

Module: Introduction**Page: Introduction**

CC0.1**Introduction**

Please give a general description and introduction to your organization.

Tokyo Electric Power Company, Incorporated (TEPCO) was established in 1951 to supply electric power to the Tokyo metropolitan area, and for more than half a century it has continued to support society and public life with high-quality electric power.

The Tohoku-Chihou-Taiheiyu-Oki Earthquake, which struck on March 11, 2011, precipitated a serious accident at Fukushima Daiichi Nuclear Power Station. TEPCO has seen considerable weakening in its financial standing and income structure due to factors associated with the aforementioned event, such as the recording of substantial expenses and losses and an increase in fuel costs accompanying the suspension of nuclear power generation. In short, TEPCO has been confronted with an unprecedented major crisis.

Addressing the situation, TEPCO, along with the Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF), formulated the Comprehensive Special Business Plan, putting together a program of drastic streamlining, management reforms, and other steps. Simultaneously, TEPCO strengthened its financial position through the issuance of preferred stocks totaling ¥1 trillion, with the NDF as allottee.

As a result of the above, including such initiatives as exhaustive cost reductions, in the year ended March 31, 2016, TEPCO achieved profitability for a third consecutive year.

In April 2016, Tokyo Electric Power Company (TEPCO) transitioned to a holding company system by reorganizing into three independent businesses: fuel & thermal power generation, general power transmission and distribution, and retail electricity. With a responsibility to the community of Fukushima and to better serve our customers, TEPCO will implement major changes.

Please note the provided information is public and is available in our website
<http://www.tepco.co.jp/en/index-e.html>

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Wed 01 Apr 2015 - Thu 31 Mar 2016

CC0.3**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

Japan

CC0.4**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

JPY(¥)

CC0.6**Modules**

As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The board of directors puts a management judgement about global warming targets of TEPCO group. And the council of environment strategies formulates TEPCO group strategy draft of climate change and monitors the implementation circumstances and promote the group initiatives.

The board of directors: The best decision making body about management of TEPCO group

The council of environment strategies:

* The managing director vice president (Hiroshi Yamaguchi) is a chairperson, and each president of a subsidiary company, each charge executive of a management plan and a management technical strategy research center and the head of a planning section, a technological integration section and a construction section of

engineering are commissioners.

*The head of an environment section conducts the council and the environment section manages this council as a secretariat.

* More than once a year basis, but the council is held at any time based on chairperson's summons according to the need.

* When an important management judgement is necessary for a global warming target, the consideration contents by this council are submitted to the board of directors.

* To maintain a reporting line and promote a climate change measure, "global warming working group" composed by the manager level and "global warming section" composed by the director and the head of each section level is installed as infrastructure of this council.

* Hiroshi Yamaguchi is a person in charge who affects environment in general as well as a climate change as an environment charge executive of the whole TEPCO group.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
All employees	Recognition (non-monetary)	Energy reduction project Energy reduction target Other: Behaviour change related indicator	Energy reduction target (the office building energy consumption basic unit, MJ/m2) is set as the management index. And all employees engage in the initiative. And we promote "Cool Biz and Warm Biz campaign", encouraging all TEPCO group employees to dress casually and help reduce the use of air conditioning in the summer and winter.
Facility	Recognition	Emissions reduction	The energy saving performances of specific facilities which consume over 1500 kl of crude-oil-

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
managers	(non-monetary)	project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	equivalent energy is managed strictly for Japanese energy saving law and headquarters promotes original manual(about energy saving) compliance and energy conservation of the whole company.
All employees	Monetary reward	Emissions reduction project Emissions reduction target Other: Behaviour change related indicator	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."

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Risks are assessed world-wide and considered into the future as far as it can be assumed.	> 6 years	Directors and executive officers assess the risk, and the departments in charge of specific business manage it. We make an effort to prevent realization of the risk that may have a serious impact on management at the Risk Management Committee, chaired by the president of HD Executive Officer. If it comes to reality, we promptly and appropriately deal with it. (nuclear power : http://www.tepco.co.jp/en/nu_reform/index-e.html) We have been looking ahead to more than 10 years in risk (including climate change risk) assessment and update every 6 months (more frequently). The result of risk assessment and opportunities are appropriately reflected in the management plan updated every fiscal year. For example, in assessing the procurement risk of LNG, when the Holmes strait is blocked, it is necessary to replace with coal. We aim at distribution of supply sources and conclusion of long-term contracts for the long-term and stable procurement of LNG with a low carbon emission intensity.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

TEPCO group uses the risk management method described above and identifies the risk with the following process.
 At company level, directors and executive officers regularly grasp and evaluate the risks in which we have been looking ahead to more than 10 years related to business activities. Regarding the risks (including fuel procurement from overseas) that may have a serious impact on management and related to supply chain, we will make an effort to prevent realization of the risks at the Risk Management Committee, chaired by the president of HD Executive Officer. If it comes to reality, we promptly and appropriately deal with it and minimize the influence on management. The risk is assessed every 6 months, the results of risk assessment and business opportunities are appropriately reflected in the management plan updated every fiscal year.

