## **TEPCO Energy Partner, Inc.**



## Making, "...and..., more..." Tangible in the Lives and Businesses of Our Customers

With the full liberalization of the electricity retail market in April 2016, we are embroiled in fierce competition with other companies as more and more companies join the market and more of the share of the market goes to new utilities.

In addition, with predicted decreases in domestic energy demand caused by the development of energy-saving technologies, the changes we see in our operating environment, such as easier procurement of electricity from the wholesale market in conjunction with spreading power system reforms, are accelerating.

It is precisely because we face this management environment that we must free ourselves from mere price competition and provide actual products and services that customers think, "wouldn't it be great to have...," thereby solving social issues and contributing to making the lives of our customers more comfortable. In order to

do this, we must go beyond just being a company that sells electricity and gas and create new value by evolving into a company that makes the "...and..., and..." mentioned in our "electricity, gas, and..., and..." commercials tangible.

In addition to further promoting sales packages that offer both electricity and gas to our household customers, we also aim to become a "lifestyle concierge" that can solve various living-related problems, such as repairing appliances and gas equipment, and develop services that provide safety and security thereby becoming closer to the customer and fostering an attitude of, "Let's first consult with TEPCO."

For our corporate clients, in addition to proposing added value, such as saving energy and costs through the efficient use of energy, we shall provide solutions to various problems that our customers have by, for example, providing various services

that meet the growing need for renewable energies, and proposing new power usage plans that contribute to reforming the work habits of clients that aid with our night operations. Through these initiatives we aim to become a company about which our customers say, "I knew TEPCO was the right choice. I look forward to having you by my side." And, we shall continue to improve corporate value and fulfill our responsibilities to recovery in Fukushima by further heightening our level of engagement with our customers and society.

President TEPCO Energy Partner, Inc.

Nolwhide Shimoto



## Directors (As of October, 2019)

yubihiko Tahijana Managing Director

Primarily engaged in legal and corporate affairs. After serving as Deputy General Manager of the TEPCO HD Niigata Headquarters, Mr. Kakisawa assumed position as Managing Director and General Manager of Business Reform Unit.

Noluhide Shimoto

Involved in primarily personnel and corporate affairs, Mr. Akimoto has been engaged in Fukushima projects (Recovery/ Compensation Department) since 2011. He assumed position as Managing Director in 2017 and was appointed President in 2019.

Tadashi Tamura

Joined the TEPCO in 2016 after working for the Nuclear Damage Liability Facilitation Fund (currently the Nuclear Damage Compensation and Decommissioning Facilitation Corporation). In 2017, Mr. Tamura assumed position as Managing Director and General Manager of Smart Life Division and Product Development Office in 2017, and was appointed Managing Director of Business Strategy Unit in 2019.

Rieko Sato

As TEPCO Customer Service Company Vice President and TEPCO EP Managing Officer, Ms. Sato has a plethora of experience and knowledge about retail.

michia Sato

Vice President

Engaged in primarily gas and thermal power duties. In 2016, Mr. Sato assumed position as Managing Director and in 2019 was appointed as Vice President and General Manager of Sales Unit.

Momoko Magasaki

Managing Director

Engaged in primarily household and corporate sales. After serving as President of Tepco Customer Service Co, Ltd., Ms. Nagasaki assumed position as Managing Director, CIO (Chief Information Officer) and General Manager Yoshitaka Kokubo

As an Auditor in the TEPCO Accounting and Treasury Department, Mr. Kokubo has a plethora of experience and knowledge about finance and accounting.



## **Business Overview**

#### **TEPCO Energy Partner, Inc.**

Major business operation Retail electricity business, gas business

Head office Ginzamitsui Bldg., 13-1 Ginza, 8-chome, Chuo-ku, Tokyo,

104-0061, JAPAN

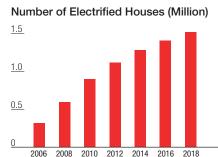
Established April 1, 2015
Capital ¥10 billion

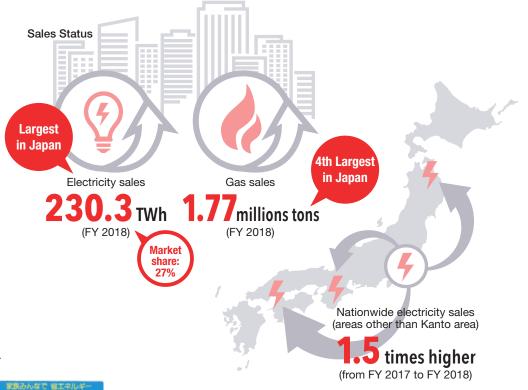
Number of employees 2,696 (Number of consolidated employees 4,085)\*

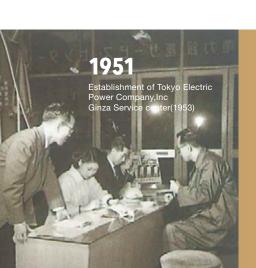
Group companies 22 companies\*

\* As of March 31, 2019

# Electricity Sales (TWh) 300 1.5 200 1.0 0.5













## **Risks & Opportunities**

We shall ensure that our business as an energy retailer is sustainable in order to respond to changes in our business environment, such as intensified competition spurred on by decreasing demand for power and market liberalization. We aim to grow into a company that is needed even more by our customers and society by expanding our fields of business into gas sales and the provision of new services, as well as developing a renewable energy business model that considers the environment.

## **External** environment

- De-regulation
- De-population
- De-carbonization

Increased competition through full Deregulation of electricity retail

Decreased power demand due to De-population

Social demand for Low-carbonization

#### **Expand business**

- Gas sales, New services
- Business model that enables saving energy, cost, and CO<sub>2</sub>
- Renewable energy sales business model
- Overseas business development

## Sales Target of Growth Businesses

¥450billion (FY2019)

電気、

ガス、

2011.3.11

Great East Japan Earthquake and Tsunami



2016



- De-regulation of electric powe
- TEPCO Energy Partner inherits retail department through company split-up

2017

- De-regulation of gas
- "Aqua Premium" (Plan offers customers carbon-free energy from 100% hydropower)



• First appearance of Tepc

2019

First overseas subsidiary established in Thailand



2030

Business model shifts to contributing to the "development of business" and "living happily"

それから

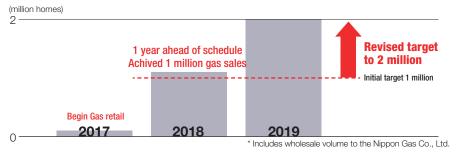
それから。

## Gas Sales/New Services

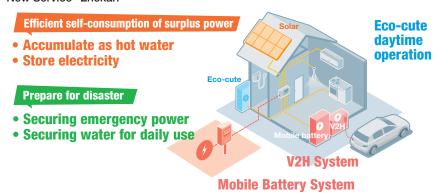
In 2018, seven years since the Great East Japan Earthquake and Tsunami, TEPCO revealed its new mascot (Tepcon) and recommenced television commercials. Thanks to these promotional activities and the sale of electricity + gas set packages, we were able to achieve our FY2019 gas sales target of 1 million\* homes a year earlier than expected. We have made an upward revision to our FY2019 gas sales target to 2 million homes as we strive to get as many customers as possible to purchase gas from TEPCO.

