

C0. Introduction

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C0.1

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**(C0.1) Give a general description and introduction to your organization.**

Tokyo Electric Power Company, Incorporated (TEPCO) is one of the largest electric power companies in Japan, which is responsible for the energy supply infrastructure centered on the Tokyo metropolitan area including the capital Tokyo. Established in 1951, TEPCO Co., Ltd. has been supporting the economic activities of the Tokyo metropolitan area and the lives of local customers for more than 60 years through an integrated system of power generation, transmission and distribution, and retail. In 2016, TEPCO moved to a holding company system ahead of other electric power companies, and then, in 2019, integrated the fuel procurement and thermal power generation business with JERA Co., Ltd. The group currently consists of operating companies that are responsible for the renewable energy and nuclear energy power generation businesses, power transmission and distribution businesses, and retail businesses.

C0.2

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**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	April 1 2019	March 31 2020	Yes	3 years

C0.3

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**(C0.3) Select the countries/areas for which you will be supplying data.**

Japan

C0.4

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**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

JPY

C0.5

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**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Financial control

C-EU0.7

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**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

**Row 1**

**Electric utilities value chain**

- Electricity generation
- Transmission
- Distribution

**Other divisions**

- Gas storage, transmission and distribution
- Smart grids / demand response

C1. Governance

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C1.1

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**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

**C1.1a**

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
President	The Board of Directors is the highest decision-making body regarding the management of the TEPCO Group. The President and Representative Executive Officer, a member of the Board of Directors, chairs the ESG Committee, the supreme body that specializes in discussing climate change issues. In addition, the President and Representative Executive Officer is positioned as the person in charge of planning environmental policies including overall climate change countermeasures. At the meeting of the Board of Directors in January 2020, as a part of the transition to the main power source of renewable energy, we discussed and decided to invest in the Dariali hydroelectric power plant in Georgia.

**C1.1b**

**(C1.1b) Provide further details on the board's oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives	<Not Applicable>	We have formulated action plans for business execution (business plan) including climate change issues and select responsible officers (executive representative vice president). In addition, we report to the Board of Directors on the status of business execution quarterly, and are supervised strategies, action plans (actions) and performance targets, including revisions as necessary. Likewise, risks and budgets including climate change issues are supervised by the Board of Directors.

**C1.2**

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Financial Officer (CFO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Other committee, please specify (the Environmental Strategy Committee)	<Not Applicable>	Managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Other committee, please specify (ESG Committee)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Half-yearly

**C1.2a**

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

Since TEPCO recognizes that addressing climate change is an important management issue, the Board of Directors appoints CFO and Deputy Executive Vice President as the executive officer for the ESG. The officer has the responsibility for the implementation and constantly monitoring the status of management of those issues. The officer regularly reviews the progress of the business plan including climate-related issues and reports to the Board of Directors once a quarter. This is how the Board of Directors oversees the implementation. If the officer deems it necessary to make an important management decisions on policies such as emission reduction targets, it will be referred to the Board of Directors. In addition, the Company has established the Environmental Strategy Committee, chaired by the officer in charge, to discuss measures for dealing with environmental issues including climate change. In 2019, in addition to the Environmental Strategy Committee, the ESG Committee has been formed, which is chaired by the President and Representative Executive Officer and chaired by the officer in charge of ESG. The ESG Committee deliberates on environmental issues, including non-financial information disclosure related to climate change, as well as social and governance issues and response policies.

**C1.3**

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

**C1.3a**

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Financial Officer (CFO)	Monetary reward	Emissions reduction project	The CFO is responsible for all relevant corporate environmental issues, including compliance of relevant environmental law and regulations, climate impact mitigation, conservation activities and GHG emission reduction target. The resultant of these operations is reflected in its personal performance and its monetary reward.
All employees	Monetary reward	Emissions reduction target	For the purpose of promoting the company's environmental activities, employees who have acquired national qualifications (such as "Qualified Person for Energy Management") related to environmental activities, such as energy conservation and CO2 emissions reduction, and inventor and design creator who registered the patent, get the awards and monetary reward. For instance, those who have qualified the license of "Qualified Person for Energy Management" are also chosen to be "Energy Manager for Type 2 Designated Energy Management Factory" and "Energy Manager for Type 1 Designated Energy Management Factory". They play a pivotal role in promoting energy conservation and in realizing energy conservation (CO2 reduction) by instructing employees and suggestion to customers with the knowledge of maintaining and controlling facilities. By making our facilities and customer's facilities more efficient, it will contribute to the CO2 emission reduction directly or indirectly, we give an award and the monetary reward (50,000 yen) to the person who have qualified the license of "Qualified Person for Energy Management."

**C2. Risks and opportunities**

**C2.1**

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

**C2.1a**

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	3	The corporate business plan compiles the priority management items and respective action plans for 1 year term. The annual financial plan covers revenues and expenditure of business plan for 3 year period.
Medium-term	3	10	The Revised Comprehensive Special Business Plan, which is the basis of our management, summarizes each business item to realize discontinuous management reform and improvement of corporate value, and the respective income and expenses in 10-year units. Our risk assessment and management process also takes into consideration 10 years, and we also forecast power supply planning based on 10 years.
Long-term	10		We define a period longer than 10 years as long-term.

**C2.1b**

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

When assessing climate-related risks, we carry out risk assessments of oversize, large, medium, and small for each element of social impact (electricity supply, human damage, livelihood obstacles) and economic loss. For example, from the perspective of power supply, the impact period is evaluated in four stages: one month or more, less than one month, several days, and a moment. In addition to this, an overall evaluation is carried out in consideration of the evaluation of other social impacts or economic losses.

**C2.2**

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

**Value chain stage(s) covered**

Direct operations

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

Medium-term

Long-term

**Description of process**

In recent years, natural disasters such as typhoons and heavy rains associated with climate change are increasing. There is a physical risk such as a power failure due to a complete stoppage of a hydroelectric power station that is responsible for regional supply due to typhoons and heavy rain. We have set up a Risk Management Committee with the purpose of centrally managing the TEPCO Group's risk management from normal times and assisting the President & CEO in making decisions regarding the handling of emerging risks. When a risk is actualized, we will discuss and consider countermeasures and recurrence prevention measures. Specifically, the Risk Management Committee conducts risk assessments for each element of social impact (electricity supply, human injury, obstacles to life) and economic loss, including oversize, large, medium, and small. For example, in response to this physical risk, we are taking measures such as identifying the location of sediment collapse risk and conducting an inspection in case of heavy rain. As a measure to mitigate damage in the event of an actual occurrence, we take out property insurance for hydroelectric power generation facilities and profit insurance that compensates for lost profits due to power outages due to disasters.

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**Value chain stage(s) covered**

Upstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

Medium-term

Long-term

**Description of process**

We are in charge of the power generation business in the remote islands and procure fuel for power generation for them. However, due to typhoons and heavy rainfall associated with climate change in recent years, fuel supply have ceased and power cannot be generated on the islands, which poses a physical risk of long-term blackouts. We have set up a Risk Management Committee with the purpose of centrally managing the TEPCO Group's risk management from normal times and assisting the President & CEO in making decisions regarding the handling of emerging risks. When a risk is actualized, we will discuss and consider countermeasures and recurrence prevention measures. Specifically, the Risk Management Committee conducts risk assessments for each element of social impact (electricity supply, human injury, obstacles to life) and economic loss, including oversize, large, medium, and small. For example, in response to this physical risk, we are implementing measures such as residual fuel amount management in preparation for fuel transportation disruption, and we will consider diversifying our fuel suppliers in the future.

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**Value chain stage(s) covered**

Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

Medium-term

Long-term

**Description of process**

In Japan, retail electric utilities are required to "set the non-fossil power source ratio to 44% of the amount of electric power procured in fiscal 2030". In the future, there is a transition risk that regulatory measures will be introduced, such as being forced to set further CO2 reduction voluntary targets and forcing individual companies to achieve a high non-fossil value procurement ratio. We have set up a Risk Management Committee with the purpose of centrally managing the TEPCO Group's risk management from normal times and assisting the President & CEO in making decisions regarding the handling of emerging risks. When a risk is actualized, we will discuss and consider countermeasures and recurrence prevention measures. Specifically, the Risk Management Committee conducts risk assessments for each element of social impact (electricity supply, human injury, obstacles to life) and economic loss, including oversize, large, medium, and small. For example, in response to this transition risk, we are working to reduce the risk by providing accurate opinions to the government, etc. based on the collection and analysis of international and domestic trends.