At asset level, the departments in charge of specific business basically manage the risks in the execution of duties. The Risk Management Meeting is established for each asset level, and we grasp and assess its own risk at a frequency of 6 months or more. Each department reports the assessed risk to the Risk Management Committee every 6 months and appropriately reflects the deliberation results in each business plan for each fiscal year. Climate change risks are assessed in this process in consideration of those stemming from economic and climatic conditions, industry deregulation, equipment and operations, and interest rate fluctuation.

CC2.1c**How do you prioritize the risks and opportunities identified?**

At asset level, each department identifies the risk scenarios in which we have been looking ahead to more than 10 years based on its business(including fuel procurement from overseas) and evaluates them in influence (in 4 levels; very serious, serious, medium, and small) and frequency (in 4 levels; high, medium, low and unknown). Then, "Risk Map" and "Significant Risk Management Sheet" are created according to the evaluation at each department, and they are required to report to the Risk Management Committee every 6 months. And the Committee assesses and evaluates them at company level.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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CC2.2**Is climate change integrated into your business strategy?**

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i. ix. Description of how the business strategy has been influenced / Forward-looking scenario analyses:

Keeping an eye on GHG reduction target of 2030 set out by the government and policy measures to achieve it, TEPCO group first makes an scenario analysis of impact on our business opportunities and risks, especially plan of new power generation and procurement plan of electricity, and we have been promoting appropriate countermeasures to deal with relevant climate change. Based on the contents of the report from the Risk Management Committee (such as risk assessment with more than 10 years' ahead), we have decided medium- and long-term strategies at the Environmental Strategy Committee. Specifically, we have been making efforts to improve Scope 1 emission intensity, such as the strategy for promotion of high efficiency of thermal power generation (introduction of MACC II, IGCC).

It is important for us to build a balanced and appropriate power portfolio from the viewpoint of "energy security" "economic stability" "environmental conservation" based on energy plan set out by Japanese government. Thus, we use forward-looking scenario analyses to inform our organization's businesses, strategy, and/or financial planning.

ii. vii. At least one example / What have been the most substantial business decisions made:

Following energy mix and GHG reduction target in FY2030 set out by Japanese government, power industry established "the Action Plan for a Low Carbon Society of Electric Power Industry" in July 2015. Then, the Electric Power Council for a Low Carbon Society ("ELCS") was established in February 2016, which aims to meet the new targets in "the Action Plan for a Low Carbon Society of Electric Power Industry". The Plan has the following targets.

- emission intensity target of 0.37 kg-CO₂e/kWh (use-end) in FY2030

- 11 million t-CO₂ as a maximum potential is reduced by adopting Best Available Technology(BAT) with regard to the construction of thermal power plants.

TEPCO group joined ELCS in February 2016 for achieving the targets in the Plan set out in July 2015 and made a decision to promote our own countermeasures on climate change such as introduction of BAT in thermal power plant. Further, we have considered enhancement of our countermeasures on climate change to ensure effective mitigation actions compatible with fair competition under full liberalized energy market.

iii. viii. What aspects of climate change have influenced the strategy / How the Paris Agreement has influenced the business strategy:

Paris agreement was adopted in COP21 and further actions are requested to every nation to address extreme weather and rise in global average temperature caused by climate change. Strengthening regulation on emission reduction in energy sector, especially improvement of thermal efficiency for thermal power plant and increase of ratio of procuring electricity generated from non-fossil fuel power generation for electricity retailing, has impacted on our business activities.

Following actions have been taken and considered:

①Adoption of More Advanced Combined Cycle II technology in Kawasaki LNG fired power plant, which has commenced commercial operation in January 2016

②Development of green electricity rate plan, in which low carbon electricity is provided

We joined a framework ("Electric Power Council for a Low Carbon Society (ELCS)") to promote measures against global warming with other domestic electric power companies, and we have been promoting efforts to realize a low carbon economy.

ELCS set a target of carbon intensity of 0.37 kg-CO₂/kWh in FY2030, which is consistent with energy plan set out by Japanese government and Japan's INDC based on the Paris Agreement.

iv. How the short term strategy has been influenced by climate change:

One of the most important components of the short term strategy for coming 2-3 years is saving energy and thereby reducing GHG emissions. Needs for equipment for saving energy such as heat pumps have increased and it has brought further business opportunities, then research and development have been promoted.

Demand is expected to continue in the future.

v. How the long term strategy has been influenced by climate change:

Taking into account of energy mix and GHG reduction target in 2030 set out by Japanese government in July 2015, i)decrease of electricity demand by deepening energy saving, ii)expansion of non-fossil fuel power generation and iii)ratio of thermal power generation in energy mix are important components in our long-term strategy. We have built well-balanced portfolio of thermal power generation between Coal fired and LNG fired and have promoted adoption of Best Available Technology (BAT) to reduce CO2 emission from thermal power plants to contribute to energy mix and the GHG reduction target in 2030 set out by Japanese government.

vi. How this is gaining a strategic advantage over your competitors:

①Introduction of advanced technology in thermal power plant

More Advanced Combined Cycle II technology (1600 degrees Celsius class / achieving the world's highest thermal efficiency of about 61%) has been introduced in Kawasaki LNG fired power plant. Integrated Gasification Combined Cycle technology(540 MW is maximum in Japan) is planned to be introduced in two coal fired power plants in Fukushima prefecture.