In addition to the sale of electricity and gas, we have also started providing new services to meet the diverse needs of customers, such as energy-saving equipment and storage batteries, etc., as we aim to increase sales in growth businesses.

#### Results and Target of Gas Sales



#### New Service "Enekari" \*



<sup>\*</sup> TEPCO HomeTech provides a new flat-rate service that allows you to install energy-saving equipment at an initial cost of ¥0.

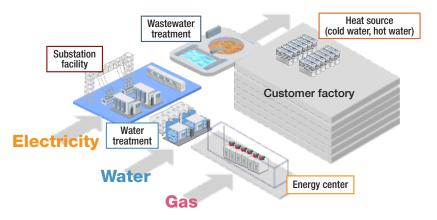
## Saving Energy, Cost, and CO<sub>2</sub>

We are developing our business as an energy service provider (ESP) so as to provide one-stop shopping that offers everything from energy sales (electricity/gas) to the introduction, operation, and maintenance management of highly efficient systems. Through these efforts we shall contribute to large savings in energy, costs, and  $CO_2$  emissions thereby enabling our customers to reduce and equalize total costs for everything from construction to operation.

TEPCO aims to transcend mere electricity sales and grow in other profitable business areas to meet the needs of our customers. And, through the promotion of ESP we shall improve the energy efficiency of society as a whole.

#### **ESP Example**





- Energy center with 24-hour monitoring
- Real-time monitoring and optimal energy supply

## Renewable Energy Sales Business

In conjunction with our initiatives to turn renewable energies into main power sources, we newly established a Renewable Energies Promotion Department on September 1, 2019 in order to fulfill the desires of our customers while also contributing to society and further creating/increasing environmental value.



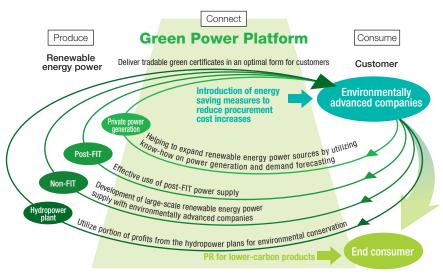
Going forward, this department will engage in initiatives to maximize the value that exists in renewable energies.

#### Construction of a Green Power Platform that Leverages Renewable Energies

We are constructing a Green power platform that shall provide products, solutions and initiatives for connecting the "creators" of environmental value with the "users" that seek environmental value.

By combining initiatives such as our "Aqua Premium" Green solution that provides electricity from hydroelectric power plants, which emit no CO<sub>2</sub>, our "Green Power Certificate" that certifies in writing the environmental value of renewable energies, and our "Renewable Energy Equipment ESP (on-site/off-site types)" that assists with capital investment, we shall meet the needs of our customers.

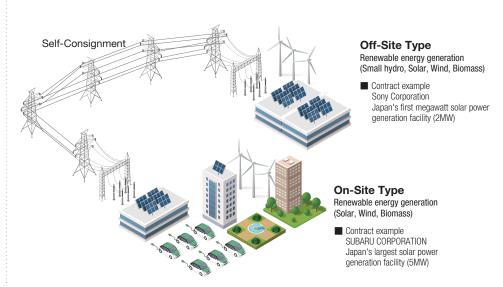
Going forward we shall meticulously look at the diverse and advanced needs of our customers, such as methods for procuring renewable energies, capital investment, and ratio improvement, and create optimal renewable energy-leveraging plans desired by our customers.



#### Renewable Energies Business Model (On-site/Off-site Types)

In August 2019, we executed a basic self-consigned energy service agreement with Sony that leverages Japan's first megawatt class solar power plant. This marks the first time that the TEPCO Group has provided its system for the highly precise prediction of power generation volume and demand volume for use in customer facilities, and shall enable Sony to reduce  $CO_2$  emissions by approximately 1,000 tons per year. Being able to predict power generation volume and demand volume with high precision shall enable energy production to be kept equal with energy demand, which is necessary during self-consignment, and contribute to helping Sony achieve its goal of "using renewable energies for 100% of the power used by Sony's companies all over the world by 2040."

TEPCO shall continue to develop its business for solving the various problems that our customers face by proposing solutions that focus on renewable energies.



1951

1965

1979

1999

Establishment of Tokyo Electric Power Company.Inc



▲ Nikko Daini power plant
Oldest hydroelectric power plant still in existence (1893~)



▲ Nature conservation activities in Oze area (1950s~)



▲ Yagisawa power plant
First pumped-storage power plant (1965~)



▲ Shin Tsakasegawa power plant Largest hydroelectric power plant (1979~)



▲ Hachijyojima power plant Largest hydroelectric power plant (1999~2019)

## The History and Technical Skill of Hydroelectric Power

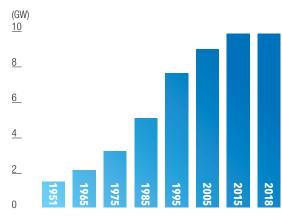
When TEPCO was established in 1951 the maximum output of hydroelectric power generation facilities was 1.44 GW, and hydroelectric power accounted for 80% of TEPCO's energy portfolio. Hydroelectric power, which utilizes energy from nature, is a clean energy source that does not emit CO<sub>2</sub> and plays an important role even today. In 1965, the year following the Tokyo Olympics, TEPCO commenced operation of its first pumped-storage hydroelectric power plant, and thereafter built eight other pumped-storage hydroelectric power plants (maximum output

of all nine plants: 7.68 GW).

A pumped-storage hydroelectric power plant has large adjustment reservoirs both above and below the power plant. During times of low demand, water is pumped up, and during times of peak demand that water is used to generate electricity. This plays an important role in maintaining a stable supply of power with the ability to immediately respond to changes in maximum demand. The ability to use pumped-storage hydroelectric power plants to adjust supply and demand has become indispensable today when more renewable energies that have unstable output are integrated to the power grid system.

At current time, TEPCO owns a total of 164 hydroelectric power plants that have a combined total output of approximately 9.87 GW. These hydroelectric power plants are placed on the Tone River basin that flows through primarily Gunma and Tochigi Prefectures, the Shinano River basin that flows through Nagano and Niigata prefectures and the Sagami and Fuji River basins in Yamanashi Prefecture. In recent years we have been replacing hydroelectric power plants that have aged. The technical skill related to the new construction/replacement and facility management of hydroelectric power plants that TEPCO has cultivated since its establishment is being taken overseas and leveraged to expand our business.

