.2.11) % of target achieved relative to base year**

### (9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

None, no alignment after assessment

### (9.15.2.13) Explain target coverage and identify any exclusions

*The target area is the range in which our company provides services (Aichi, Gifu, Mie, Shizuoka (west of the Fuji River), and Nagano prefectures), and areas outside the service area are excluded.*

### (9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

*Through Chuden Telemetry LLC, a telemetry service company funded by Chubu Electric Power Co., Inc. and Chubu Electric Power Grid Co., Inc., we aim to expand the market and enhance services, and we are aiming to increase the number of service users to 500,000 by fiscal 2025. The number of users as of fiscal 2023 is steadily increasing to 230,000.*

### (9.15.2.16) Further details of target

*The target value is the figure at the end of the target fiscal year.*

## Row 4

### (9.15.2.1) Target reference number

Select from:

Target 4

### (9.15.2.2) Target coverage

Select from:

Site/facility

### (9.15.2.3) Category of target & Quantitative metric

Community engagement

Increase in number of population participating in community engagement activities

**(9.15.2.4) Date target was set**

04/01/2023

**(9.15.2.5) End date of base year**

03/31/2023

**(9.15.2.6) Base year figure**

300

**(9.15.2.7) End date of target year**

03/31/2024

**(9.15.2.8) Target year figure**

310

**(9.15.2.9) Reporting year figure**

310

**(9.15.2.10) Target status in reporting year**

Select from:

Achieved

**(9.15.2.11) % of target achieved relative to base year**

100

### **(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target**

Select all that apply

None, no alignment after assessment

### **(9.15.2.13) Explain target coverage and identify any exclusions**

*This covers our electricity supply area in Japan, and excludes areas outside the supply area and overseas.*

### **(9.15.2.15) Actions which contributed most to achieving or maintaining this target**

*We believe that increasing the number of people who can carry out forest conservation activities such as thinning, which is important for maintaining watershed functions and preventing sediment disasters, and increasing the number of people guiding thinning volunteers, etc., will contribute to the sustainability of water resources and prevent sediment disasters, etc., and therefore, we consider this to be important. For this reason, we consider the number of people guided by “Chuden Forester” in the relevant fiscal year to be an indicator for evaluating the success of engagement. The figures listed for the target year are the cumulative number of people trained as Chuden Foresters. For each activity, we compile implementation results to understand the progress of the activity and evaluate the progress. For the Chuden Forester activity, we trained 10 foresters in FY2023, achieving a cumulative total of 310 foresters trained, and utilized a total of 195 people for guiding thinning volunteers and forest experience activities.*

### **(9.15.2.16) Further details of target**

*The goal is to have trained more than 320 Chuden Forester by the end of fiscal year 2024.*

## C10. Environmental performance - Plastics

### (10.1) Do you have plastics-related targets, and if so what type?

#### (10.1.1) Targets in place

Select from:

Yes

#### (10.1.2) Target type and metric

##### End-of-life management

- Increase the proportion of recyclable plastic waste that we collect, sort, and recycle
- Increase the proportion of plastic waste which is prepared for reuse or composted

#### (10.1.3) Please explain

*Chubu Electric Power Grid Co., Inc., a business company that operates power transmission and distribution, uses plastic products purchased from other companies for things like power transmission and distribution line covers and electricity meter covers. With regard to the disposal of these plastic products due to aging and other factors, based on the Law for the Promotion of Sorted Collection and Recycling of Containers and Packaging, we have set the goal of “working to reduce waste emissions and recycle as much as possible” for plastic products, and we publish our actual waste emissions on our website.*

### (10.2) Indicate whether your organization engages in the following activities.

#### Production/commercialization of plastic polymers (including plastic converters)

#### (10.2.1) Activity applies

Select from:

No

### (10.2.2) Comment

*Our company does not manufacture or sell plastic polymers.*

## Production/commercialization of durable plastic goods and/or components (including mixed materials)

### (10.2.1) Activity applies

Select from:

No

### (10.2.2) Comment

*Our company does not produce or commercialize durable plastic goods and/or components.*

## Usage of durable plastics goods and/or components (including mixed materials)

### (10.2.1) Activity applies

Select from:

Yes

### (10.2.2) Comment

*Chubu Electric Power Grid Co., Inc., a company that operates power transmission and distribution businesses, uses plastic products purchased from other companies for things like power transmission and distribution line covers and electricity meter covers.*

## Production/commercialization of plastic packaging

### (10.2.1) Activity applies

Select from:

No

## (10.2.2) Comment

*Our company does not produce or commercialize plastic packaging.*

## Production/commercialization of goods/products packaged in plastics

### (10.2.1) Activity applies

Select from:

No

## (10.2.2) Comment

*Our company does not produce or commercialize products/merchandise packaged in plastic packaging.*

## Provision/commercialization of services that use plastic packaging (e.g., food services)

### (10.2.1) Activity applies

Select from:

No

## (10.2.2) Comment

*Our company does not provide or commercialize services that use plastic packaging.*

## Provision of waste management and/or water management services

### (10.2.1) Activity applies

Select from:

No

## (10.2.2) Comment

*Our company does not provide waste management or water management services related to plastics.*

## **Provision of financial products and/or services for plastics-related activities**

### **(10.2.1) Activity applies**

*Select from:*

No

### **(10.2.2) Comment**

*Our company does not provide financial products or services for plastic-related activities.*

## **Other activities not specified**

### **(10.2.1) Activity applies**

*Select from:*

No

### **(10.2.2) Comment**

*Our company does not engage in any other activities related to plastics.*

**(10.4) Provide the total weight of plastic durable goods and durable components produced, sold and/or used, and indicate the raw material content.**

	Total weight during the reporting year (Metric tons)	Raw material content percentages available to report	Please explain
Durable goods and durable components used	1838	Select all that apply <input checked="" type="checkbox"/> None	<i>Chubu Electric Power Grid Co., Inc., a company that operates power transmission and distribution businesses, uses plastic products purchased from other companies for things like power transmission and distribution line covers and electricity meter covers.</i>

## C11. Environmental performance - Biodiversity

### (11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

#### (11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

- Yes, we are taking actions to progress our biodiversity-related commitments

#### (11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

- Land/water management
- Species management
- Education & awareness

### (11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	<p>Select from:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Yes, we use indicators</li> </ul>	<p>Select all that apply</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Pressure indicators</li> <li><input checked="" type="checkbox"/> Response indicators</li> </ul>

## (11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

### Legally protected areas

**(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity**

Select from:

Yes

### **(11.4.2) Comment**

*It is assumed that legally protected areas include national parks and quasi-national parks, and the national parks and quasi-national parks in the five central prefectures are listed below. Jōshin'etsu Kōgen National Park, Myōkō-Togakushi Renzan National Park, Chūbu Sangaku National Park, Hakusan National Park, Ise-Shima National Park, Minami Alps National Park, Yatsugatake-Chūshin Kōgen Quasi-National Park, Chūō Alps Quasi-National Park, Tenryū-Okumikawa Quasi-National Park, Ibi-Sekigahara-Yōro Quasi-National Park, Hida-Mizogawa Quasi-National Park, Aichi Kōgen Quasi-National Park, Mikawa Wan Quasi-National Park, Suzuka National Park, Muro Akame Aoyama National Park*

### UNESCO World Heritage sites

**(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity**

Select from:

Yes

### **(11.4.2) Comment**

*The UNESCO World Heritage sites in the five prefectures of the Chubu region are Shirakawa-go and the Kii Mountain Range.*

### UNESCO Man and the Biosphere Reserves

**(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity**

Select from:

Yes

## (11.4.2) Comment

*UNESCO Man and Biosphere Reserves are considered to be Biosphere Reserve Areas (UNESCO Ecoparks) and are answered as such. The UNESCO Ecoparks in the five central prefectures are Shiga Kogen, Hakusan, Odaigahara/Omine/Osugidani, Minami Alps, and Kobushin*

## Ramsar sites

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

Yes

## (11.4.2) Comment

*The Ramsar Convention sites in the five prefectures of the Chubu region are the Fujimae Tidal Flat and the Tokai Hills Spring Water Wetland Group.*