②Development of renewable energy

We have constructed and operated three mega solar power stations with total installed capacity of 30 MW and one wind power station with total installed capacity of 18.37 MW.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price on carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

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.

· 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 price including the carbon credit assumed cost for adjusting to 0.550kg-CO₂ / kWh or less
- The price of carbon credits is estimated based on the 2020 estimated value of "World Energy Outlook 2013 edition" (\$15 / t-CO₂), assuming up to 2035 price.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Support with minor exceptions	Direct communication with policy makers is made in a timely manner. For instance, we have exchanged our opinions and made suggestions from various points of view in discussing national emission reduction target, so called INDC, and the Plan for Global Warming Countermeasures, through various channels.	For instance, we have made requests as follows: i) revision of calculation method based on liberalization of electricity retail from April 2016 and ii) early introduction of plan-by-plan calculation of emission intensity.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
The Federation of Electric Power Companies of Japan (FEPC)	Consistent	FEPC and other volunteers in power industry established the "Electric Utility Low Carbon Society Council (ELCS)" in February 2016, which is a new voluntary framework for the realization of a low-carbon society. ELCS works on restraining GHG emissions, based on "the Action Plan for a Low Carbon Society of Electric Power Industry". As a member, we are promoting high efficiency of thermal power generation and expansion of renewable energy in order to contribute to the following targets of ELCS. · emission intensity target of 0.37 kg-CO2e/kWh (use-end) in FY2030 · 11 million t-CO2 as a maximum potential is reduced by adopting Best Available Technology(BAT) with regard to the construction of thermal power plants.	We have been appointed as a council member of ELCS and actively engaged in a discussion relating its target, actions and regulations in ELCS.
KEIDANREN	Consistent	Keidanren has encouraged 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.	We participate in Keidanren and contribute to the formation of industry's opinion about national policy of GHG reduction as a member of the meeting on climate change.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Please provide details of the other engagement activities that you undertake

CC2.3f

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?

Policies on climate change, related issues in government and industry group and its impact on our business activities have been reported to the management by monthly report or in the management meeting, so as to ensure that all of our direct and indirect activities that influence policy are consistent with our overall climate change strategy.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Intensity target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
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CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1	100%	35%	Metric tonnes CO2e per megawatt hour (MWh)*	2013	0.57	2030	No, and we do not anticipate setting one in the next 2 years	The intensity target was set out as industry-wide target in ELCS (not the target that each member of ELCS shall meet), based on energy mix and GHG reduction target in FY2030 set out by Japanese government.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	35			CO2 emission and intensity is based on energy mix and GHG reduction target in FY2030 set out by Japanese government. · 360 million t-CO ₂ / 980.8 TWh = 0.37 t-CO ₂ e/MWh (use-end) · FY2013's result: 548million t-CO ₂ / 966.6TWh = 0.57 t-CO ₂ e/MWh (use-end)

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
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CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	12%	19%	To contribute achieving industry-wide target in ELCS, we have been taking actions in our action plan submitted to ELCS. ELCS will monitor and review its members' actions to implement the Plan-Do-Check-Act cycle.

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

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

CC3.2a

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
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CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	7	1023000
Implementation commenced*	1	700000
Implemented*	4	776000
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Low carbon energy installation	Introduction of Wind Farm consists of 11 wind turbines in Shizuoka prefecture. The maximum output of the Wind Farm is 18,370 kW (1,670kW each).	16000	Scope 1	Voluntary	360000000	6300000000	11-15 years	16-20 years	The above figures are estimated based on information regarding Higashi-Izu Wind Power Plant, typical wind utilization rate and figures showed by Japanese governments' Special committee for Determination of Tariffs and Duration.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

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	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Page16	https://www.cdp.net/sites/2017/17/18517/Climate Change 2017/Shared Documents/Attachments/CC4.1/Annual Securities Report.pdf	
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Page41-43	https://www.cdp.net/sites/2017/17/18517/Climate Change 2017/Shared Documents/Attachments/CC4.1/New Comprehensive Special Business Plan.pdf	Determined pursuant to Article 46 Paragraph1 of the Act on the Nuclear Damage Compensation and Decommissioning Facilitation Corporation.
In voluntary communications	Complete	Page5,17,18,20	https://www.cdp.net/sites/2017/17/18517/Climate Change 2017/Shared Documents/Attachments/CC4.1/TEPCO Group Action Plan.pdf	
In voluntary communications	Complete	TEPCO Illustrated > Environmental Protection Measures > CO2 Emissions, CO2 Emissions Intensity and Electricity Sales	https://www.cdp.net/sites/2017/17/18517/Climate Change 2017/Shared Documents/Attachments/CC4.1/TEPCO Illustrated.pdf	