## Trends in Maximum Output from Hydroelectric Power Plants



## Renewable Energy

2000

Establishment of Japan Natural Energy Company Limited
Start of Tradable Green Certificates business

▲ Hachijyojima power plant
First wind power plant (2000~2014)

2011.3.11

Great East Japan Earthquake and Tsunami



▲ Ukishima power plant
TEPCO's first mega solar power plant (2011~)

2020

Business start
TEPCO Renewable Power



▲ Higashiizu power plant First wind farm (2015~)



2030~

Development of Various Types of Renewable Energies

In 1999, operation of a geothermal power plant with an output of 3.3MW commenced on Hachijo Island, Tokyo. And, in the year 2000, a wind power generation plant with an output of 0.5MW commenced operation on the same island (both power

Introduction Status of Renewable Energy

plants has been abolished at current time). Currently, we have three mega-solar power plants that produce a maximum output of 30MW, and are operating a wind farm that comprises of 11 wind turbines and produces a maximum output of 18MW. And, in 2019 we commenced commercial operation of an offshore wind power plant.

Introduction Status of Renewable Energy				
	Power Stations	Maximum Output (MW)		
Hydro	164 locations	9,873MW		
Solar	Ukishima mega solar power plant (Kanagawa prefecture)	7MW		
	Ogishima mega solar power plant (Kanagawa prefecture)	13MW		
	Komekurayama mega solar power plant (Yamanashi prefecture)	10MW		
Wind	Higashiizu wind farm (Shizuoka prefecture)	18.4MW (1.67MW×11)		
	Off-shore wind power plant off the coast of Choshi (Chiba prefecture)	2.4MW		

**Eurus Energy** 

Total In Operation Solar 341.5MW Wind 2,555.8MW

(as of July 2019)

▲ Investment in Eurus Energy

Holdings Corporation (2002~)

6~7 GW in Japan and overseas that will serve as the pillar for this growth business. In order to promote this, the decision has been made to form a separate company "TEPCO Benewable"

Establishment of

**TEPCO** Renewable Power

In 2018, the TEPCO Group announced

that it was aiming to make renewable

energies into primary power sources

its renewable energies business with

the objective of developing a total of

and began taking steps to expand

separate company, "TEPCO Renewable Power," in April 2020 to handle our

a separate company will enable quick decision-making in regards to large-scale investments and partnerships both within and outside of Japan, and will enable us to flexibly raise capital to support these initiatives. Furthermore, working under competitive cost levels will enable us to reach our FY2030 profit target of ¥100 billion. Going forward, we shall build upon the value chain of the TEPCO Group, which is the foundation for our revenues, in order to maximize the value that renewable energies have.

renewable energies businesses. Creating



Renewable energy power

www7.tepco.co.jp/ourbusiness/renewable/index-e.html

## **Off-Shore Wind Power**

#### Off-Shore Wind Farm Project

In January 2019, TEPCO commenced commercial operation of its first off-shore wind power facility. Off the coast to the south of Choshi City, Chiba Prefecture, where this facility lies, we are engaged in a project with Ørsted A/S (Denmark), the world's largest wind farm operator, to develop our offshore wind power facility into a wind farm in hopes that we will be given the rights by the government to exclusively develop this area of the ocean and for this purpose we have signed a memorandum with Ørsted A/S that allows the knowledge of both companies to be leveraged as much as possible. In August 2019, we submitted a Planning Stage Environmental Consideration Brief to the Minister of Economy, Trade and Industry, and have commenced an environmental impact assessment in preparation to use the

aforementioned area for a wind farm. In the future we aim to develop off-shore wind power facilities on the scale of 2~3 GW both within and outside of Japan, and provide society with the value of renewable energies by promoting the development of off-shore wind power for power generation purposes.

## Outline of Planning Stage Environmental Consideration Brief

Project name	(Tentative name) Choshi off-shore wind power generation project
Type of motor	Off-shore wind power (Implantation type)
Maximum output	370MW
Location	1.2+km off coast of Choshi
Wind condition	More than 6.6m/s
Water depth	8~20m
Start operation	After FY2024 (planned)

Wind power generation facility and observation tower(Off Choshi)



## **Hydro Power in Vietnam**

## Investment in the Coc San Hydroelectric Power Plant in Vietnam

In 2018, we invested in the Coc San Hydroelectric Power Plant (total output: 29.7 MW) owned by Lao Cai Renewable Energy in Vietnam as TEPCO's first overseas hydroelectric power project. Hydroelectric power plants all over the world face the common problems related to facility and the use of water. TEPCO believes that leveraging our technical skill and know-how cultivated over many years in Japan to appropriately handle these risks will contribute to stable operation over the long-term and an improvement in revenues. Going forward, the TEPCO Group will continue to form partnerships with entities both within and outside of Japan with a focus on Southeast Asia,

and promote participation in overseas hydroelectric power projects that are competitive and leverage the Group's technical know-how as we aim for improved profitability.





Coc San hydro power plant (Vietnam)

## Value Chain for Renewable Energy

By building a continuous value chain that covers everything from renewable energy generation to consumption, the TEPCO Group shall maximize the value of renewable energies and contribute to the creation of a low-carbon society.

**Power Generation** 

Distribution

#### Consumption



#### Renewable Energy Solutions (Tokyo Densetsu Service Co.,Ltd)

The technical prowess that we have cultivated through our power business has given us a step up when it comes to construction planning, power system interconnection and pre-use inspections, and Renewable Energy Solutions is a "one-stop service" that provides everything from material procurement, to project implementation and maintenance management.

### Renewable Energy Storage Plan (TEPCO Energy Partner)

With this money-saving plan, surplus power stored by TEPCO is used to fulfill the electricity needs of customer homes without requiring the installation of storage batteries in the household.



#### Suncle

#### (TEPCO Ventures, Inc.)

SUNCLE is a website that enables anyone to enter their address and estimate their savings and the amount of energy produced by installing solar panels on their roofs. The site also forecasts the amount of CO<sub>2</sub> emissions that can be eliminated by going solar. Suncles uses Google Project Sunroof technology.



#### **Grid Connection Support**

#### (Tokyo Electric Power Services Co.,Ltd.)

Based on our experience of system interconnection operation, we provide optimal transmission development plan and smooth coordination among parties involved in regards to transmission infrastructure from renewable power plants to the trunk transmission line of electric utility.

www.tepsco.co.jp/english/services/renewable/index.html



#### Tradable Green Certificates

(TEPCO Energy Partner)

#### (Japan Natural Energy Co.,Ltd)

Agua Premium/Agua Energy100

The environmental added value that electricity generated with renewable energies has is provided in the form of a Green Power Certificate.

First domestic rate plan where 100% of electricity

is generated from hydroelectric power. This plan

offers electricity with zero CO2 emissions.



#### Hotdenki (TRENDE Inc.)

With Hotdenki the initial cost of installation of the solar power generation system is ¥0, a maximum of 20% can be cut from household electric bills and the equipment will be transferred at no cost upon conclusion of the contract.