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C2.2a

**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	In Japan, electric retailers are required to "set the non-fossil power supply ratio to 44% of the electric power procured in fiscal 2030". As our non-fossil power supply ratio in FY2019 electric power supply is approximately 15%, it is necessary to procure non-fossil power supply systematically to achieve the target. On the other hand, because Japan's non-fossil power sources potential are limited, competition for procurement of non-fossil power sources may increase the cost of purchasing non-fossil power sources. As a result, our business results and financial condition may be adversely affected. The risk is monitored by the Risk Management Committee on current regulatory trends and evaluating financial and strategic impacts from the viewpoint of "probability of occurrence" and "degree of influence" while establishing some scenarios (6 months or more with frequency).
Emerging regulation	Relevant, always included	If the Japanese government introduced additional regulations such as carbon pricing for fossil fuels, our procurement from thermal power generation will account for approximately 80% of the total procurement volume, which may increase procurement costs. As a result, our business results and financial condition may be adversely affected. The risk is monitored by the Risk Management Committee on current regulatory trends. Also, while assessing additional regulations introduction scenarios, and we evaluates financial and strategic impacts from the viewpoint of "probability of occurrence" and "degree of influence" (6 months or more with frequency).
Technology	Relevant, always included	With innovation, the cost of generating renewable energy can be significantly reduced even in Japan and deployments can increase sharply. Above all, when non-farm power supplies increase rapidly without any adjustment, the stability of the power supply declines, and it is assumed that it will affect the power supply to the Kanto area including the capital Tokyo where our company mainly operates. As a result, the credibility of the company as a T&D network operator can be greatly reduced. The risk is monitored by the Risk Management Committee on technology trends and evaluating financial and strategic impacts from the viewpoint of "probability of occurrence" and "degree of influence" while establishing some scenarios (6 months or more with frequency).
Legal	Relevant, always included	As we procure 80% of sales power from thermal power plants, we will be the largest thermal power producer in Japan. As a result, the growing awareness of climate change in the world may cause lawsuits to be sued by neighbors of thermal power plants to stop procuring power from thermal power. In addition, corporate value is lowered by this, and there is a risk that a shareholder may sue. The risks are evaluated financial and strategic impacts from the viewpoint of "possibility of occurrence" and "degree of influence" at the risk management meeting while collaborating through appropriate information cooperation with related sections (6 months More frequently).
Market	Relevant, always included	Changes in customer needs due to climate change-related regulations and social conditions affect the electricity retail market. The Kanto area, where our company mainly operates, is the area where the liberalization of electricity retailing is most advanced, and it has already lost about 20% of its customers compared with before the liberalization. In the future, customer needs may change due to climate change, and customers may demand lower carbon or zero-carbon electricity. If we are unable to provide low carbon electricity, our competitive advantage may be compromised. This risk is evaluated at the risk management meeting on financial and strategic impacts (at a frequency of 6 months or more) from the viewpoint of "possibility of occurrence" and "degree of influence".
Reputation	Relevant, always included	The annual CO2 emissions associated with the electricity we deliver to customers account for about 9% of Japan's annual CO2 emissions. Therefore, if we can not reduce our CO2 emission without taking measures against climate change (introduction of renewable energy, restart of nuclear power, etc.), it will have a big impact to Japan's CO2 emission. As a result, it may not meet the expectations of low-carbon-oriented stakeholders and the corporate brand may decline. The risks are evaluated for their financial and strategic impacts from the viewpoint of "possibility of occurrence" and "degree of influence" at the risk management meeting (At a frequency of 6 months or more).
Acute physical	Relevant, always included	We operate T&D business based in Kanto, including the capital Tokyo. For example, if extreme typhoons in associated with climate change hits the Kanto region, storms, storm surges on the Pacific coast, and inland river floods cause large-scale and long-term power outages, preventing stable power supply. In particular, with regard to the Tone River and Arakawa, which flow through the Kanto region where our company mainly works, the Cabinet Office is also estimating the damage, as the scale of damage may increase if flooding occurs due to heavy rain. If we can not respond appropriately to these damages, additional costs may be incurred for restoration and network facilities (such as transmission towers). As a result, our business results and financial condition may be affected. Through sharing examples of past damage and countermeasures, the risk assesses the financial and strategic impacts from the viewpoint of "possibility of occurrence" and "degree of influence" at the risk management meeting (at a frequency of 6 months or more).
Chronic physical	Relevant, always included	If the change in precipitation pattern caused by climate change causes a drought, and the amount of hydroelectric power decreases significantly, there is a possibility that it will not be able to supply customers who have contracted the menu of 100% of our hydroelectric power (Aqua Premium etc.) As a result, it may cause inconvenience to customers (or even may cause non-compliance for RE100 obligation), which may reduce corporate value and may affect the Group's business performance and financial position. This risk is evaluated at the Risk Management Committee from financial viewpoints of "possibility of occurrence" and "degree of influence" (at a frequency of 6 months or more).

**C2.3**

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.3a**

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Current regulation	Mandates on and regulation of existing products and services
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**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Japan stipulates that "the percentage of non-fossil power in electricity sales by electric retailers should be 44% in 2030". The non-fossil power supply ratio to our sales power in fiscal 2019 is as low as approximately 15% because the nuclear power plant is not operating. In addition, as the average non-fossil power ratio in Japan in fiscal 2019 is approximately 20%, our non-fossil power ratio is inferior to competitors as of fiscal 2019. As a result, the cost of achieving the goals set by the country may be higher than the competitor.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

0

**Potential financial impact figure – maximum (currency)**

7910000000

**Explanation of financial impact figure**

If it is difficult to achieve 44% non-fossil power in fiscal 2030, it is possible to procure and achieve non-fossil power certificates. Non-fossil power accounted for 15% of our sales in FY2019. In 2030, non-fossil power supply ratio (FY 2019 results: 15%), electric power sales (FY 2019 results: 209.7 billion kwh), non-fossil certificate price (FY 2019 results: 1.3 yen / kwh) are each 2019 and Assuming that the level is the same, the cost will increase up to 79.1 billion yen.  $209.7 \text{ billion kwh} \times (0.44 - 0.15) \times 1.3 \text{ yen / kwh} = 79.1 \text{ billion yen}$

**Cost of response to risk**

15942000000

**Description of response and explanation of cost calculation**

We are working to reduce the financial impact as of 2030 through the development of renewable energy sources and efforts to restart nuclear power. In fiscal 2019, capital investment of 15,942,000,000 yen for hydropower, new energy, etc. is recorded as management expenses.

**Comment**

**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
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**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

The Company operates based in Kanto, including the capital Tokyo. With regard to the Tone River and Arakawa that flow through the area, the Cabinet Office has also made an assumption of damage if there is a flood due to a heavy rain every 200 years, and we have taken measures to reduce the damage according to that assumption.

**Time horizon**

Medium-term

**Likelihood**

Unlikely

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

0

**Potential financial impact figure – maximum (currency)**

2271360000

**Explanation of financial impact figure**

It is estimated that there will be about 1.8 million blackouts when Arakawa and Tonegawa have flooded. Assuming that the market share of our company is 80% and it takes one week to resume the supply of electricity, it is the largest decrease in sales power.  $1.8 \text{ million houses} \times \text{share ratio } 0.8 \times 260 \text{ kwh / month} \times 7/30 \text{ days} \times 26 \text{ yen / kWh} = \text{approximately } 2,27136 \text{ million}$

**Cost of response to risk**

520988000000

**Description of response and explanation of cost calculation**

Following countermeasures against natural disasters such as high tide caused by typhoon, river flood caused by heavy rain are prepared: i) watertight building of electric facilities such as watertight door and tide gate ii) levelling of installation of electric facilities to avoid being inundated iii) making facilities waterproof iv)precautions (restoration of facilities) in order to supply electricity with power facility when water reached Regular company-wide disaster prevention training and training for smooth internal communication are prepared, to rapidly collect information on damages of power facilities(transmission steel towers etc.), blackout, requests from related organizations, to consider emergent response to recover damaged power facilities, to consider effective allocation of equipment and personnel. Moreover, we regularly participate in disaster training held by national and local government and training for flexibly offering equipment for recovery between utilities. In addition, in fiscal 2019, the company recorded an allowance for disaster losses of ¥ 520,988,000,000 for financial impact mitigation measures.

**Comment**

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**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
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**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Climate risk type mapped to traditional financial services industry risk classification**

&lt;Not Applicable&gt;

**Company-specific description**

The TEPCO Group owns 163 hydroelectric power stations, mainly in the Kanto region, and has a power generation capacity of 9.87 million kW. A power plant can be damaged if it experiences water shortages or equipment problems due to climate change. In addition, the amount of power generated may decrease, which may adversely affect profits.

**Time horizon**

Medium-term

**Likelihood**

Unlikely

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

0

**Potential financial impact figure – maximum (currency)**

362132000000

**Explanation of financial impact figure**

We have hydroelectric power generation facilities in 163 locations, and the book value is 362,132,000,000 yen.

**Cost of response to risk**

57000000

**Description of response and explanation of cost calculation**

In order to ensure countermeasures against disaster risks due to disasters, from 2018 we took out property insurance for hydroelectric power facilities and profit insurance to compensate for lost profits due to power outages due to disasters. The non-life insurance premium for FY2019 is 57,000,000 yen.

**Comment**

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## C2.4

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**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

### C2.4a

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**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.****Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Reduced direct costs

**Company-specific description**

We own seven nuclear power plants and an installed capacity of approximately 8,212 GW, but they are all inactive right now. Recognizing that operating a power generation facility that does not emit any CO2 during power generation will help meet the needs of retailers and customers who demand low-carbon electricity, as well as contribute to

the cost reduction of our own power generation.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

0

**Potential financial impact figure – maximum (currency)**

110000000000

**Explanation of financial impact figure**

We are committed to putting the Kashiwazaki-Kariwa nuclear power plant into operation with the highest priority on safety. If one unit is operated, it is expected to reduce the maximum income by 110 billion yen in a single year and reduce CO2 emissions by 2.8 million tons from the sale of electricity.

**Cost to realize opportunity**

1169000000000

**Strategy to realize opportunity and explanation of cost calculation**

We are working on the operation of the Kashiwazaki-Kariwa Nuclear Power Plant, which is premised on ensuring safety. As a cost to realize this opportunity, we have posted a safety measure cost of 1,169 billion yen.