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Uncertainty surrounding new regulation	If Japanese government introduces extra regulations and tightens existing regulations in order to achieve the goal of CO2 emission	Increased operational cost	>6 years	Direct	More likely than not	Medium-high	We gradually implement replacing facilities such as gas turbines in order to increase efficiency of power generation and increase output	Following energy mix and GHG reduction target in FY2030 set out by Japanese government, power industry has established the Electric Power Council for a Low	We invested 118.59 billion yen in thermal power generation in total (including investment in high efficient thermal power

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	reduction by FY 2030, it will cause increase in cost of thermal power generation. Therefore, Electricity price will be raised and negative impact on our business performance and financial position will likely be brought about.						power. Although extra cost will temporarily be occurred, we enable reduction of running cost such as fuel price by replacing facilities. For example, thermal efficiency has increased from 54.1% to 55.8% and output power has increased from 350,000 kW to 377,000 kW by replacing Gas Turbine in Group 7 Unit 2 of Yokohama Thermal Power Plant which restarted its commercial operation in July, 2015. As a result, we have succeeded in cutting the fuel price of 10 billion yen per a year and reduction of approximately 30,000 ton-CO2 emission.	Carbon Society ("ELCS"). It aims to meet the new targets in the Action Plan for the Electricity Business for Achieving a Low-Carbon Society, which includes emission intensity target of 0.37 kg-CO2e/kWh (use-end) in FY2030. We have been appointed as a council member of ELCS and actively engaged in a discussion related to its target, actions and regulations in ELCS. We are to build well-balanced portfolio between coal-fired thermal power and LNG-fired thermal power, and promote environmentally friendly portfolio of thermal power generation in adopting Best Available Technology or BAT (More Advanced Combined Cycle II	generation).

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>technology or MACC, Integrated Gasification Combined Cycle technology or IGCC). We installed MACC, the world's highest level generation efficiency, in Kawasaki Thermal Power Station and started commercial operations on January 29th, 2016. (rated output: 710MW, generation efficiency: approx. 61%, fuel: LNG). Compared with conventional LNG thermal power plants, the generation efficiency improves about 40% and the amounts of fuel costs and CO2 emissions are reduced about 30%. Direct or indirect communication with policy makers are made to reflect our opinions to climate change policies.</p>	

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Tropical cyclones (hurricanes and typhoons)	When large typhoon strikes Kanto District, for instance, hard storm, high tide along Pacific Ocean and the river flood in the inlands will cause large-scaled and long-term power blackout and difficulty in acquiring stability of electricity supply. Extra cost of restoring and network facilities (transmission steel towers etc.) may occur. As a result, it will bring about negative impact on our business performance and financial position.	Increased operational cost	>6 years	Direct	Unlikely	Low-medium	Extra cost for restoring network facilities damaged by typhoon may occur. For instance, standard unit price for constructing 77kV transmission steel tower showed on the website of Organization for Cross-regional Coordination of transmission Operators is 90 million-320 million yen.	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	We appropriated 217.41 billion yen for restoration cost of total network in FY 2015. It includes the cost of natural disaster prevention related to climate change risk in order to achieve stable electricity supply.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	As TEPCO group's CO2 emission accounts for 30% of total CO2 emission in electric power industry in	Reduced demand for goods/services	>6 years	Direct	Unlikely	Low-medium	As TEPCO group's CO2 emission accounts for one third of total CO2 emission in electric power	Following energy mix and GHG reduction target in FY2030 set out by Japanese government, Electricity power industry has	A group that implements climate change strategy is regularly in charge of communicating those information of our climate

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Japan, when the high efficient thermal power generation is not introduced and no efficient measures on climate changes such as renewable energy has implemented, therefore we are unable to achieve the goal to reduce GHG emission, it will bring about a huge impact on a society.</p> <p>Moreover, when we do not meet the expectations of stakeholders such as customers, our corporate value may be decreased.</p>						<p>industry in Japan, failure of our actions for climate change may have a big impact and it may cause decreasing of corporate value. If sales of electricity decreases 1%, our sales income drops 52.37 billion yen.</p>	<p>established the Electric Power Council for a Low Carbon Society ("ELCS") . It aims to meet the new targets in the Action Plan for the Electricity Business for Achieving a Low-Carbon Society, which includes emission intensity target of 0.37 kg-CO2e/kWh (use-end) in FY2030. TEPCO group decided to join ELCS and make a contribute to make plans, goals and rules to realize the ELCS's effective function. We are to build well-balanced portfolio between coal-fired thermal power and LNG-fired thermal power, and promote environmentally friendly portfolio of thermal power generation in adopting Best</p>	<p>change strategy. For example, the cost related to organization (personnel expenses) above is approximately 30 million yen per a year.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>Available Technology or BAT(More Advanced Combined Cycle II technology or MACC II, Integrated Gasification Combined Cycle technology or IGCC). We installed MACC II, the world's highest level generation efficiency , in Kawasaki Thermal Power Station and started commercial operations on January 29th, 2016. (rated output: 710MW, generation efficiency: approx. 61%, fuel: LNG). Compared with conventional LNG thermal power plants, the generation efficiency improves about 40% and the amounts of fuel costs and CO2 emissions are reduced</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								approximately 30%. Moreover, we meet customers' request by suggesting a electricity price menu which accounts for low-carbon electricity power generation.	