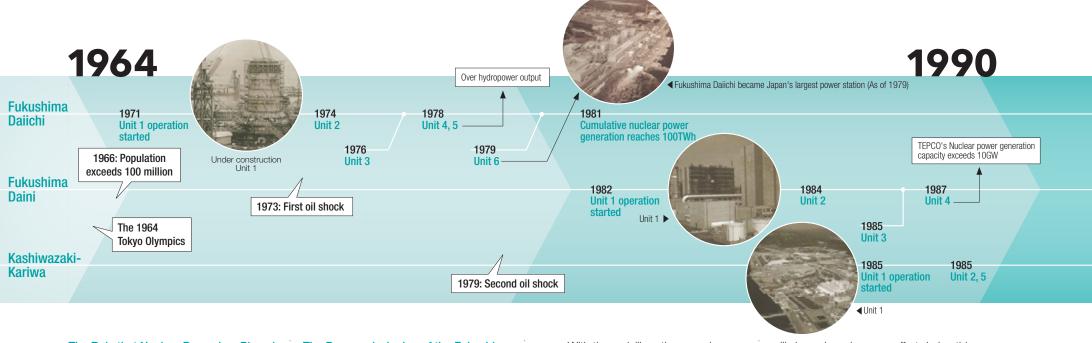


#### Renewable Energy ESP

#### (Japan Facility Solutions,Inc.)

Renewable Energies ESP provides one-stop shopping for the installation, operation, and maintenance of renewable energy equipment needed for on-site (household consumption) and off-site (self-consignment) power by combining renewable energies with energy conservation.





#### The Role that Nuclear Power has Played

At the generation stage, nuclear power can provide large amounts of electricity in a stable manner, at low cost, and without producing any CO<sub>2</sub>. In Japan, which lacks energy resources, nuclear power supported the period of rapid economic growth following World War II, and has played a vital role as a baseload power source.

## The Decommissioning of the Fukushima Daini Nuclear Power Station

We have examined how to handle Fukushima Daini from the perspective of decommissioning Fukushima Daiichi and providing the people in the region with peace of mind. We therefore deliberated the decommissioning of all reactors at Fukushima Daini while taking into consideration securing human resources for the decommissioning of both Fukushima Daini and Fukushima Daiichi, safely engaging in decommissioning, and the impact that decommissioning Fukushima Daini would have on our business in general.

With these deliberations coming close to conclusion, and in total consideration of the regional communities that wish to have all nuclear power stations in Fukushima Prefecture decommissioned, we made the decision on July 31, 2019 to decommission all reactors at Fukushima Daini. Going forward, the TEPCO Group shall provide detailed explanations to community residents about how Fukushima Daini will be decommissioned and move forward with procedures required to decommission the plant while obtaining the understanding of the community. At the same time, we

will sincerely make every effort during this process to provide community residents with peace of mind as we decommission both the Fukushima Daiichi and Fukushima Daini Nuclear Power Stations.

#### Basic Decommissioning Plan

- Securing human resources needed for decommissioning both Fukushima Dajichi and Fukushima Dajni
- 2. Safe decommissioning
- 3. Contributing to the recovery of industry in the region

## **Nuclear Power**



## **Nuclear Power Station**

In accordance with the Nuclear Safety Reform Plan, we are using the Management Model, which puts forth policies for power station operation, to improve safety awareness, technological capability, and our ability to engage in dialogue in order to establish the world's highest levels of safety. We are also constructing management systems that prioritize safety and enable us to engage in business activities from the perspective of the local communities so that we can respond to various issues in a unified manner.

In preparation for the recommencement of operation of the Kashiwazaki-Kariwa Nuclear Power

resistance enhancements, handle procedures required to obtain the work plan permit for Unit 7, and steadily move forward with preparations for inspections of Unit 6. We are also carefully listening to the opinions of community residents as we engage in activities to promote understanding and contribute to the region, while also striving to develop support bases for times of disaster.

Furthermore, at the Higashidori Nuclear Power Station we are implementing geological surveys in order to further improve safety as we aim to create a basic framework of cooperation with other operators by FY2020.

¥1,169 billion (Current estimate)

**Cost of safety measures at** Kashiwazaki-Kariwa Nuclear Power Station

¥90-110 billion/year

Cost reduction if operating one nuclear unit

2.8 million tons/year\*

**CO<sub>2</sub> reductions if operating one nuclear unit** 

\* Reference: "Energy and Environment 2018" by the Federation of Electric Power Companies of Japan. Effects of CO<sub>2</sub> emission reduction with Nuclear Power 1GW. (Estimates)

2011.3.11

2014

#### Recovery

Great East Japan Earthquake and Tsunami







Lifting of evacuation orders

2014 Tamura City Part of Kawauchi Village

Lifting of evacuation orders

2016
Part of Katsurao Village
Kawauchi Village
Part of Minamisoma City

Lifting of evacuation orders

Decommissioning

2011.3 Hydrogen explosions at Units 1, 3 and 4 2014 Completion of fuel removal from Unit 4



2015 Completion of a large rest area

2015

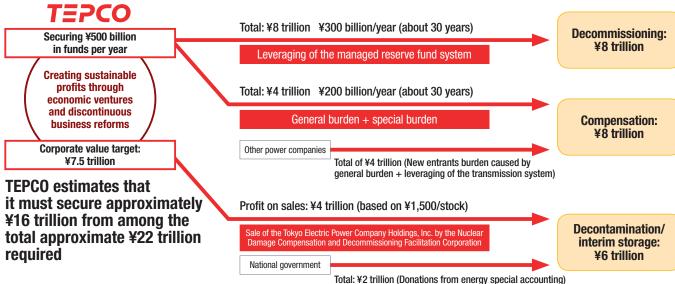
Naraha Town



## Funds Required for Fukushima Initiatives as Put Forth in the TEPCO Reform Proposal

According to the TEPCO reform proposal made by the TEPCO Reform and 1F Problem Committee, which is a committee of experts formed by the Ministry of Economy, Trade and Industry, a total of approximately ¥22 trillion in funds is needed to address the Fukushima Nuclear Accident. And, of this amount TEPCO is responsible for securing approximately ¥16trillion. In order to fulfill our responsibilities to Fukushima, we must not only provide compensation to the residents of Fukushima, help the area to recover, and move forward with decommissioning, but also leverage the capacity of every department in the TEPCO Group to stably increase revenue and secure the funds that are required.