## Key Biodiversity Areas

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

Yes

## (11.4.2) Comment

*The Important Biodiversity Areas (KBA) in the five prefectures of the Chubu region are as follows: 118 Northern Japan Alps, 119 Chausu-yama Pond Group, 120 Yatsugatake Chushin Highland, 131 Hakusan, 134 Nogo Hakusan/Ibukiyama, 135 Hida-Kiso River, 136 Tenryu Okumikawa, 137 Aichi Highlands, 139 Fujimae Tidal Flat, 140 Shiokawa Tidal Flat, 141 Ikawazu, 142 Yahagigawa Estuary, 143 Unoyama, 145 Unozu, Atago and Kongo River Estuaries, 146 Yoshino-Kumano, 147 Kii-Nagashima*

## Other areas important for biodiversity

### (11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

Yes

### (11.4.2) Comment

*Other examples of areas important for biodiversity include the Uchigatani Forest, where our company is aiming to be registered as an OECM site, and the Chubu District's natural symbiosis site.*

### (11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity.

#### Row 1

#### (11.4.1.2) Types of area important for biodiversity

Select all that apply

- Ramsar sites
- Key Biodiversity Areas
- Legally protected areas
- UNESCO World Heritage sites
- UNESCO Man and the Biosphere Reserves
- Other areas important for biodiversity

#### (11.4.1.3) Protected area category (IUCN classification)

Select from:

Category Ia-III

#### (11.4.1.4) Country/area

Select from:

Japan

#### (11.4.1.5) Name of the area important for biodiversity

*In Japanese, it is considered to be an IUCN Category I Strict Nature Reserve, Category II National Park, Category III Natural Monument, Category IV Area for the Management of Species and Habitats, Category V Landscape Conservation Area, and Category VI Protected Area. hogorin\_seido-46.pdf (maff.go.jp)*

*However, as specific names have not been designated, we will list national parks, quasi-national parks, UNESCO World Heritage sites, UNESCO Ecoparks, Ramsar Convention sites, and KBAs again. National Parks: Joshinetsu Kōgen National Park, Myōkō-Togakushi Renzan National Park, Chūbu-Sangaku National Park, Hakusan National Park, Ise-Shima National Park, Minami-Alps National Park Quasi-National Parks: Yatsugatake-Chūshin Kōgen Quasi-National Park, Chūō-Alps Quasi-National Park, Tenryū-Okumikawa Quasi-National Park, Ibi-Sekigahara-Yōro Quasi-National Park, Hida-Mishigawa Quasi-National Park, Aichi-Kōgen Quasi-National Park, Mikawa Wan National Park, Suzuka National Park, Muro-Akame-Aoyama National Park UNESCO World Heritage Shirakawa-go, Kii Mountain Range UNESCO Ecopark Shiga Kogen, Hakusan, Odaigahara/Omine/Osugidani, Southern Alps, Kobushin Ramsar Convention Site Fujimae Tidal Flat, Tokai Hill Spring Wetland Group KBA Northern Alps, Chausu Mountain Peripheral Pond Group, Yatsugatake Chushin , Hakusan, Nogo Hakusan-Ibukiyama, Hida-Kiso River, Tenryu Okumikawa, Aichi Highlands, Fujimae Tidal Flat, Shiokawa Tidal Flat*

#### (11.4.1.6) Proximity

Select from:

Overlap

#### (11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

*Power transmission, power distribution, power generation*

#### (11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

Yes, but mitigation measures have been implemented

#### (11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- Project design
- Physical controls

#### (11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

*At hydroelectric power stations, fish ladders are installed in dams to allow the upstream migration of native freshwater fish species. We collected, organized, analyzed existing documents, and conducted field surveys to understand the current situation with regard to environmental factors that are expected to change due to the construction and operation of wind power stations, and we predicted the extent of the impact and examined the issues that should be considered for environmental conservation. In addition, depending on the environmental factor, we conducted surveys and predictions based on the advice of experts. Based on the results of the survey and prediction, we examined and evaluated whether the environmental impact was avoided or reduced to the extent feasible, and whether appropriate consideration was given to environmental conservation. We also examined and evaluated whether the project was consistent with environmental conservation measures such as environmental standards and regulatory standards for environmental conservation set by the national or local government. For example, we decided to minimize the alteration of vegetation to the greatest extent possible due to the installation of facilities, and to promote the recovery of vegetation by using the topsoil, etc. to the greatest extent possible.*