**Comment**

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**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Reduced direct costs

**Company-specific description**

We are working on promoting the renewable energy generation business, and are planning development renewables of around 6 to 7 GW globally. If it realizes as planned, we anticipate additional revenue of 100 Billion yen annually. In Japan, under the Sophisticated Methods of Energy Supply Structures Law, electricity retailers, including TEPCO Energy Partner Inc., are obliged to increase the ratio of non-fossil power sources to 44% in 2030. To comply the Law and to meet RE100 requirements, the opportunity for renewable energy business would therefore increase towards 2030 even in Japan.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

0

**Potential financial impact figure – maximum (currency)**

100000000000

**Explanation of financial impact figure**

If renewable energy is developed as planned, it is expected to reach a profit level of around 100 billion yen.

**Cost to realize opportunity**

15942000000

**Strategy to realize opportunity and explanation of cost calculation**

Based on the knowledge and technology that has been operating a hydroelectric power plant for over 100 years, we plan to expand overseas, focusing on Southeast Asia, and carry out development of about 2 to 3 million kW. As for offshore wind power, demonstration tests have been conducted off the coast of Shishiko in Chiba Prefecture from October 2013, and we aim to develop around 2 to 3 million kW in Japan. Furthermore, in January 2019, we partnered with the world's largest offshore wind power company, Orsted. Based on the accumulated knowledge and technology, we will expand overseas mainly in Asia and Europe and aim for the development of 2 to 3 million kW scale. Including the cost to realize this opportunity, capital investment in hydropower, new energy, etc. in 2019 will be 15,942,000,000 yen.



## Comment

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### Identifier

Opp3

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Shift in consumer preferences

### Primary potential financial impact

Other, please specify (移り変わる消費者の嗜好を反映し、より良い競争上の地位を確立することによる収益増)

### Company-specific description

We have approximately 20 million power contract customers, and have information on customer power usage and energy saving knowledge and technology. Recently, in light of the growing need for value improvement of existing homes by improving energy saving performance, we established a joint venture company with Epco in August 2017, and the majority of greenhouse gas emissions in the household sector Promoting energy saving projects targeting existing homes.

### Time horizon

Medium-term

### Likelihood

Likely

### Magnitude of impact

Medium-high

### Are you able to provide a potential financial impact figure?

Yes, an estimated range

### Potential financial impact figure (currency)

<Not Applicable>

### Potential financial impact figure – minimum (currency)

0

### Potential financial impact figure – maximum (currency)

25500000000

### Explanation of financial impact figure

We aim for sales of approximately 50 billion yen in fiscal 2021, with a maximum impact of 25.5 billion yen based on our investment ratio.

### Cost to realize opportunity

255000000

### Strategy to realize opportunity and explanation of cost calculation

Information on energy use and energy saving knowledge and technology of approximately 20 million customers including Tokyo, which the Company owns, and EPCO's know-how in designing home equipment over 1 million houses, after-sales maintenance function of general housing and We will provide comprehensive energy saving services for homes that combine the strengths of each other, such as system development capabilities. Specifically, the energy saving diagnosis is performed based on the energy and the usage condition of the device at home, and the proposal, such as replacement to the energy saving device, designs, constructions, and after-sales service, and the application originally developed by our company. We propose optimal energy saving while presenting the effects of reduction of utility costs based on your current usage of electricity and gas. As a cost to realize this opportunity, we invested 255,000,000 yen, which is 51% of the 500,000,000 yen capital required to establish the company.

## Comment

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## C3. Business Strategy

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### C3.1

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#### (C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

### C3.1a

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#### (C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, quantitative

### C3.1b

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**(C3.1b) Provide details of your organization's use of climate-related scenario analysis.**

Climate-related scenarios and models applied	Details
IEA NPS	Tokyo Electric Power Holdings is the first Japanese energy company to support with the April 2019 TCFD recommendations and is a core member of the Japan TCFD Consortium. <a href="https://www7.tepco.co.jp/newsroom/press/archives/2019/tepco-becomes-first-utility-company-in-japan-to-express-support-for-task-force-on-climate-related-financial-disclosures-tcfd-recommendations.html">https://www7.tepco.co.jp/newsroom/press/archives/2019/tepco-becomes-first-utility-company-in-japan-to-express-support-for-task-force-on-climate-related-financial-disclosures-tcfd-recommendations.html</a> According to the scenario analysis method in the TCFD recommendations, we have identified multiple climate scenarios including the 2 ° C scenario and analyzed the resilience of the TEPCO Group's business strategy. Regarding the climate scenario, we are referring to the NPS of IEAWEO2018 and looking at the target of the Paris Agreement in the latter half of this century, we are conducting a long-term analysis including 2050. As a result, the improvement of electrification rate was found to be correlated with GHG reduction, and the summary was announced in the 2019 integrated report. At the same time, we identify opportunities and risks related to climate change, report the results and scenario analysis results to the ESG Committee, which is a member of the President and other executive officers, and utilize them in our business strategy. As a result of scenario analysis, we reaffirm that it is important to promote decarbonization and electrification of electricity in order to reduce CO2, and specifically decided the following. <ul style="list-style-type: none"> <li>Establishment of a company (e-Mobility Power) that conducts business related to electric vehicles</li> <li>Establishment of renewable energy promotion department at electric retail company</li> <li>Split the renewable energy power generation business</li> <li>Set target to reduce CO2 emissions of electricity sold in FY2030 by half compared to FY2013</li> </ul> We have transferred its thermal power generation business to JERA, and fossil fuel-related assets have decreased significantly. Therefore, we believe it is unlikely that our assets will become stranded assets in the medium to long term due to the risk of transition associated with climate change.
IEA Sustainable development scenario	Again this year, according to the scenario analysis method in the TCFD recommendations, we have identified multiple climate scenarios including the 2 ° C scenario and analyzed the resilience of the TEPCO Group's business strategy at this year. Regarding the climate scenario, we are referring to the STEPS and SDS of IEAWEO2019 and looking at the latter half of this century, which is targeted by the Paris Agreement, and conducting a long-term analysis including 2050. It also identifies opportunities and risks based on IPCC RCP 2.6 to 8.5. The contents are reported to the ESG Committee, which is a member of the President and CEO and the executive officers of each core operating company, and the summary will be announced in the integrated report for 2020.

**C3.1d**

**(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	( Opportunity3 ) Specifically, we carry out energy-saving diagnosis based on the energy usage at home and equipment usage, and implement the following to propose optimal energy-saving. <ul style="list-style-type: none"> <li>Suggestions such as replacement with energy-saving equipment</li> <li>Design, construction, after-sales service</li> <li>We will show you the effect of reducing utility costs based on the customer's usage of electricity and gas, etc.</li> </ul> The company is aiming for sales of approximately 50 billion yen in fiscal 2021, and its investment ratio will have a maximum impact of 25.5 billion yen. The impact of this amount on our company is "medium".
Supply chain and/or value chain	Yes	( Risk1 ) In Japan, the law stipulates that the proportion of non-fossil power sources to be sold in 2030 should be 44% to retailers of electricity. We operate a retail business, in 2030, non-fossil power supply ratio (FY 2019 results: 15%), electric power sales (FY 2019 results: 209.7 billion kWh), non-fossil certificate price (FY 2019 results: 1.3 yen / kWh) are each 2019 and Assuming that the level is the same, the cost will increase up to 79.1 billion yen. The degree of impact of this amount on our company is "medium".
Investment in R&D	Yes	( Opportunity 2 ) We are working on promoting the renewable energy business, and are considering development of around 6 to 7 million kW in Japan and overseas by the first half of the 2030s. As for offshore wind power, demonstration tests have been conducted off the coast of Isogo in Chiba Prefecture since October 2013, and we are developing around 2 to 3 million kW in Japan. If renewable energy is developed as planned, it is expected to reach a profit level of up to around 100 billion yen. The degree of impact of this amount on our company is "large".
Operations	Yes	( Opportunity 1 ) We are committed to putting the Kashiwazaki-Kariwa nuclear power plant into operation with the highest priority on safety. December 2020 is the completion time for the safety measures for Unit 7, etc., and we are currently working diligently to obtain licenses and safety measures for the new regulatory standards. If one unit is operated, it is expected to reduce the maximum income by 110 billion yen in a single year and reduce CO2 emissions by 2.8 million tons from the sale of electricity. The degree of impact of this amount on our company is "large".

**C3.1e**

**(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital allocation	We are working on promoting the renewable energy business, and are considering development of around 6 to 7 million kW in Japan and overseas by the first half of the 2030s. The company was spun off on April 1, 2020 for the purpose of clarifying the responsibility and authority for cooperation with domestic and overseas partners and swift decision-making for large-scale investment, and the flexibility of financing. The capital of the spin-off company is 1 billion yen. If renewable energy is developed as planned, it is expected to reach a profit level of up to around 100 billion yen. The degree of impact of this amount on our company is "large".

**C3.1f**

**(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

Further climate change strategies will be delivered ad detailed in the integrated report published in the fall of 2020, which is now under preparation.