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: **CC6. Climate Change Opportunities**

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
General environmental regulations, including planning	Due to introduction of regulations relating climate change, low	Increased demand for existing products/services	3 to 6 years	Direct	Likely	Medium-high	In Energy Mix by 2030 set out by Japanese government, in which nuclear account for 22-20%, renewables 22-24%, LNG-fired 27%, policies and	We are to build well-balanced portfolio between coal-fired thermal power and LNG-fired	We invested 118.59 billion yen in thermal power generation in total(includin

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	or no CO2-emission electricity such as renewable, nuclear and LNG fired will become more competitive. It will bring about positive impact on our business performance and financial position.						regulations will have an impact on actual energy mix. We put an importance on building a well-balanced power generation portfolio from the viewpoint of a stable, economic, and environmentally friendly way. Therefore, we try to introduce Best Available Technology(BAT)(More Advanced Combined Cycle II technology or MACC II, Integrated Gasification Combined Cycle technology or IGCC) to thermal power plants and more numbers of renewable power plants in order to reduce CO2 emission when generating power For example, thermal efficiency has increased from 54.1% to 55.8% and output power has increased from 350,000 kW to 377,000 kW in Yokohama Thermal Power Plant which	thermal power, and promote environmentally friendly portfolio of thermal power generation in adopting Best Available Technology or BAT(More Advanced Combined Cycle II technology or MACC II, Integrated Gasification Combined Cycle technology or IGCC). We installed MACC II, the world's highest level generation efficiency, in Kawasaki Thermal Power Station and started commercial operations on January 29th, 2016. (rated output:	g investment in high efficient thermal power generation).

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							restarted its commercial operation in July, 2015. As a result, we have succeeded in cutting the fuel price of 10 billion yen per a year and reduction of approximately 30,000 ton-CO2 emission.	710MW, generation efficiency: approx. 61%, fuel: LNG). Compared with conventional LNG thermal power plants, the generation efficiency improves about 40% and the amounts of fuel costs and CO2 emissions are reduced about 30%. Communication with the policy makers are periodically made in order to deal with tightening of environmental regulations.	

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	<p>Since we take efficient precautions for minimizing power blackouts when natural disaster such as typhoons strike, we succeed in minimizing extra costs that may occur during the power blackouts (restoration cost of facilities etc.). Moreover, by minimizing the power blackouts, we can supply energy security and maximize our corporate value. For instance, our grid connection system installed multiplexing of power facilities and interconnection between transmission line and distribution line (automatical recovery from power blackout etc.). Therefore, when power</p>	Wider social benefits	>6 years	Direct	Unlikely	Low-medium	<p>When damage to power plants and network facilities is caused by natural disasters, we can contribute to disaster recovery project by avoiding long-term blackout and quickly restoring electricity supply in the area affected. As a result, our corporate value as well as value of electricity as energy source will be increased. For example, when one more customers concludes the quantitative contract by normal voltage of 100V transmission service, income of network price will be increased.(Basic price: 210.6 yen/1kW, (tax included) Electricity volume price: 7.31 yen/1kWh(tax included))</p>	<p>Following countermeasures against power blackout caused by large natural disaster(typhoons etc.) are prepared: i) watertight building of major electric power substations such as watertight door and tide gate ii) levelling of installation of electric facilities to avoid being inundated iii) regular company-wide disaster training a) to rapidly collect information on damages of power plants and network facilities, blackout, requests from national and local governments and so on, b) to consider emergency response to recover damaged plants and facilities and c) to consider effective allocation of equipment and personnel iv) participation in disaster training held</p>	<p>Disaster prevention measures are regularly taken to maintain a stable supply of electricity. The cost amount of all network facilities investment is 208.97 billion yen (including the cost for taking measures against natural disaster for achieving to stable electricity supply).</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	facilities are struck by natural disasters, we can avoid power blackouts and restore in a short time. Thus, power blackouts per a household occurred in FY2015 were 0.06 times, Recovered in six minutes.							by national and local government and training for flexibly offering equipment for recovery between utilities.	