## Fukushima



Created based upon the TEPCO Reform Proposal (from TEPCO Committee under the government)

2016

2017

2017 Part of Katsurao Village Part of Namie Town Kawamata Town 2018

Lifting of evacuation orders

2019

2019

Lifting of evacuation orders

Determining Fuel Debris Removal

Methods of first unit

¥2.3trillion

Compensation ¥6.8trillion

**Decontamination etc** 

2020

- · Started operation of power transmission facility by Fukushima Power Transmission Limited

2021

2020

generated to

2021

of Fuel Debris from the first unit pool of unit 1,2

2023

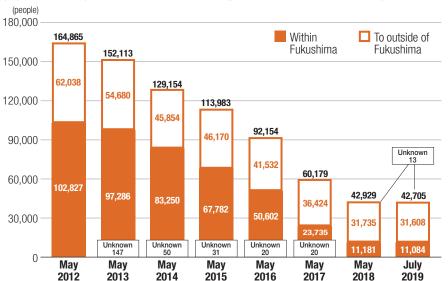
from the spent fuel

(Current situation) West side hill of Units 1 to 44

2030~

#### Change in the Number of Evacuees

(Prepared based on "Steps for Revitalization in Fukushima" issued by Fukushima Prefecture and other documents)

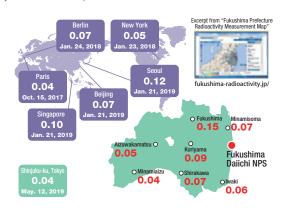


#### **Radiation Level Changes**

(Prepared based on "Steps for Revitalization in Fukushima" issued by Fukushima Prefecture)

Unit: µSv/hours

	Fukushima City	Aizuwakamatsu City	lwaki City
Before the earthquake	0.04	0.04 ~0.05	0.05 ~0.06
2011.4	2.74	0.24	0.66
2012.3	0.63	0.10	0.17
2013.3	0.46	0.07	0.09
2019.7	0.14	0.06	0.06



## **Working with Local Companies**

## Commencement of Dismantling of the Unit 1/2 Exhaust Stack

In order to accelerate recovery in Fukushima, the TEPCO Group is proactively engaging in initiatives to develop industrial infrastructure and provide opportunities for employment.

As part of the decommissioning process we are dismantling an exhaust stack and the work is moving forward with the cooperation of Able, Inc., a local company located in Hirono Town, Fukushima Prefecture, while prioritizing safety.

There are four exhaust stacks that were used to handle exhaust from the reactor buildings, etc., at Fukushima Daiichi. Of these four exhaust stacks, the decision has been made to dismantle the top of the exhaust

stack that was used for Units 1 and 2 to make the decommissioning process even safer regardless of the fact that it still has sufficient seismic resistance. The stack is being dismantled using remotely operated equipment in order to reduce exposure during the task.

While receiving cooperation and assistance from the local communities, the national government, Fukushima Prefecture, and local governments, we will continue to leverage the experience and know-how that we have cultivated through our business to date and employ local companies to engage in construction and provide materials as the TEPCO Group perseveres to the best of its ability to help Fukushima recover as quickly as possible.



Commencement of dismantling of approximately half of the Unit 1/2 exhaust stack so as to widen seismic-resistance margins (August 2019)

## Global State-of-the-Art Coal-Thermal Power Station Project

In Iwaki City and Hirono Town we are moving forward with our "global state-of-the-art coal-thermal power station project" (construction and operation of two 543,000 kW power plants) that leverages integrated coal gasification combined cycle (IGCC) technology, which is being developed in Fukushima Prefecture. In October 2016, TEPCO invested in two companies in





order to create employment through construction and operation. In addition to hoping that this project will help Fukushima to recover, we also want to contribute to solving global climate change issues by making Fukushima the origin of Clean coal technology\*.

\*More efficient than conventional power stations of the same size and approximately 15% less CO<sub>2</sub> emissions



#### Renovating Small/Medium-Sized Hydroelectric Facilities

By continually renovating small/medium-sized hydroelectric facilities in Fukushima Prefecture that have aged, we are creating employment within the prefecture and procuring work equipment and materials from local vendors. At the same time, we are contributing to recovery in Fukushima by donating a portion of the proceeds we have received in conjunction with application of the Feed-in Tariff System for Renewable Energy to the fields of education and medicine, etc.



#### Cooperating to Expand the Use of Renewable Energies

We have upgraded the equipment at the Shin-Fukushima substation and in FY2016 we newly enabled connection to 130,000kW of power produced by renewable energies in Fukushima Prefecture.

Also, in March 2017 we established the "Fukushima Power Transmission Limited Liability Company" along with Fukushima Electric Power Company and The Toho Bank, Ltd. for the purpose of constructing and managing transmission lines and substations aimed at the expansion of the use of renewable energies, and shall commence operation in 2020.

## **Current Conditions at the Fukushima Daiichi**

Reactor building

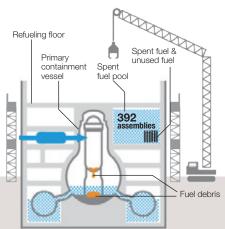
Fuel debris

Spent fuel & unused fuel

#### **Fuel and Fuel Debris Removal Status**

#### Unit:1

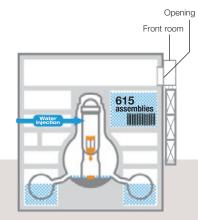




Rubble is being removed from the operating floor in preparation for the removal of fuel from the spent fuel pool. Furthermore, in preparation for fuel debris removal, additional primary containment vessel internal investigations and analysis are being conducted.

#### Unit:2

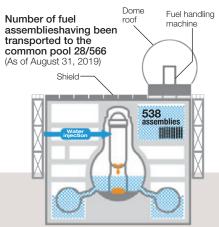




Remaining machinery on the refueling floor are being relocated and removed in preparation for the removal of fuel from the spent fuel pool. Also, in preparation for fuel debris removal, additional primary containment vessel internal investigations and analysis are being conducted.

#### Unit:3



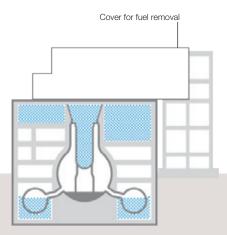


Aiming for the completion of removal by the end of FY2020 fuel removal from the spent fuel pool commenced on April 15, 2019.

And, whether or not additional primary containment vessel internal investigations are required in preparation for fuel debris removal is being deliberated.

#### Unit:4





The removal of fuel from the spent fuel pool was completed in December 2014 thereby eliminating risks associated with the nuclear fuel.

#### **Contaminated Water Countermeasures**

Preventative and multilayered contaminated water countermeasures have been implemented based upon the three basic policies.

Water treated with ALPS is currently being stored in tanks, but going forward, TEPCO must not only think about scientific and technical aspects, but also fully consider putting society at ease

and promoting recovery in Fukushima. It is TEPCO's understanding that the government will stipulate a direction in which to head based upon discussions held by government committees and based on that decision, TEPCO will handle the situation appropriately and carefully while respecting the opinions of stakeholders, such as the local community.

Policy 1 Remove contamination sources

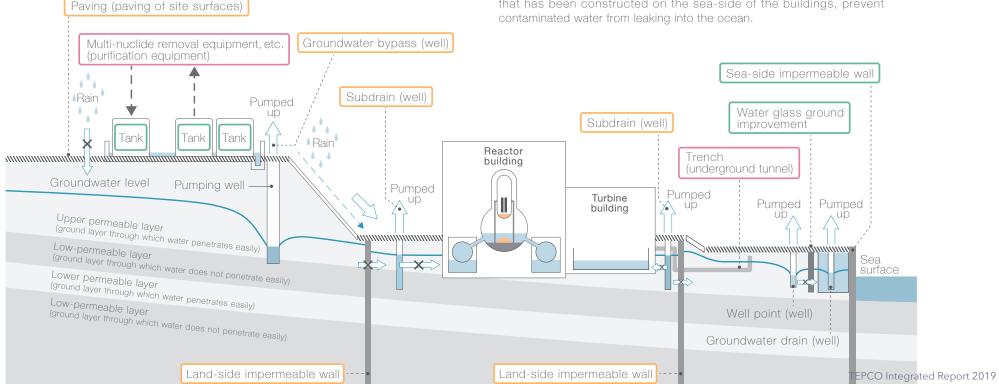
Contaminated water is treated with purification equipment such as multi-nuclide removal equipment.