<https://www.tepco.co.jp/en/hd/about/esg/index-e.html>

**C4. Targets and performance**

## C4.1

---

### (C4.1) Did you have an emissions target that was active in the reporting year?

Both absolute and intensity targets

## C4.1a

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### (C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

**Target reference number**

Abs 1

**Year target was set**

2020

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

**Base year**

2013

**Covered emissions in base year (metric tons CO2e)**

139200000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

85

**Target year**

2030

**Targeted reduction from base year (%)**

50

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

69600000

**Covered emissions in reporting year (metric tons CO2e)**

92600000

**% of target achieved [auto-calculated]**

66.9540229885057

**Target status in reporting year**

New

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Please explain (including target coverage)**

In response to the urgent issue of climate change, COP21 (December 2015) adopted the Paris Agreement, and Japan also established the "long-term strategy as a growth strategy based on the Paris Agreement". The final goal is a "carbon-free society", and it is said that we aim to achieve it as soon as possible. As an energy company, we will reduce the CO2 emissions of electricity delivered to customers by 50% or more by fiscal 2030, aiming to achieve both economic efficiency and environmental conservation, and to solve this global issue.

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## C4.1b

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**(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

**Target reference number**

Int 1

**Year target was set**

2015

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

**Intensity metric**

Metric tons CO2e per megawatt hour (MWh)

**Base year**

2013

**Intensity figure in base year (metric tons CO2e per unit of activity)**

0.57

**% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure**

100

**Target year**

2030

**Targeted reduction from base year (%)**

35

**Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]**

0.3705

**% change anticipated in absolute Scope 1+2 emissions**

0

**% change anticipated in absolute Scope 3 emissions**

35

**Intensity figure in reporting year (metric tons CO2e per unit of activity)**

0.462

**% of target achieved [auto-calculated]**

54.1353383458646

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Please explain (including target coverage)**

The intensity target was set out as industry-wide target in ELCS (the Electric power companies for Low Carbon Society), based on energy mix and GHG reduction target in FY2030 set out by Japanese government. Since the basic unit index for the reporting year has not been published, the actual results for 2018 were used instead.  $(0.570 - 0.462) / (0.570 - 0.370) = 0.540$  ( 54% )

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**C4.2**

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Other climate-related target(s)

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**C4.2b**

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

**Target reference number**

Oth 1

**Year target was set**

2019

**Target coverage**

Business activity

**Target type: absolute or intensity**

Absolute

**Target type: category & Metric (target numerator if reporting an intensity target)**

Low-carbon vehicles	Percentage of low-carbon vehicles in company fleet
---------------------	--

**Target denominator (intensity targets only)**

<Not Applicable>

**Base year**

2018

**Figure or percentage in base year**

10

**Target year**

2030

**Figure or percentage in target year**

100

**Figure or percentage in reporting year**

10

**% of target achieved [auto-calculated]**

0

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

Although it is not part of the emission target, efforts to achieve this target will reduce the amount of gasoline used by company-owned vehicles and contribute to GHG reductions.

**Is this target part of an overarching initiative?**

EV100

**Please explain (including target coverage)**

The TEPCO Group is accordingly planning to convert all of its approximately 4,400 commercial vehicles—excluding special construction and emergency vehicles—to run on electric power by the year 2030, and will be installing its own dedicated charging facilities. <https://www.tepco.co.jp/en/hd/newsroom/press/archives/2019/tepco-becomes-02.html>

**C4.3**

**(C4.3) 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.**

Yes

**C4.3a**

**(C4.3a) 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	
To be implemented*	0	
Implementation commenced*	0	
Implemented*	1	1087.26
Not to be implemented	0	

**C4.3b**

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

**Initiative category & Initiative type**

Low-carbon energy generation	Hydropower
------------------------------	------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

1087.26

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

6354110

**Investment required (unit currency – as specified in C0.4)**

382080000

**Payback period**

>25 years

**Estimated lifetime of the initiative**

Please select

**Comment**

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for other emissions reduction activities	Based on the concept of the business portfolio of the entire group through analysis of the market environment and competitive advantage, we decided to identify the priority business field. Thus, in the domestic electric power business we will replace thermal power stations that will contribute to strengthening competitiveness and will fund hydropower generation and renewable energy etc. with a view towards a low carbon society. As an investment portfolio, we have included strategic investment of 350 billion yen (2017FY to 2026FY) for domestic renewable energy, green & innovation etc..

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

**Level of aggregation**

Product

**Description of product/Group of products**

We sell low-carbon electricity generated by hydroelectric power and new energy, called "Aqua premium" for industrial and commercial customer and "Aqua Energy 100" for residential customer.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (水力や新エネルギーで発電した電気はカーボンフリーのため)

**% revenue from low carbon product(s) in the reporting year**

99

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

The ratio of low-carbon products to revenues in FY2019 was calculated using the following method, as it is sensitive to our management. \* Calculation formula: {Hydro power generation (10,743,000,000 kWh) + new energy etc. generated power (62,000,000 kWh)} / total power generation (10,966,000,000 kWh) ≈99 %

## C-EU4.6

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### (C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

We have diesel power generation equipment in the remote islands, and the fuel used in the diesel smoke equipment is low-sulfur A heavy oil containing methylnaphthalene as the main component, so it does not generate methane.

## C5. Emissions methodology

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### C5.1

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#### (C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

##### Scope 1

**Base year start**

April 1 2016

**Base year end**

March 31 2017

**Base year emissions (metric tons CO2e)**

89000000

**Comment**

##### Scope 2 (location-based)

**Base year start**

April 1 2016

**Base year end**

March 31 2017

**Base year emissions (metric tons CO2e)**

2540000

**Comment**

##### Scope 2 (market-based)

**Base year start**

April 1 2016

**Base year end**

March 31 2017

**Base year emissions (metric tons CO2e)**

2500000

**Comment**

### C5.2

---

#### (C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Act on the Rational Use of Energy

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)

The Tokyo Cap-and Trade Program

## C6. Emissions data

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### C6.1

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**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**  
191000

**Start date**  
April 1 2019

**End date**  
March 31 2020

**Comment**

**Past year 1**

**Gross global Scope 1 emissions (metric tons CO2e)**  
81600000

**Start date**  
April 1 2018

**End date**  
March 31 2019

**Comment**

**Past year 2**

**Gross global Scope 1 emissions (metric tons CO2e)**  
84300000

**Start date**  
April 1 2017

**End date**  
March 31 2018

**Comment**

**Past year 3**

**Gross global Scope 1 emissions (metric tons CO2e)**  
89000000

**Start date**  
April 1 2016

**End date**  
March 31 2017

**Comment**

**C6.2**

---

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

**Row 1**

**Scope 2, location-based**  
We are reporting a Scope 2, location-based figure

**Scope 2, market-based**  
We are reporting a Scope 2, market-based figure

**Comment**

**C6.3**

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**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

6050000

**Scope 2, market-based (if applicable)**

6040000

**Start date**

April 1 2019

**End date**

March 31 2020

**Comment**

**Past year 1**

**Scope 2, location-based**

2770000

**Scope 2, market-based (if applicable)**

2730000

**Start date**

April 1 2018

**End date**

March 31 2019

**Comment**

**Past year 2**

**Scope 2, location-based**

2540000

**Scope 2, market-based (if applicable)**

2500000

**Start date**

April 1 2017

**End date**

March 31 2018

**Comment**

**Past year 3**

**Scope 2, location-based**

2540000

**Scope 2, market-based (if applicable)**

2500000

**Start date**

April 1 2016

**End date**

March 31 2017

**Comment**

**C6.4**

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**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

**C6.5**

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**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

## Purchased goods and services

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

11488

### Emissions calculation methodology

Calculated by multiplying the amount of purchased goods by the emission factor We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Capital goods

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

1719303

### Emissions calculation methodology

Calculated by multiplying the amount of annual capital investment in financial report by the emission factor We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

108824347

### Emissions calculation methodology

The sum of the following two values; 1. Emissions from resource extraction, production and transportation Calculated by multiplying electricity sales and gas sales by emission factors 2. Emissions of energy consumption by other companies related to the amount of electricity sold Calculated by multiplying the amount of electricity procured from other companies by the emission factor We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

0

### Emissions calculation methodology

As we are utility company, our products are electricity and gas. Emissions related to electricity and gas transportation and distribution are calculated in "Fuel-and-energy-related activities (not included in Scope 1 or 2)". Therefore, there are no emissions related to upstream transportation and distribution.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

1657

### Emissions calculation methodology

Calculated by multiplying the volume of industrial waste by the emission factor for each type of waste treatment method We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

**Business travel****Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

4041

**Emissions calculation methodology**

Calculated by multiplying the number of employees by the emission factor We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain****Employee commuting****Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

10712

**Emissions calculation methodology**

Calculated by multiplying the number of employees by the number of business days and the emission factor for each location type of office We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain****Upstream leased assets****Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

0

**Emissions calculation methodology**

We have no leased assets, so there are no emissions related to upstream leased assets.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain****Downstream transportation and distribution****Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

0

**Emissions calculation methodology**

As we are utility company, our products are electricity and gas. Emissions related to electricity and gas transportation and distribution are calculated in "Fuel-and-energy-related activities (not included in Scope 1 or 2)". Therefore, there are no emissions related to downstream transportation and distribution.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain****Processing of sold products****Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

0

**Emissions calculation methodology**

We sell electricity and gas. The sold electricity and gas are not processed so there is no emission of processing of sold products.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

## Use of sold products

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

5888356

### Emissions calculation methodology

Calculated by multiplying the volume of gas sales by the emission factor We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## End of life treatment of sold products

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

0

### Emissions calculation methodology

We sell electricity and gas. As the sold electricity and gas are not discarded but all used, there is no emission of end of life treatment of sold products.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Downstream leased assets

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

0

### Emissions calculation methodology

We have no leased assets, so there are no emissions related to downstream leased assets.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Franchises

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

No franchise is included in our business.