CC6.1c

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behavior	In GHG reduction target in FY2030 set out by Japanese government, "residential sector" and "commercial and other	New products/business services	1 to 3 years	Direct	Likely	Low-medium	We put an importance in building well-balanced portfolio from a viewpoint of "Energy Security", "Economy", "Environmental Conservation."	We introduce environmentally friendly high efficient generation facility in order to build well-balanced power generation portfolio. For example, our first	We invested 11.14 billion yen in Hydropower generation and new energy in total (including the investment cost in

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	sector (office buildings, etc.)" have to reduce as much as 40% of GHG emission. In order to achieve above sectorial target, government will take measures such as regulation, taxation and subsidies as well as campaign for promoting low carbon products and services. As a result, customers' behavior and preference may change. With introduction of stricter regulation and rise of awareness on climate change, more electricity user may be interested in						Thus we promote thermal power generation in adopting Best Available Technology or BAT(More Advanced Combined Cycle II technology or MACC II, Integrated Gasification Combined Cycle technology or IGCC) and renewable power generation in order to achieve low-carbon power generation. For example, our first wind farm has started its business operation in Higashiizu town and Kawazu town Kamo country Shizuoka prefecture in August, 2015. 11 wind mills and maximum output reaches 18,370kW. It supplies	wind farm has started its business operation in Higasi Izu town and Kawazu town Kamo county Shizuoka prefecture in August, 2015. It enables us to supply electricity volume of approximately 10,000 households per a year and reduce 16,000 ton-CO2 emissions per a year. We will meet customers' request by supplying low-carbon electricity as well as suggesting low-carbon price menus.	Renewable energy).

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	purchase of low carbon electricity and consulting service for energy saving. It will result in increased demand in low-carbon power generation and will bring about business opportunities to TEPCO group and positive impact on our financial position.						electricity volume of approximately 10,000 households per a year and reduce 16,000 ton-CO2 emissions per a year. If sales of electricity increases 1%, our sales income increases 52.37 billion yen.		

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Apr 2014 - Tue 31 Mar 2015	97221600
Scope 2 (location-based)		
Scope 2 (market-based)	Tue 01 Apr 2014 - Tue 31 Mar 2015	200000

Scope	Base year	Base year emissions (metric tonnes CO2e)

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
Act on the Rational Use of Energy
Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
The Tokyo Cap-and Trade Program

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Crude oil	0.00262	metric tonnes CO2 per liter	Ministerial ordinance by Ministry of the Environment
Diesel/Gas oil	0.00258	metric tonnes CO2 per liter	Ministerial ordinance by Ministry of the Environment
Kerosene	0.00249	metric tonnes CO2 per liter	Ministerial ordinance by Ministry of the Environment
Liquefied Natural Gas (LNG)	2.7	metric tonnes CO2 per metric tonne	Ministerial ordinance by Ministry of the Environment
Liquefied petroleum gas (LPG)	3	metric tonnes CO2 per metric tonne	Ministerial ordinance by Ministry of the Environment
Town gas or city gas	0.00223	metric tonnes CO2 per m3	Ministerial ordinance by Ministry of the Environment
Electricity	0.51	metric tonnes CO2 per MWh	Notification of the Ministry of Environment about emission factor of each electric utility
Other: Coal	2.33	metric tonnes CO2 per metric tonne	Ministerial ordinance by Ministry of the Environment

Further Information

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

91420800

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
	We are reporting a Scope 2, market-based figure	

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
	190000	

CC8.4

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

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Assumptions Data Management	It is difficult to eliminate all the uncertainty in settlement of emissions figures. Mistakes in inputting data, miscalculation, and making the wrong choice on emission factor can be occurred. Also some very small offices can be used assumption data for their emissions.
Scope 2 (location-based)			
Scope 2 (market-based)	Less than or equal to 2%	Assumptions Data Management	It is difficult to eliminate all the uncertainty in settlement of emissions figures. Mistakes in inputting data, miscalculation, and making the wrong choice on emission factor can be occurred. Also some very small offices can be used assumption data for their emissions..

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

No third party verification or assurance – regulatory CEMS required

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
Other: GHG Emissions Accounting, Reporting, and Disclosure System (Ministry of the Environment, Japan).Air Pollution Control Act	100	Wed 01 Apr 2015 - Thu 31 Mar 2016	https://www.cdp.net/sites/2017/17/18517/Climate Change 2017/Shared Documents/Attachments/CC8.6b/C8.6b.pdf

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Market-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/17/18517/Climate Change 2017/Shared Documents/Attachments/CC8.7a/C8.7a.pdf	page 1	Tokyo cap-and-trade guideline for verification	1

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Apr 2015 - 31 Mar 2016)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By GHG type
By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
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CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	91300000
N2O	58000
HFCs	2800
SF6	60000

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Generation of Electricity	91358000
Other	62800

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Apr 2015 - 31 Mar 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
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CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
-------------------	--	--

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Head office buildings		130000
Office buildings and others		60000

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 25% but less than or equal to 30%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	1838
Steam	14217
Cooling	8223

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

453481318

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Crude oil	9035302
Diesel/Gas oil	206119
Natural gas	329835007
Town gas or city gas	32239999
Other: Fuel oil	19949321
Other: petroleum gas	2227091
Other: Coal	59988479

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company	44160	0	

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
1145907	1101747	201960660	9129958	44160	