Policy 2 Isolate water from contamination sources

The flow of groundwater into buildings is being suppressed by pumping up groundwater and the construction of a land-side impermeable wall.

Policy 3 Prevent leakage of contaminated water

Countermeasures, such as the impermeable wall made of steel plates that has been constructed on the sea-side of the buildings, prevent



Water countermeasures and treatment of water that has accumulated in buildings are being engaged in in a planned manner based upon set deadlines.

Policy 1

Remove contamination sources

Additional effective doses at site borders have been reduced to 1mSv/year.

Target deadline: FY2015 Achievement status: Achieved (March 2016)

Commencement of preparations aimed at deciding on how water treated with ALPS is to be handled over the long term

Target deadline: First half of FY2016 Achievement status: Achieved (September 2016)

- <Primary countermeasures>
- Operation of ALPS and the tank storage/ management of treated water

Policy 2

Isolate water from contamination sources

Decrease the amount of contaminated water generated to approximately 150m³/day

Target deadline: During 2020 Achievement status: Achieved during the dry season (December 2017)

- <Primary countermeasures>
- Trenches have been filled in and drainage channels have been equipped with backflow prevention valves in preparation for large rainfall, such as during typhoons
- Water treatment equipment, such as sub-drains, etc., has been enhanced

Policy 3

Prevent leakage of contaminated water

Store all water that has been purified with purification equipment in welded tanks

Target deadline: FY2018 Achievement status: Achieved (March 2019)

- <Primary countermeasures>
- Replacing tanks



Flange tanks





Welded tanks

Treating accumulated water

### Cutoff connections between Units 1 and 2, and Units 3 and 4 $\,$

Target deadline: FY2018

Achievement status : Achieved(September 2018)

Reduce the amount of radioactive substances in water that has accumulated in buildings to approximately 1/10 what it was at the end of FY2014

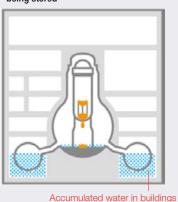
Target deadline: FY2018

Achievement status: About 2/10 of the end of 2014

### Complete treatment of accumulative water buildings

Target deadline: During 2020

- <Primary countermeasures>
- Remove radioactive substances from accumulated water in buildings
- Reduce the amount of accumulated water being stored





## Increasing Corporate Value and Creating Shared Value

The TEPCO Group will create value over the long-term amidst sudden changes in the energy market. In order to do this, we must, to the best of our ability, leverage tangible and intangible assets from amongst the TEPCO Group's management resources.

Since management resources used for value creation include intangible assets that are not clearly represented by financial indicators, we have categorized them in accordance with the six types of capital (financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, natural capital) put forth in the IIRC's International Integrated Reporting Framework. The various types of inputted capital shall be transformed into output, such as products and services, in each field through the business activities of the TEPCO Group thereby producing an outcome that impacts each type of capital both within and outside the organization.

Through this cyclical process, the TEPCO Group shall create bifaceted value. One of these facets shall improve the value of the TEPCO Group itself thereby improving the financial strength of the organization and providing financial return to those that have provided financial capital. The other facet shall create value attributed to stakeholders and society as a whole. An example of this is contributing to the achievement of SDGs through our business activities.

This value creation process is supported by the relationship that we have with society and stakeholders, and also our diverse resources. The TEPCO Group shall strive to regularly revise business strategies and business models, and distribute resources appropriately so as to adapt to changes in the external environment in order to enable the group to continue to create value over the long-term in a sustainable fashion.

## Financial Capital

#### **Basic Information** (Results of FY2018)

Ordinary Income	¥276.5 billion
Net Income	¥232.4 billion
Market Capitalization	¥1,124.9 billion

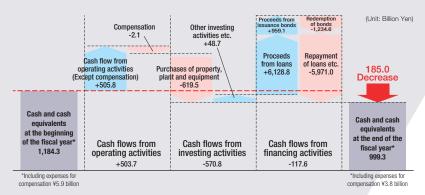
Based on our belief that the reason why companies exist is to "return to society the added value that the company has created through earning," we position financial capital out of the six types of capital, as the foundation for the entire value creation process.

The TEPCO Group aims for increased future cash flow and management independence by growing into a company that has overwhelming "earning power" and securing the resources necessary for recovery in Fukushima and strategic investment.

#### Overview of Consolidated Cash Flow:

Cash and cash equivalents as of March 31, 2019 decreased ¥185.0 billion to ¥999.3 billion.

- Cash flow from operating activities increased ¥503.7 billion mainly due to income before income taxes and minority interests
- Cash flow from investing activities decreased ¥570.8 billion mainly due to purchases of property, plant and equipment
- Cash flow from financing activities decreased ¥117.6 billion mainly because redemption of bonds and repayment of loans exceeded proceeds from issuance of bonds and those from loans



#### **INPUT: 6 capitals ACTIVITY & OUTPUT** Manufactured **Tokyo Electric Power Company Holdings** ¥100 billion FY2030 revenue target of Renewable Energy Business **TEPCO Power Grid** Intellectual ¥150 billion Capital FY2025 reduction target of transmission and distribution costs ¥100 billion Human FY2026 sales target from other than transportation **Financial** Capital services **Capital** P79-80 **TEPCO Energy Partner** ¥450 billion Social and FY2019 sales target of growth businesses Relationship Capital **TEPCO Fuel & Power, JERA** P81-82 ¥200 billion FY2025 consolidated net profit target **Natural** Reducing costs by adoption of Kaizen Capital

#### Work Efficiency

In addition to the cost reductions that has been made under the New Comprehensive Special Business Plan (TEPCO \*1: ¥4.8 trillion/10 years), TEPCO has been executing, under the Revised New Comprehensive Special Business Plan, unprecedented and recurrent streamlining of operations that includes "kaizencentered doubling of productivity" and "use of digitalized technologies for bold technological and operational innovation" to be sure to achieve ¥1 trillion in even deeper cost reductions of over 10 years.

P83-84

FY2018 results of TEPCO and its subsidiaries & affiliated companies were ¥953.8 billion and ¥82.0 billion, respectively, and targets were achieved.