## Investments

### Evaluation status

Not relevant, calculated

### Metric tonnes CO2e

0

### Emissions calculation methodology

Our investments are for policy purposes, not for profit purposes, so that have not need calculated in this category. Thus there are no emissions related to investments. We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" "Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models)"

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

**Other (upstream)**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

**Other (downstream)**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

C6.7

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**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

C6.10

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**(C6.10) 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.**

**Intensity figure**

0.000001

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

6240000

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

6241422000000

**Scope 2 figure used**

Location-based

**% change from previous year**

92

**Direction of change**

Decreased

**Reason for change**

Emissions for Scope 1 and 2 were significantly reduced, and the change in sales was smaller than the change in emissions, resulting in a decrease in the intensity figure. From FY2019, the thermal power plant owned by TEPCO Fuel&Power, which is inside the reporting boundary, was transferred to JERA, which is outside the reporting boundary, resulting in a reduction in emissions. In addition, as "other reduction activities", emissions were reduced by managing leakage of other GHGs (SF6 and HFCs) through proper management of circuit breakers and air conditioners etc.. Calculation of percentage change Total emissions of Scope 1 and 2 (location based) in FY2018 (previous year) were 84,400,000tCO2. The sales was 6,338,490,000,000 (JPY).  $84,400,000/6,338,490,000=0.0000133(\text{tCO}_2/\text{JPY})$  The rate of change is  $\{(0.000001/0.0000133)-1\}*100 =-92\%$

---

**Intensity figure**

0.02

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

6240000

**Metric denominator**

megawatt hour transmitted (MWh)

**Metric denominator: Unit total**

283676910

**Scope 2 figure used**

Location-based

**% change from previous year**

92

**Direction of change**

Decreased

**Reason for change**

Emissions for Scope 1 and 2 were significantly reduced, and the change in megawatt hour transmitted (MWh) was smaller than the change in emissions, resulting in a decrease in the intensity figure. From FY2019, the thermal power plant owned by TEPCO Fuel&Power, which is inside the reporting boundary, was transferred to JERA, which is outside the reporting boundary, resulting in a reduction in emissions. In addition, as "other reduction activities", emissions were reduced by managing leakage of other GHGs (SF6 and HFCs) through proper management of circuit breakers and air conditioners etc.. Calculation of percentage change Total emissions of Scope 1 and 2 (location based) in FY2018 (previous year) were 84,400,000tCO2. Total of megawatt hour transmitted (MWh) was 289,386,130 (MWh).  $84,400,000/289,386,130 =0.29(\text{tCO}_2/\text{MWh})$ . The rate of change is  $\{(0.02/0.29)-1\}*100 =-92\%$

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## C7. Emissions breakdowns

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### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

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### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	128000	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	867	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	59100	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	3430	IPCC Fourth Assessment Report (AR4 - 100 year)

### C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	2.6	59100	
Combustion (Electric utilities)	128000	0	0	128000	
Combustion (Gas utilities)	0	0	0	0	
Combustion (Other)	0	0	0	0	
Emissions not elsewhere classified	0	0	0	0	

### C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Japan	191000

### C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

### C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
Corporate and non-fossil fuel power generation	9800
Power Transmission and Distribution	181000
Retail	353
Renewable power generation	22

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) 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	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	191000	<Not Applicable>	
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.9**

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

**C7.9a**

**(C7.9a) 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 emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	This section describes Scope 2 of electricity consumption for civil uses, hydroelectric and thermoelectric plants, which is excluding related to technical losses from distribution and transmission network. In FY2018 (the previous year), the amount of renewable electricity is 57900MWh out of 1140000MWh. The ratio renewable energy consumption is $(57900/1140000) * 100 = 5\%$ In FY2019 (reporting year), the amount of renewable electricity is 541000MWh out of 1070000MWh. The ratio of renewable energy consumption is $(53900/1070000) * 100 = 5\%$ Thus the ratio does not change, so the reduction is 0tCO2e. The total emissions of Scope 1 and Scope 2 in the previous year was 84300000t(market based), so $(0/84300000) * 100 = 0\%$ .
Other emissions reduction activities	4370	Decreased	0.01	Emissions have been reduced due to "other emission reduction activities" implemented this year. By managing leakage of other GHGs (SF6 and HFCs) through proper management of circuit breakers and air conditioners etc., 4370tCO2e was reduced. The total emissions of Scope 1 and Scope 2 in the previous year was 84300000t(market based), so it reached $-0.01\%$ at $(-4370/84300000) * 100 = -0.01\%$ (i.e. a 0.01% decrease in emissions).
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output		<Not Applicable >		
Change in methodology		<Not Applicable >		
Change in boundary	78500000	Decreased	93	From FY2019, the thermal power plant owned by TEPCO Fuel&Power, which is inside the reporting boundary, was transferred to JERA, which is outside the reporting boundary, resulting in a reduction in emissions. The reduction amount was 78500000t CO2e, and the total emission amount of Scope 1 and Scope 2 in the previous year was 84300000t (market based), so $(-78500000/84300000) * 100 = -93\%$ (i.e. a 93% decrease in emissions).
Change in physical operating conditions		<Not Applicable >		
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

**C7.9b**

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based



## C8. Energy

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### C8.1

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**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

### C8.2

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**(C8.2) 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)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

### C8.2a

---

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	481000	481000
Consumption of purchased or acquired electricity	<Not Applicable>	53900	1020000	1070000
Consumption of purchased or acquired heat	<Not Applicable>	0	1110	1110
Consumption of purchased or acquired steam	<Not Applicable>	0	487	487
Consumption of purchased or acquired cooling	<Not Applicable>	0	2660	2660
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	53900	1505257	1555257

### C8.2b

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**(C8.2b) 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	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

### C8.2c

---

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**Fuels (excluding feedstocks)**

Crude Oil Heavy

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

457000

**MWh fuel consumed for self-generation of electricity**

457000

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

0.0693

**Unit**

metric tons CO2 per GJ

**Emissions factor source**

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)

**Comment**

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

18900

**MWh fuel consumed for self-generation of electricity**

18900

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

0.0686

**Unit**

metric tons CO2 per GJ

**Emissions factor source**

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)

**Comment**

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**C-EU8.2d**

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**(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.**

**Coal – hard**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

**Lignite**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

**Oil**

Nameplate capacity (MW)

57

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

160

Absolute scope 1 emissions (metric tons CO2e)

181000

Scope 1 emissions intensity (metric tons CO2e per GWh)

1130

Comment

**Gas**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

**Biomass**

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

**Waste (non-biomass)**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Nuclear**

**Nameplate capacity (MW)**

8212

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

9800

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

We own the nuclear power plants, but we did not have any record of electricity generated in FY2019. Scope 1 emissions are being generated in preparation for the restarting plants.

**Fossil-fuel plants fitted with CCS**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Geothermal**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Hydropower**

**Nameplate capacity (MW)**

2196

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

8389

**Absolute scope 1 emissions (metric tons CO2e)**

22

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Wind**

**Nameplate capacity (MW)**

21

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

32

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Solar**

**Nameplate capacity (MW)**

30

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

31

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Marine**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Other renewable**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Other non-renewable**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

**Total**

**Nameplate capacity (MW)**

10516

**Gross electricity generation (GWh)**

**Net electricity generation (GWh)**

8612

**Absolute scope 1 emissions (metric tons CO2e)**

191000

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

22

**Comment**

**C-EU8.4**

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**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

Yes

**C-EU8.4a**

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**(C-EU8.4a) Disclose the following information about your transmission and distribution business.**

**Country/Region**

Japan

**Voltage level**

Transmission (high voltage)

**Annual load (GWh)**

283677

**Annual energy losses (% of annual load)**

4.3

**Scope where emissions from energy losses are accounted for**

Scope 2 (location-based)

**Emissions from energy losses (metric tons CO2e)**

5550000

**Length of network (km)**

40804

**Number of connections**

30771502

**Area covered (km2)**

39575

**Comment**

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**C9. Additional metrics**

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**C9.1**

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**(C9.1) Provide any additional climate-related metrics relevant to your business.**

**Description**

Waste

**Metric value**

99.9

**Metric numerator**

Total waste recycled

**Metric denominator (intensity metric only)**

Total waste generated by our business

**% change from previous year**

0.01

**Direction of change**

Increased

**Please explain**

As a central part of our environment management, we have set recycle rate target to seek and contribute circular economy. T&D assets materials such as electric cables and electric poles are already used to be recycled in normal business practice.

**C-EU9.5a**

**(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.**

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Nuclear	133739000000	61.3	2020	
Hydropower	15942000000	7.3	2020	CAPEX on the left includes the amount of investment in wind power generation and geothermal power generation.