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	0.14	Decrease	Increasing volume of purchasing electricity generated from renewable energy sources. $\frac{13,597[\text{MWH}] \times 0.491[\text{t-CO}_2\text{e/MWH}] - 536,052[\text{MWH}] \times 0.496[\text{t-CO}_2\text{e}]}{97,421,600[\text{t-CO}_2\text{e}] \times 100[\%]}$
Divestment			
Acquisitions			
Mergers			
Change in output	3.85	Decrease	Declining electricity sales by the demand decreases. $\frac{247,100,000[\text{MWH}] \times 0.496[\text{t-CO}_2\text{e}] - 257,000,000[\text{MWH}] \times 0.496[\text{t-CO}_2\text{e}]}{257,000,000[\text{MWH}] \times 0.496[\text{t-CO}_2\text{e}]} \times 100[\%]$
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.00001749	metric tonnes CO2e	5237000000000	Market-based	7.88	Increase	The volume of purchasing electricity generated from renewable energy sources increased, and the electricity sales revenue decreased by 13.00% compared to the previous fiscal year (FY2015: 5237.00 billion yen, FY2014: 6007.8 billion yen). And total amount of emissions were reduced by 6.00% (FY2015: 91610800 tCO2e FY2014: 97421600 tCO2e). As a result, the intensity decreased by 7.88%

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.371	metric tonnes CO2e	megawatt hour (MWh)	247100000	Market-based	2	Decrease	We were able to reduce emissions intensity by increasing emissions of renewable energy and reducing emission fossil fuels such as oil fired thermal power generation ratio. FY2015: 91610800 [t-CO2e] / 247100000 [MWh] = 0.371 FY2014: 97421600 [t-CO2e] /

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							257000000 [MWh] = 0.379 Emission of this reply is GHG emissions from its own power plant and excludes electricity purchased from other companies for sale for sales purposes but emissions reported to the government are sent from other companies Includes purchased electricity.

Further Information

Page: **CC13. Emissions Trading**

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
Tokyo Cap-and-Trade	Wed 01 Apr 2015 - Sun 31 Mar 2019	28915	0	4693	Facilities we own and operate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Tokyo Cap-and-Trade only covers scope2 emissions in Tokyo metropolitan area, which amount of emission from power plant is not included. The required offices fulfill the obligations by taking both facility and operation measures. TEPCO is making continuous efforts to reduce emissions regardless of locations and emission methods. Offices in Tokyo 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. Also power plants have taken heat efficient measures and others to reduce scope1 emissions.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit origination	Biomass energy	Use of Charcoal from Renewable Biomass Plantations as Reducing Agent in Pig Iron Mill in Brazil	CDM (Clean Development Mechanism)	13682	13682	No	Voluntary Offsetting

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, explanation provided				Assessment has shown that emissions from this source are not quantitatively relevant compared to TEPCO's overall emissions. Therefore, the impact on

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					our business risk is quite small and the priority to evaluate is low to each stakeholder.
Capital goods	Relevant, calculated	2159520	Capital investment(JPY)×Emission Factor about capital goods[tCO2e/JPY]	100.00%	The emissions are calculated based on the emission factor provided by the database of the Ministry of Environment.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	678972	Electricity sales from thermal power plants [MWh] ×Emission Factor 0.0354 [tCO2e/MWh]	100.00%	The emissions are calculated based on the emission factor provided by the database of the Ministry of Environment. The emission factor is considered the process of procurement the power generation fuel and included the factor of waste disposal.
Upstream transportation and distribution	Relevant, calculated	25181	Related fuel amount of consumption [kl] × Calorific value unit [MJ/l] × Emission factors of related fuel [tC/GJ] x 12/44	100.00%	The emissions are required to submit yearly to the government by the Act on the Rational Use of Energy about domestic transportation.
Waste generated in operations	Relevant, calculated	57420	Using emission unit intensity by waste type treatment method for the amount of major industrial waste (coal ash, gypsum recovered through desulfurization, scrapped concrete utility poles, metal scraps, pcb, wastewater treatment sludge, heavy/crude oil ash, shells, etc.) Calculated	100.00%	The emissions from waste disposal caused by generations are included the emissions from Fuel-and-energy-related activities.
Business travel	Not relevant, explanation provided				Assessment has shown that emissions from this source are not quantitatively relevant compared to TEPCO's overall emissions. Therefore, the impact on our business risk is quite small and the priority to evaluate is low to each

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					stakeholder.
Employee commuting	Not relevant, explanation provided				Assessment has shown that emissions from this source are not quantitatively relevant compared to TEPCO's overall emissions. Therefore, the impact on our business risk is quite small and the priority to evaluate is low to each stakeholder.
Upstream leased assets	Not relevant, calculated	0		100.00%	Not applicable to our business.
Downstream transportation and distribution	Not relevant, calculated	0		100.00%	Not applicable to our business.
Processing of sold products	Not relevant, calculated	0		100.00%	This is considered not applicable to our central products electricity.
Use of sold products	Not relevant, explanation provided				The emissions from use of sold electricity are not quantitatively relevant compared to TEPCO's overall emissions.
End of life treatment of sold products	Not relevant, calculated	0		100.00%	Not applicable to our business.
Downstream leased assets	Not relevant, calculated	0		100.00%	We have no downstream leased assets.
Franchises	Not relevant, calculated	0		100.00%	We have no franchises.
Investments	Not relevant, explanation provided				Assessment has shown that emissions from this source are not quantitatively relevant compared to TEPCO's overall emissions. Therefore, the impact on