#### Row 2

#### (11.4.1.2) Types of area important for biodiversity

Select all that apply

- Ramsar sites
- Key Biodiversity Areas
- Legally protected areas
- UNESCO World Heritage sites
- UNESCO Man and the Biosphere Reserves
- Other areas important for biodiversity

#### (11.4.1.3) Protected area category (IUCN classification)

Select from:

- Category IV-VI

#### (11.4.1.4) Country/area

Select from:

Japan

#### (11.4.1.5) Name of the area important for biodiversity

*In Japanese, it is considered to be an IUCN Category I Strict Nature Reserve, Category II National Park, Category III Natural Monument, Category IV Area for the Management of Species and Habitats, Category V Landscape Conservation Area, and Category VI Protected Area. hogorin\_seido-46.pdf (maff.go.jp)*

*However, as specific names have not been designated, we will list national parks, quasi-national parks, UNESCO World Heritage sites, UNESCO Ecoparks, Ramsar Convention sites, and KBAs again. National Parks: Joshinetsu Kōgen National Park, Myōkō-Togakushi Renzan National Park, Chūbu-Sangaku National Park, Hakusan National Park, Ise-Shima National Park, Minami-Alps National Park Quasi-National Parks: Yatsugatake-Chūshin Kōgen Quasi-National Park, Chūō-Alps Quasi-National Park, Tenryū-Okumikawa Quasi-National Park, Ibi-Sekigahara-Yōro Quasi-National Park, Hida-Mishigawa Quasi-National Park, Aichi-Kōgen Quasi-National Park, Mikawa Wan National Park, Suzuka National Park, Muro-Akame-Aoyama National Park UNESCO World Heritage Shirakawa-go, Kii Mountain Range UNESCO Ecopark Shiga Kogen, Hakusan, Odaigahara/Omine/Osugidani, Southern Alps, Kobushin Ramsar Convention Site Fujimae Tidal Flat, Tokai Hill Spring Wetland Group KBA Northern Alps, Chausu Mountain Peripheral Pond Group, Yatsugatake Chushin , Hakusan, Nogo Hakusan-Ibukiyama, Hida-Kiso River, Tenryu Okumikawa, Aichi Highlands, Fujimae Tidal Flat, Shiokawa Tidal Flat*

#### (11.4.1.6) Proximity

Select from:

Overlap

#### (11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

*Power transmission, power distribution, power generation*

#### (11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

Yes, but mitigation measures have been implemented

#### (11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

Project design

Physical controls

**(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented**

*At hydroelectric power stations, fish ladders are installed in dams to allow the upstream migration of native freshwater fish species. We collected, organized, analyzed existing documents, and conducted field surveys to understand the current situation with regard to environmental factors that are expected to change due to the construction and operation of wind power stations, and we predicted the extent of the impact and examined the issues that should be considered for environmental conservation. In addition, depending on the environmental factor, we conducted surveys and predictions based on the advice of experts. Based on the results of the survey and prediction, we examined and evaluated whether the environmental impact was avoided or reduced to the extent feasible, and whether appropriate consideration was given to environmental conservation. We also examined and evaluated whether the project was consistent with environmental conservation measures such as environmental standards and regulatory standards for environmental conservation set by the national or local government. For example, we decided to minimize the alteration of vegetation to the greatest extent possible due to the installation of facilities, and to promote the recovery of vegetation by using the topsoil, etc. to the greatest extent possible.*

## C13. Further information & sign off

**(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?**

### **(13.1.1) Other environmental information included in your CDP response is verified and/or assured by a third party**

Select from:

No, and we do not plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years

### **(13.1.2) Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party**

Select from:

Not an immediate strategic priority

### **(13.1.3) Explain why other environmental information included in your CDP response is not verified and/or assured by a third party**

*The Chuden group's core business is the electricity business, and the top priority in this business is to promote the Zero Emission Challenge 2050, which aims for the realization of a carbon-free society. For this reason, receiving third-party assurance for the indicators related to this issue is a top priority from a strategic perspective, but receiving third-party assurance for other indicators is not a top priority, and we do not have any plans to receive third-party assurance within the next two years.*

**(13.3) Provide the following information for the person that has signed off (approved) your CDP response.**

#### **(13.3.1) Job title**

*General Manager, Corporate Planning & Strategy Division*

### (13.3.2) Corresponding job category

Select from:

Other C-Suite Officer

**(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.**

Select from:

No