**C-EU9.5b**

**(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).**

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Charging networks	Together with Chubu Electric Power Co., Inc., TEPCO Holdings has established "e-Mobility Power Co., Ltd.," a joint venture company that supports a next-generation mobility society by realizing "a service that allows anyone, anytime, anywhere to charge reasonably." Planned CAPEX here consists of initial investment by the TEPCO Holdings.	3000000000	0.3	2020
Micro-grid	We here disclose TEPCO Power Grid CAPEX, which operates a power transmission and distribution business in the Tokyo metropolitan area. This CAPEX includes the installation cost of smart meters, which aims to install 29 million units by 2020 (penetration rate 79% as of July 2019). Furthermore, through a subsidiary company, TEPCO Power Grid have invested in the micro grid business in Southeast Asia, promoted business development based on the technological capabilities we have cultivated in Japan, and have worked on creating new businesses and developing human resources.	291229000000	55.5	2020
Energy management services	We here disclose TEPCO Energy Partner's CAPEX, which operates a electricity and gas retail business in all over Japan. Specifically, they started an energy supply business in the redevelopment area of the Toranomon area in Tokyo through a company jointly established with Mori Building Co., Ltd. Realized network construction. Furthermore, as a service related to the use of renewable energy, in addition to expanding sales of electricity rate menus that utilize hydroelectric power generation that does not emit CO2, we also use electricity from solar power generation installed in a location remote from the customer's factory (for Sony Corp.). They have been implementing new energy service projects for self-consumption.	17711000000	3.4	2020

**C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6**

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

	Investment in low-carbon R&D	Comment
Row 1	Yes	

**C-CO9.6a/C-EU9.6a/C-OG9.6a**

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Unable to disaggregate by technology area	<Not Applicable>	41-60%	9511000000	The figures on the left are the research and development expenses of TEPCO Holdings, which is responsible for business related to nuclear power generation/decommissioning, offshore wind power generation, renewable energy, reuse of storage batteries, expanded use of electric vehicles, and digital technology (DX).
Unable to disaggregate by technology area	<Not Applicable>	21-40%	7353000000	The figures on the left are the R&D expenses of TEPCO Power Grid, which is the responsible department for the business related to power transmission and transformation such as strengthening renewable energy system connections and improving resilience of the grids including smart grids/smart meters.
Unable to disaggregate by technology area	<Not Applicable>	≤20%	1040000000	The figures on the left are R&D expenses for TEPCO Energy Partner, which develops next-generation energy service businesses such as virtual power plants and demand response programs.

## C10. Verification

### C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

### C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Underway but not complete for reporting year – previous statement of process attached

**Type of verification or assurance**

Third party verification/assurance underway

**Attach the statement**

Verification Result Report ( FY2018@Shinsaiwaibashi Building).docx

検証結果報告書 ( 2018年度@新幸橋ビルディング ) .pdf

**Page/ section reference**

The entire document is relevant. The verification report was issued only in Japanese in accordance with Tokyo ETS scheme, and tentative translation version is hereby attached.

**Relevant standard**

Tokyo cap-and-trade guideline for verification

**Proportion of reported emissions verified (%)**

1

### C10.1b



**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.**

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Underway but not complete for reporting year – previous statement of process attached

**Type of verification or assurance**

Third party verification/assurance underway

**Attach the statement**

Verification Result Report ( FY2018@Shinsaiwaibashi Building).docx

検証結果報告書 ( 2018年度@新幸橋ビルディング ) .pdf

**Page/ section reference**

The entire document is relevant. The verification report was issued only in Japanese in accordance with Tokyo ETS scheme, and tentative translation version is hereby attached.

**Relevant standard**

Tokyo cap-and-trade guideline for verification

**Proportion of reported emissions verified (%)**

5

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**C10.2**

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**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we do not verify any other climate-related information reported in our CDP disclosure

**C11. Carbon pricing**

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**C11.1**

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**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

**C11.1a**

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**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

Japan carbon tax

Saitama ETS

Tokyo CaT - ETS

**C11.1b**

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**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

### Saitama ETS

**% of Scope 1 emissions covered by the ETS**

0

**% of Scope 2 emissions covered by the ETS**

100

**Period start date**

April 1 2016

**Period end date**

March 31 2020

**Allowances allocated**

23494

**Allowances purchased**

0

**Verified Scope 1 emissions in metric tons CO2e**

0

**Verified Scope 2 emissions in metric tons CO2e**

16244

**Details of ownership**

Facilities we operate but do not own

**Comment**

The target sites fulfill their reduction obligations by "efficient operation of heat source", "appropriate setting of air conditioning INV according to mechanical load", and "minimization of lighting equipment, stopping of elevator, etc.". In addition, the target establishments have acquired the certification of 【National Environment Pollution Prevention Promotion Office in Aya】 , which contributed to ESG.

### Tokyo CaT - ETS

**% of Scope 1 emissions covered by the ETS**

0

**% of Scope 2 emissions covered by the ETS**

100

**Period start date**

April 1 2015

**Period end date**

March 31 2020

**Allowances allocated**

28915

**Allowances purchased**

0

**Verified Scope 1 emissions in metric tons CO2e**

0

**Verified Scope 2 emissions in metric tons CO2e**

19274

**Details of ownership**

Facilities we own and operate

**Comment**

Tokyo Cap-and-Trade only covers scope2 of TEPCO's emissions in Tokyo metropolitan area, which amount of emission from power plant is not included. The regulated offices fulfill the obligations by taking both facility and operation measures. The measures includes installation of high-efficient heating devices for hot-water supply, appropriate temperature setting for air-conditioner during summer and winter seasons, and efficient operation of elevator. TEPCO is making continuous efforts to reduce emissions regardless of locations and emission methods. Offices in Tokyo area as well as offices in other areas steadily works on an energy saving measures and reduction of GHG emissions, and best practices are developed in other offices.

### C11.1c

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(C11.1c) Complete the following table for each of the tax systems you are regulated by.

**Japan carbon tax**

**Period start date**

April 1 2019

**Period end date**

March 31 2020

**% of total Scope 1 emissions covered by tax**

100

**Total cost of tax paid**

33440000

**Comment**

The total cost of the tax paid is the amount of fuel consumption in fiscal 2019 multiplied by the tax rate for "Tax for global warming measures", which is assumed same amount as actually paid to the taxation authority.

C11.1d

---

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

At Tokyo Cap and Trade, regulated covered establishments fulfill their obligations by taking both facilities and operational measures. The measures includes installation of high-efficient heating devices for hot-water supply, appropriate temperature setting for air-conditioner during summer and winter seasons, and efficient operation of elevator. TEPCO is making continuous efforts to reduce emissions regardless of locations and emission methods. Offices in Tokyo area as well as offices in other areas steadily works on an energy saving measures and reduction of GHG emissions, and best practices are developed in other offices.

The emissions trading system in Saitama Prefecture targets only Scope 2 emissions. The target sites fulfill their reduction obligations by "efficient operation of heat source", "appropriate setting of air conditioning INV according to mechanical load", and "minimization of lighting equipment, stopping of elevator, etc.". In addition, the target establishments have acquired the certification of 【National Environment Pollution Prevention Promotion Office in Aya】 , which contributed to ESG .

The Group is working not only on the response to Tokyo and Saitama Prefecture under the global warming countermeasure system but also on energy saving measures and GHG emission reduction, and develops best practices to other business sites.

Regarding the carbon tax (tax for global warming countermeasures), we will reduce the fuel consumption of the internal combustion engine on the remote islands, such as by promoting efforts to supply 100% renewable energy on Hahajima.

C11.2

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(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

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(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

**Credit origination or credit purchase**

Credit purchase

**Project type**

Forests

**Project identification**

Ethiopia Humbo Assisted Regeneration Project <https://cdm.unfccc.int/Projects/DB/JACO1245724331.7/view>

**Verified to which standard**

CDM (Clean Development Mechanism)

**Number of credits (metric tonnes CO2e)**

3390

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

3390

**Credits cancelled**

No

**Purpose, e.g. compliance**

Compliance

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C11.3

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**(C11.3) Does your organization use an internal price on carbon?**

Yes

**C11.3a**

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**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

**Objective for implementing an internal carbon price**

Supplier engagement

**GHG Scope**

Scope 3

**Application**

In the case of procuring electricity generated from a thermal power plant by bidding, we evaluated the bid price including the cost of carbon credits to offset CO2 emissions based on government bidding guidelines. We believe that the estimation of these carbon credit cost enable to reflect environmental externality to the electricity price.

**Actual price(s) used (Currency /metric ton)**

1992

**Variance of price(s) used**

The price does not differ depending on the area and related departments. In addition, the price is adopted as a fixed (unchanged) price reflecting future price change forecasts.

**Type of internal carbon price**

Internal fee

**Impact & implication**

Carbon price has already impacted to our the electricity bidding price. Set the conditions for bidding for the CO2 emission intensity to be 0.550kg-CO2 / kWh or less. In the case of exceeding 0.550 kg – CO2 / kWh, evaluate the carbon price including the carbon credit assumed cost for adjusting to 0.550kg-CO2 / kWh or less. The reference price of carbon credits is 15 USD/t-CO2 based on the 2020 estimated value of IEA World Energy Outlook 2013 edition. If the electricity supply period is set to 15 years, the carbon credit equalization annual cost will be 1,992 yen/t-CO2 in consideration of currency conversion and the escalation rate during the contract period. As a result of the successful bid, we would procure approximately 1.5 million kW from four companies after fiscal 2020. As of 2017, each company is carrying out construction etc. for the start of supply. Outline of Bidding for Power Wholesale Supply, Aug, 2014, Tokyo Electric Power Company, Inc. Sorry, available only in Japanese.  
<https://www.tepco.co.jp/kaikaku/ipp/images/ipp40-j.pdf>

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**C12. Engagement**

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**C12.1**

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**(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

**C12.1a**

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**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

**Type of engagement**

Engagement & incentivization (changing supplier behavior)

**Details of engagement**

Run an engagement campaign to educate suppliers about climate change

**% of suppliers by number**

1

**% total procurement spend (direct and indirect)**

62.6

**% of supplier-related Scope 3 emissions as reported in C6.5**

100

**Rationale for the coverage of your engagement**

JERA is a power generation company jointly established by TEPCO F & P and Chubu Electric Power Co., Ltd. TEPCO F & P and Chubu Electric hold a 50% stake in JERA respectively. The ownership transfer of thermal power generation assets to JERA was completed in April 2019, becoming an extremely important upstream supplier in the power supply business of the TEPCO Group. From this reporting year, JERA becomes being out of our financial control boundary. Of the electricity that the TEPCO Group sells to customers, most of the power supplied by thermal power generation is purchased from JERA by power purchase agreements, so we recognize that it is appropriate to conduct supplier engagement.