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					our business risk is quite small and the priority to evaluate is low to each stakeholder.
Other (upstream)					
Other (downstream)					

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third party verification or assurance

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Capital goods	Change in output	14	Increase	Increasing capital investment for decommissioning of the Fukushima Daiichi Nuclear Power Station.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	6.5	Decrease	In consideration of the environment, changed to a supplier with a low emission unit.
Upstream transportation & distribution	Change in output	6	Increase	Increase in the transportation of materials and equipment due to the recovery work of the power station due to the accident at Fukushima Daiichi Nuclear Power Station.
Waste generated in operations	Change in output	10	Increase	The amount of waste increased.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our customers
Yes, other partners in the value chain

CC14.4a**Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success****i) Methods of engagement**

TEPCO Group's JFS (Nippon Facility Solution) carries out energy-saving service projects with guarantee of effect to customers.

JFS provides one-stop services such as technology (design, construction, maintenance, and verification of effects), financing, and certification of energy saving effects to customers when refurbishing buildings and factories into energy saving ones.

The operation of energy-saving equipment is undertaken by customers under the guidance of JFS. JFS works collaboratively with customers to reduce energy, and the utility expenses reduced by energy saving refurbishment is divided between customers and JFS, thus they are in a Win - Win relationship.

ii) Strategy for prioritizing engagement

We are prioritizing proposals to customers with large scale of margin for reduction, such as factories and buildings with large amounts of energy consumption and CO2 emissions.

iii) Measures of success

The results are evaluated based on the number of energy saving refurbishments JFS carried out for each fiscal year. In FY 2015, JFS supported 15 energy saving refurbishments.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
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CC14.4c

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Hiroshi Yamaguchi	Vice President of TEPCO Holdings	Board/Executive board

Further Information

Module: Electric utilities

Page: EU0. Reference Dates

EU0.1

Please enter the dates for the periods for which you will be providing data. The years given as column headings in subsequent tables correspond to the "year ending" dates selected below. It is requested that you report emissions for: (i) the current reporting year; (ii) one other year of historical data (i.e. before the current reporting year); and, (iii) one year of forecasted data (beyond 2021 if possible).

Year ending	Date range
2015	Wed 01 Apr 2015 - Thu 31 Mar 2016

Further Information

Page: EU1. Global Totals by Year

EU1.1

In each column, please give a total figure for all the countries for which you will be providing data for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emission intensity (metric tonnes CO2e/MWh)
2015	66845	201961	91420800	

Further Information

Page: EU2. Individual Country Profiles - Japan

EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Coal - hard
Oil & gas (excluding CCGT)
CCGT
Hydro

Other renewables

EU2.1a

Coal - hard

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	3200			

EU2.1b

Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
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EU2.1c

Oil & gas (excluding CCGT)

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	23739			

EU2.1d**CCGT**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	17384			

EU2.1e**Nuclear**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

EU2.1f

Waste

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

EU2.1g

Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2015	9859	10800

EU2.1h

Other renewables

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2015	52	100

EU2.1i**Other**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
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EU2.1j**Solid biomass**

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

EU2.1k

Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	44323	198200	91420800	

EU2.1l

Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	66845	201961	91420800	

Further Information**Page: EU3. Renewable Electricity Sourcing Regulations**

EU3.1

In certain countries, e.g. Italy, the UK, the USA, electricity suppliers are required by regulation to incorporate a certain amount of renewable electricity in their energy mix. Is your organization subject to such regulatory requirements?

EU3.1a

Please provide the scheme name, the regulatory obligation in terms of the percentage of renewable electricity sourced (both current and future obligations) and give your position in relation to meeting the required percentages

Scheme name	Current % obligation	Future % obligation	Date of future obligation	Position in relation to meeting obligations

Further Information**Page: EU4. Renewable Electricity Development**

EU4.1

Please give the contribution of renewable electricity to your organization's EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization) in the current reporting year in either monetary terms or as a percentage

Please give:	Monetary figure	%	Comment
Renewable electricity's contribution to EBITDA			

EU4.2

Please give the projected contribution of renewable electricity to your organization's EBITDA at a given point in the future in either monetary terms or as a percentage

Please give:	Monetary figure	%	Year ending	Comment
Renewable electricity's contribution to EBITDA				

EU4.3

Please give the capital expenditure (capex) planned for the development of renewable electricity capacity in monetary terms and as a percentage of total capex planned for power generation in the current capex plan

Please give:	Monetary figure	%	End year of capex plan	Comment
Capex planned for renewable electricity development				

Further Information

CDP 2017 Climate Change 2017 Information Request