#### Cost Reduction \*2

	FY2018	
	Plan	Actual
TEPCO <sup>*1</sup>	¥809.1 billion	¥953.8 billion
Subsidiaries & Affiliated Companies	¥69.6 billion	¥82.0 billion

and promoting work efficiency

- \*1 TEPCO means Tokyo Electric Power Company Holdings, Inc., TEPCO Fuel & Power, Inc., TEPCO Power Grid, Inc. and TEPCO Energy Partner, Inc.
- \*2 Cost reductions given in the table were calculated using the preearthquake cost plan as the basis



**OUTCOME:** Creating Shared Value

**OUTCOME: Increasing Corporate Value** 

Low-carbonizing and Improving Resilience of Energy-supply Systems

**Integrating Business** and **Energy Technologies** 

Cultivating Human Resources that have earning power

Restoring Trust and Branding

Developing Oze's Value Creation Model

**Increasing Profitability Targets** 

**Financial Impacts** 

Ordinary income

¥300 billion (10 years average, FY2017-2026)

Profit level ¥450 billion/year

Market capitalization

¥**7.5** trillion (FY2027-)

Conventionally

brushes would

Aiming for management independence by increasing cash flow

Fulfilling Our Responsibilities to Fukushima

**Creating Additional Values** 

Tower Painting Kaizen: Development of a Method for Painting that Prevents the Dispersion of Dust, etc.

Getting rid of the net used to prevent the dispersion into the surrounding area of rust and paint that has been scraped off, and using a gondola sky chair to reach high locations where there is no scaffolding has enabled us to simultaneously improve safety while making work more efficient.

This has enabled us to triple productivity while reducing annual costs by ¥500 million.



remove rust while

collecting shavings

We have developed paint that is highly viscous and

We have developed paint that is highly viscous and does not disperse into the air. The paint is applied using an auto-feed system that enables a single application of a thick coat.



Prior to kaizen:
1,539 man-hours



After kaizen:
620 man-hours

Productivity

tripled and annual costs

reduced by

¥500 millio



nting using a gondola

## Manufactured Capital \*\*

**Basic Information** (As of March 31, 2019)

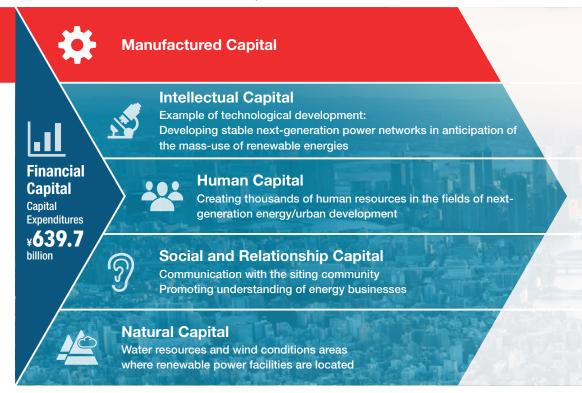
Power Stations		
Hydro	164	9,873MW
Internal combustion (Islands	) 10	60MW
Solar and Wind	5	51MW
Nuclear	2	(under suspention)
Electric Power Supply F	acilities	
Transmission lines	Overhead	28,314km
ITALISTIISSIOTI IITIES	Underground	12,349km
Substations	1,615	274 million kVA
Utility poles/Transformers		5,945,612/2,521,535
Installed number of smart me	ters (As of July, 2019)	22.8 million (coverage : 79%)
Work Vehicles		
Total		6,700
Special Vehicles		1,800
Electric Vehicles		400

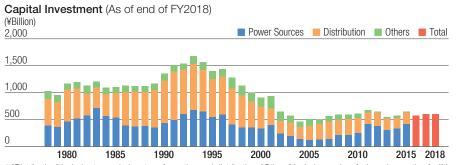
Thermal power facilities

Inherited to JERA April, 2019

As a result of power system reforms, the needs of our customers and society are becoming more diversified as competition intensifies, large power sources are introduced, and renewable energies, for which suitable locations are unevenly distributed, are leveraged. In regards to power generation facilities, we are developing our domestic and overseas renewable energies business by leveraging the strengths of our business model that integrates everything from the planning and development to the operation and maintenance of existing power sources, such as hydroelectric and wind power plants, in light of diverse needs that aim to create a low-carbon society. In regards to power supply facilities, we shall create highly secure, stable, and efficient power transmission and distribution networks that are resilient and flexible by engaging in initiatives to increase regional collaboration and the amount of power generated by renewable energy sources that can be accessed, and build smart networks.

INPUT: 6 capitals





- 1. "Distribution" includes transmission, transformation and distribution. "Others" includes nuclear fuels and operation facilities.
- 2.Non-consolidated results before establishing holding company system. Consolidated Results after FY2016.

#### **ACTIVITY & OUTPUT**

#### Power Generation P59, P63

- Renewables: Developing a total of 6-7 GW in Japan and overseas
- Nuclear: Completion of safety measure renovations and pre-startup inspections of Kashiwazaki-Kariwa NPS Unit 7 (FY2020)

#### **Transmission and Distribution**

- Nationwide integrated control of demand frequency control apparatus in power system
- Promote interconnectivity between electric power companies (Enhance interconnectivity facilities in the Shinano direction)
- Increase connectivity to renewable energy sources
- Complete installation of all smart meters (29 million units by FY2020)

#### Electric Vehicles P31

- EV100: 2030 target of electrifying 4,400 work vehicles
- Build recharging infrastructure

#### **OUTCOME:** Increasing Corporate Value

**OUTCOME: Creating Shared Value** 

**Reducing the Carbon Footprint and** Improving the Resilience of Energy **Supply Systems** 

#### **Financial Impacts**

¥100 billion

FY2030 revenue target of Renewable Energy Business

¥90-110 billion/year

Reduction in costs from operating one nuclear reactor

¥150 billion

FY2025 reduction target of transmission and distribution costs



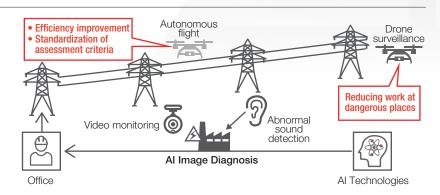
Affordable and **Clean Energy** 

#### Enhancing Resilience

While considering cost-effectiveness we are engaging in initiatives to enhance system interconnectivity to connect the transmission and distribution networks of different electric utilities in order to assure a stable supply of power during times of disaster and also prepare for the increased use of renewable energies. To be prepared to quickly restore power in the event of power outages during a disaster we are coordinating with other electric utilities and related agencies to deliberate and implement measures for constructing a system to better dispatch human resources and materials/ equipment to affected areas, and implementing training on gathering/sharing information. Through these efforts we will steadily strengthen our ability to respond to disasters

#### Smart Maintenance and Leveraging Al

We are striving to improve equipment maintenance safety and productivity by leveraging digital technology and drones, etc., for automated equipment monitoring and remote maintenance. And, we aim to further improve quality by digitalizing individualistic work and standardizing criterion, such as leveraging AI technology for image analysis in order to diagnose abnormalities with equipment.