**Impact of engagement, including measures of success**

JERA promotes high efficiency of thermal power generation by introducing high efficiency gas turbine etc., and promotes low carbonization by investing in renewable energy generation and planning early retirement of low-efficiency coal-fired power plants. We refer to electricity sales per unit of electricity supplied as an indicator of engagement, which is anticipated improving over time.

**Comment**

The ratio of suppliers to total procurement expenditure tentatively refers to the ratio of power purchase costs to TEPCO energy partner operating costs. TEPCO Energy Partners purchase electricity from thermal power independent power producers other than JERA, but the ratio is considered to be very small. So, we refer 100% for emissions proportion.

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**C12.1b**

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement**

Collaboration & innovation

**Details of engagement**

Run a campaign to encourage innovation to reduce climate change impacts

**% of customers by number**

20

**% of customer - related Scope 3 emissions as reported in C6.5**

40

**Portfolio coverage (total or outstanding)**

<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**

In Chiba area, TEPCO Power Grid has received many applications for grid access for renewable energy, but in the current rules of grid access, there is "no empty capacity" due to the constraint of the core grid. It is therefore difficult to ensure effective and optimal connections. We have received many applications including solar for low voltage business, and further applications are expected in the future. On the other hand, as a feature of the power supply ground in our area, the power supply is concentrated in the Chiba area, and it is necessary to evaluate from the viewpoint of supply reliability and resilience. We will continue to concretely implement "trial activities" while consulting with the national government and electric power wide area operation promotion organizations for the efficient introduction and expansion of renewable energy. As for the proportion of customers with collaboration and the associated Scope 3 emissions, we referred the ratio of the demanded power amount in the Chiba area and the generated power amount respectively. [https://www.tepco.co.jp/pg/company/press-information/press/2019/1515133\\_8614.html](https://www.tepco.co.jp/pg/company/press-information/press/2019/1515133_8614.html) (in Japanese only)

**Impact of engagement, including measures of success**

The TEPCO Power Grid will contribute to the creation of measures to maximize the introduction of renewable energy, while proceeding with the procedure for grid access examination based on certain conditions and exchanging opinions and views with the national authority. In this collaboration, TEPCO PG uses the storage battery utilization know-how cultivated as a power system operator and the accumulated battery utilization know-how accumulated in the energy field based on technologies for predicting fluctuations in renewable energy, etc.

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**C12.1d**

**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

TEPCO Power Grid aims to realize a low carbon and sustainable recycling-oriented society by working with NextE Solutions Co., Ltd. (NExT-eS), as an electricity supply value chain partner, to effectively utilize storage batteries after primary use and maximize added value. Regarding storage batteries, which are typified by lithium-ion batteries used in the mobility field, it is expected that they will be used as secondary customers for supply and demand adjustment and frequency fluctuation response in the energy field where the use of renewable energy is rapidly expanding. However, it is difficult to evaluate the performance of storage batteries after their primary use in the mobility field, and no mechanism has been established to maximize the use of storage batteries manufactured from scarce resources. In the collaborative activities, TEPCO PG uses the storage battery supply know-how cultivated as a power system operator and the accumulated battery utilization know-how accumulated in the energy field based on technologies such as the prediction of fluctuations in renewable energy. We aim to build a platform (storage battery LCM platform) that clarifies the utility value and promotes reuse. NExT-eS uses storage battery control technology that compensates for variations in the voltage and capacity of lithium-ion batteries and extends the life of storage batteries, and a storage battery control platform that can be used for various purposes and collection of storage battery data using IoT technology. We will build a system that enables analysis management.

**C12.3**

**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

**C12.3a**

**(C12.3a) On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Climate finance	Support	TEPCO HD supported the utilization of green finance promoted by the Japanese government and contributed to the establishment of TCFD guidance by participating in the TCFD Study Group of the Ministry of Economy, Trade and Industry. In addition, TEPCO HD participates as a founding member and planning committee member of the TCFD Consortium that was established in May 2019, and is working with the Japanese government and industry to enhance the disclosure of information on climate change. ..	In the electricity sector guidance of the TCFD guidance, which was discussed at the Ministry of Economy, Trade and Industry TCFD Study Group and was announced in the fall of 2019, TEPCO HD expressed its opinion based on the knowledge to date on the disclosure of climate change information and the characteristics of the electricity business, We exchanged opinions appropriately with policy makers. As a result, it contributed to the development of rational and consensus guidance.
Carbon tax	Oppose	TEPCO HD advocated the importance of electrification in order to realize decarbonization of society to the Ministry of the Environment, which is formulating policies for carbon pricing including carbon tax, directly or through business associations. Particularly, we introduced concrete good practices in transportation and industry sector.	In order to realize decarbonization, it is necessary to implement policies to promote electrification on the demand side, in addition to the low carbonization of power sources. Regarding global warming policies including carbon pricing, TEPCO HD believes that a balanced policy that matches this objective is desirable.
Energy efficiency	Support	Regarding the operation and revision of the Energy Conservation Law concerning the thermal efficiency benchmark of thermal power plants, TEPCO HD exchanged views with policy makers on the flexibility to achieve the goals in its operation from the standpoint of supporting the efficiency improvement of thermal power plants. ..	TEPCO HD believes that it is necessary to adopt the flexibility to achieve the target in its operation, from the standpoint of supporting further efficiency improvement of thermal power plants.
Clean energy generation	Support with minor exceptions	TEPCO HD exchanged views and made suggestions with relevant policymakers directly and through business association, with an view to set a reasonable interim target and associated measure and procedures, on revision process by "the Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources".	We have provided information about the expected influence of rapid renewable energy resources installation into the existing power grid. We also recommended and commence pilot project a possible framework which enable additional renewable generation grid-connections such as "non-firm connection in Chiba area".

**C12.3b**

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

**C12.3c**

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

The Federation of Electric Power Companies of Japan (FEPC)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

In promoting measures against global warming, the Federation of Electric Power Companies of Japan aims to simultaneously achieve stable energy supply, economic efficiency, and environmental protection, with the main premise of ensuring safety "S" (so-called S+3Es). From the point of view of S+3Es, based on the pursuit of an optimal energy mix, we are promoting efforts on both the supply and demand side, such as "lower energy consumption on the supply side" and "more efficient use of energy".

**How have you influenced, or are you attempting to influence their position?**

TEPCO HD dispatches its staff to the Federation of Electric Power Companies (FEPC) who are involved in climate policy development with policymakers. Also the managers of ESG office are proactively promoting activities as a deputy head of the Working Group and Environment Committee on Climate Change.

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**Trade association**

KEIDANREN(Japan Business Federation)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Keidanren (Japan Business Federation) made recommendations for Japan's climate change policy from the viewpoint of balance between the environment and the economy, and stable supply of energy. Thus, Keidanren encourages each industry to develop action plan for achieving low-carbon society to promote voluntary mitigation actions under each industry's commitment and has formulated the "KEIDANREN's Commitment to a Low Carbon Society". This commitment is compiled in each industry "low carbon society implementation plan". "the Action Plan for a Low Carbon Society of Electric Power Industry" of ELCS is also an important component. We joined ELCS and are promoting high efficiency of thermal power generation and expansion of renewable energy in order to contribute to ELCS's targets based on "the Action Plan for a Low Carbon Society of Electric Power Industry", and report the effort and the results of the previous year to ELCS every year. Then, ELCS reports the results of "the Action Plan for a Low Carbon Society of Electric Power Industry" to Keidanren and receives reviews.

**How have you influenced, or are you attempting to influence their position?**

We have participated in the Keidanren Global Environment Subcommittee, which discusses the impact of environmental policies such as climate change on industry, and formulate recommendations, etc., and participate in the international strategic work group on climate change, and advocate the position of the TEPCO Group. TEPCO HD supports the Zero Challenge concept announced by Keidanren in December 2019, and has announced its vision for the realization of a carbon-free society in its 2019 integrated report. <https://www.keidanren.or.jp/en/policy/2019/109.pdf> <https://www.challenge-zero.jp/en/member/122>

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**Trade association**

The Electric Power Council for a Low Carbon Society ( ELCS )

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Under the premise of ensuring safety, the Electricity Business Low Carbon Society Council is based on the pursuit of the optimal energy mix from the viewpoint of "S + 3E" aiming at simultaneously achieving stable energy supply, economic efficiency, and environmental conservation. The member companies will firmly implement measures to combat global warming according to their business form.

**How have you influenced, or are you attempting to influence their position?**

As a member, the Company participates in general meetings and various regular meetings, and as a secretary, is actively involved in the operation of the council. In addition, we submit our activities and actual results to the association, and are actively involved in third-party review work.

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**Trade association**

Japan TCFD Consortium

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Companies and financial institutions that support the TCFD recommendations work together to promote effective disclosure of information on climate change by companies and to link the disclosed information to appropriate investment decisions by financial institutions etc. need to be discussed.

**How have you influenced, or are you attempting to influence their position?**

We are the first Japanese energy company to support the TCFD recommendations, and are actively involved in the operation of the consortium as a planning committee member.

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**C12.3d**

**(C12.3d) Do you publicly disclose a list of all research organizations that you fund?**

Yes

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**C12.3f**

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

The TEPCO Group's climate change response policy is discussed at the management meetings including the ESG committee and conducted by the board, and is shared with each operating company through the management meeting participants with a consistent policy. In addition, there is no discrepancy because the ESG Promotion Office of HD functions to ensure consistency in policy proposals and engagement through industry associations on climate change.

C12.4

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**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

indicators\_SAM.pdf

**Page/Section reference**

Please refer to climate change-related among the environmental-related metrics in the attached document.

**Content elements**

Emissions figures  
Other metrics

**Comment**

In order to speed up and enhance ESG information disclosure, environmental indicators that match the questions are disclosed on the TEPCO HD website.  
[https://www.tepco.co.jp/en/hd/about/esg/pdf/indicators\\_SAM.pdf](https://www.tepco.co.jp/en/hd/about/esg/pdf/indicators_SAM.pdf)

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**Publication**

In mainstream reports, incorporating the TCFD recommendations

**Status**

Complete

**Attach the document**

200530\_1-e.pdf

**Page/Section reference**

Result of the scinario analysis; P46

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Other, please specify (Results of scenario analysis based on TCFD recommendations)

**Comment**

NOTICE OF CONVOCATION OF THE 96TH ORDINARY GENERAL MEETING OF SHAREHOLDERS [https://www.tepco.co.jp/en/hd/about/ir/stock/pdf/200530\\_1-e.pdf](https://www.tepco.co.jp/en/hd/about/ir/stock/pdf/200530_1-e.pdf) We recognize that notice of the ordinary general meeting of shareholders could be the same court report as the mainstream financial report.

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**Publication**

In voluntary sustainability report

**Status**

Underway – previous year attached

**Attach the document**

TP19\_FIX\_web\_eng\_security2.pdf

**Page/Section reference**

Results of scinario analysis including risk and opps ; p27-p30 Indicators; p87 Governance; p91 SASB index; p94

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics  
Other, please specify

**Comment**

Updated scinario analysis in accordance with TCFD reccommandations including physical risks newly conducted and CO2 reduction targets for the medium and long term would be disclosed in our integrated report, which is currently under preparation for publication in the fall of 2020.  
<https://www.tepco.co.jp/en/hd/about/ir/library/integratedreport/index-e.html>

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**Publication**



In voluntary communications

**Status**

Complete

**Attach the document**

Contribution\_to\_a\_low\_carbon\_society\_r1.pdf

**Page/Section reference**

Please see "Major Initiative" of "Management Approach" on page 1 in the attached document, and you will find our emission reduction target for the electricity retail sector.

**Content elements**

Emission targets

**Comment**

TEPCO HD decided and announced CO2 emission reduction target for the electricity retail sector in 2030FY. <https://www.tepco.co.jp/en/hd/about/esg/environment/low-carbon-e.html#anchor01>

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## C15. Signoff

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### C-FI

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

Not applicable

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### C15.1

**(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	HD Director and Representative Executive Officer leads climate change issues as chairman of the ESG Committee.	Chief Executive Officer (CEO)

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## SC. Supply chain module

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### SC0.0

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

TEPCO sells Aqua Premium, a 100% CO2 free tariff menu for electricity generated hydropower, to corporate customers who wish to supply electricity from renewable energy. In order to become a main source of renewable energy, we will expand our renewable energy generation business, focusing on overseas hydropower generation and domestic and overseas wind power generation.

Given that the TEPCO Group is promoting the expansion of renewable energy centered on offshore wind power, with the aim of making it a main power source for electricity supply, we are working closely with the needs of our customers. We established a new organization in August 2019, the Renewable Energy Promotion Department, which contributes to the above and further strengthens the creation and expansion of environmental value. The Renewable Energy Promotion Department has tried to identify the different needs for renewable energy for each customer, and has certified the environmental value of renewable energy with the "Aqua Premium" green price menu that delivers electricity from hydroelectric power plants that do not emit CO2. Combined with a "Green Power Certificate" and "Renewable Energy System Energy Service" that supports customers' investment in renewable energy power generation facilities, etc. to create solutions aimed at increasing the renewable energy ratio targeted by that customer. We will continue to. Moreover, in proposing this optimal plan, we will meet the needs of customers with services that not only provide environmental value but also reduce total cost by energy saving know-how cultivated by the TEPCO Group over many years. ..Through these efforts, we will continue to be closer to our customers for a long time and work with them to contribute sustainable development goals, including expanding renewable energy.

[https://www.tepco.co.jp/ep/notice/pressrelease/2019/1516530\\_8664.html](https://www.tepco.co.jp/ep/notice/pressrelease/2019/1516530_8664.html)

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### SC0.1

**(SC0.1) What is your company's annual revenue for the stated reporting period?**

	Annual Revenue
Row 1	6241400000000

**SC0.2**

**(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?**

Yes

**SC0.2a**

**(SC0.2a) Please use the table below to share your ISIN.**

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	JP	

**SC1.1**

**(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

**Requesting member**

KAO Corporation

**Scope of emissions**

Scope 2

**Allocation level**

Company wide

**Allocation level detail**

<Not Applicable>

**Emissions in metric tonnes of CO<sub>2</sub>e**

10320

**Uncertainty (±%)**

**Major sources of emissions**

Scope-3; on-site emissions by sold products and emissions by capital goods upstream Scope-2; Indirect emissions from buildings and facilities such as light and air-conditioning, transmission and distribution losses

**Verified**

No

**Allocation method**

Allocation based on the volume of products purchased

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

The allocated amount reported this time has increased from last year due to the expansion of the calculation range of Scope-2 and Scope-3 emissions and the increase in sales to Kao Corporation. Allocation calculation method; (TEPCO Group's Scope-2 and Scope-3 emissions (excluding Category 3 "CO<sub>2</sub> related to power generation of electricity purchased from other companies") [t- CO<sub>2</sub>] / TEPCO Group consolidated sales [yen]) multiplied by (sales value of customer in question)

**SC1.2**

**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

The published annual emission calculation data of TEPCO Holdings is used.

[https://www.tepco.co.jp/en/hd/about/esg/pdf/indicators\\_SAM.pdf](https://www.tepco.co.jp/en/hd/about/esg/pdf/indicators_SAM.pdf)

**SC1.3**

**(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	Development standardized useful guidance could be one of the possible solution.

SC1.4

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**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

No

SC1.4b

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**(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.**

The method of calculating and publishing the emission factor per electricity sold has already been established under the domestic law. According to that method, it is considered that customers are calculating and reporting Scope 2 indirect emissions by electricity and heat by our products. The GHG emissions related to electricity, which is the Group's main product, are dominated by the above mentioned indirect emissions, and allocating other emissions per customer does seem neither to be material or considered cost effective.

SC2.1

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**(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.**

**Requesting member**

KAO Corporation

**Group type of project**

Reduce Logistics Emissions

**Type of project**

Other, please specify (Electrification of commercial vehicles)

**Emissions targeted**

Actions to reduce customers' operational emissions (customer scope 1 & 2)

**Estimated timeframe for carbon reductions to be realized**

Other, please specify (10)

**Estimated lifetime CO2e savings**

**Estimated payback**

Other, please specify (Possibility of reducing fossil fuel costs together with carbon emission reductions)

**Details of proposal**

In May 2020, NTT Corporation, Hitachi., Ricoh, and Tokyo Electric Power Company Holdings, Inc. agreed with a total of 40 companies and organizations, to disseminate electric-powered commercial vehicles and established the "Electric Vehicle Utilization Consortium". The electrification of commercial vehicles both will not only contribute to corporate activities, such as being able to extract electricity in the event of a disaster, but will also help to protect the lives of local people and contribute to the development of a disaster-resistant city. TEPCO and associates believe that companies and organizations working together to electrify vehicles will not only solve these most recent social issues, but also lead to the resolution of various issues for the SDGs. Although many companies are actively considering electrifying their business vehicles, there are many companies and organizations that can not solve the problems at the time of introduction by themselves and can not embark on electrification. The consortium promotes the introduction and utilization of electric vehicles, solves social issues, and contributes to the sustainable society by sharing the issues of these companies and organizations and working together to solve them. [https://www.tepco.co.jp/press/release/2020/1541025\\_8710.html](https://www.tepco.co.jp/press/release/2020/1541025_8710.html)

SC2.2

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**(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?**

No

SC3.1

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**(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?**

No

SC3.2

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**(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?**

No

SC4.1

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**(SC4.1) Are you providing product level data for your organization's goods or services?**

No, I am not providing data

Submit your response

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**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

**Please confirm below**

I have read and accept the applicable Terms