## Intellectual Capital 💅

#### **Basic Information**

- "The Energy industry in the year 2050 -Game-changing Utility 3.0-" published, Sep. 2017
- Number of submitted patents: 4,706 (cumulative total FY2001-2018)

#### R&D area

Think tank	Scenario analysis, Energy economics analysis, Energy demand and supply simulation		
		Power grid innovation, Smart O&M of grid facilities, Off-shore wind power and DC transmission,	
Research & Development, Engineering	Advanced power network	Advanced distribution network, Distributed energy resources control, Battery application, Energy analysis and solution, Energy service development	
	Environment, materials, chemistry	Decommissioning, Availability enhancement of coal-fired power, Innovation of thermal power O&M, Aging control of materials of power facilities	

As an internal company of TEPCO Holdings, the TEPCO Research Institute links management strategies, the business strategies and technical strategies of each group company, and intellectual property strategies as it engages in scientific research and technological development for the entire Group. Current technological development centers on reducing costs and handling risks, such as natural disaster countermeasures, but in conjunction with unforeseen changes to the business environment of the TEPCO Group, the Institute is also addressing such issues as the impact of distributed power sources and the spread of the use of storage batteries, as well as institutional issues. Technological development is indispensable for addressing issues that cannot be rivaled by mere extensions of conventional business, such as next-generation power grids and expanding spheres of business.

The TEPCO Research Institute aims to maximize corporate value and optimize risk management by fully leveraging its role as a think tank and center for engineering and innovation, and fusing business and technology to find solutions for everything from issues in the field to mid/long-term management issues.

**INPUT: 6 capitals** 



## Examples of Technological Development that We Aim to put into Practical Use in the Future

#### MR: Mixed Reality Technology

We have jointly developed and commenced sale of an advanced system called QuantuMR that leverages MR in order to assist workers on the front lines in the field (November 2018). Going forward we will continue to develop and test this system in order to further improve functionality.



#### **ACTIVITY & OUTPUT**

#### Think Tank

Predicting management issues

#### **Engineering**

- Digitalization and utilization of proprietary technologies
- Cost reductions, O&M labor saving, Work efficiency

#### Innovation

(2020-2030)

- Electrification of the transportation and industrial sectors
- Handling the distribution and spread of renewable energies
- Floating type off-shore wind power
- Balancing safety with economical nuclear power and decommissioning assistance

#### **OUTCOME:** Increasing Corporate Value

**OUTCOME: Creating Shared Value** 

#### Integrating Business and Energy Technologies

#### **Financial Impacts**

Areas of business to which the TRI contributes
Turning renewables into primary energy sources

¥ 100 billion in revenues

Creation of next-generation grids fused with renewable energies

Stable supply/consigned transmission and distribution cost reductions

¥150 billion

New services, such as EV charging/storage battery use

JERA profit line goal

¥200 billion

Safely and steady decommissioning of Fukushima Daiichi

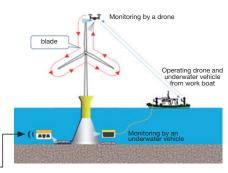
#### Industry, Innovation and Infrastructure

#### Remote Maintenance Verification Tests for Offshore Wind Power Generation Facilities off the Coast of Choshi

#### **Robots and Drones**

In order to make smart O&M a reality, we are conducting verification tests on submersible robots and aerial drones in order to remotely perform maintenance and inspections on off-shore wind power generation facilities. We are also conducting field tests using aerial drones to perform remote inspections on transmission lines and robot arms for the automated painting of towers.

AUV\*







Autonomous sailing test of Hobarin AUV (autonomous underwater vehicle) conducted as part of joint research with the National Institute of Maritime, Port and Aviation Technology. (Hobarin is an deep-sea exploration AUV developed as part of the Strategic Innovation Program (SIP) Next-Generation Maritime Resource Exploration Technology Research and Development of Multiple Methods for Using AUV)

## Human Capital 👺

#### **Basic Information**

Number of employees	31,726
Ratio of women in top management positions*	5.97%
Ratio of women in management positions	4.24%
Employment ratio of physically challenged individuals	2.41%
Number of newly hired employees	276
Number of career emplyees hired	76
Percentage of employees that have returned to work after taking leaves of absence for child rearing	100%

<sup>\*</sup> Top management position based on Companies Act, such as Director, Auditor, Executive Officer and Corporate Officer

#### ■ Work-style reform programs

- Work-from-home programs (Started in FY2017)
- Programs for balancing medical treatment and work (Planned in FY2019)
- Increase in the number of satellite offices (Planned in FY2019)

#### Human resources training

- Kaizen education
- Training to improve earning power
- Reforms of groups in charge/Supporting human resources training

Certified L Star (eruboshi) company (the L Star is awarded to companies that promote women in the workforce)



TEPCO Holdings TEPCO Fuel & Power TEPCO Power Grid



TEPCO Energy Partner

 Awarded Silver PRIDE index (Work with Pride promotes the support of the LGBT community in the workplace)



TEPCO Holdings
TEPCO Fuel & Power
TEPCO Power Grid
TEPCO Energy Partner

The TEPCO Group is developing personnel strategies to improve profitability and corporate value. We aim to cultivate personnel and create work environments that balance "job satisfaction and economic growth" by prioritizing and flexibly assigning human resources to highly profitable "earning" projects, improving employee motivation and creating diversity through work style reforms.

#### INPUT: 6 capitals



Gradi (FY20 Progr

Graduate school exchange program
(FY2018: 2 employees had joined)
Programs to support employees to acquire licenses



**Human Capital** 

9

Social and relationship capital

Employee awareness survey (FY2018 results of well-being index:6.50 points/ average of Japanese companies:5.02 points)



**Financial** 

¥300.6

Capital Labor Cost

billion

including Training C<u>ost</u>

¥230

million

**Natural Capital** 

## TEPCO Employee Given the Distinguished Female Engineer Award

General Manager of the North Kanto Office in the TEPCO Energy Partner, Inc. Sales Division, Mika Kosuge (Ms. Kosuge was serving as Superintendent of the TEPCO Power Grid Shinano River Power Station when she was submitted for consideration), has been awarded the Distinguished Female Engineer Award. Ms. Kosuge's achievements in creating diversity in the field of electronic communications were recognized thereby marking the first time an electric utility has received this award. (Photo: Ms. Kosuge is seated third from the right in the front row)



**Allocating Human** 

and Kaizen activities

8,000 people

(At the end of FY2019)

in management

Program of 100

entrepreneurs

**Human Resources** 

Training of future leaders

Improving work efficiency

Target of allocating human

Resources

resouces

Training

#### **ACTIVITY & OUTPUT**

#### **Employees** Improve "Level of

**Improving Vitality of** 

Happiness" score on employee awareness survey

#### **Diverse Human** Resources

10% 2025 Target goal for the ratio of women in top management positions:

130 2019 Target goal for the hiring of career employees (highly skilled human resources):

#### **Work-Style Reforms**

1,840 hours/year 2019 Target goal for reducing the total average work time per person

\* Regular working hours (7 hours and 40 minutes)× Regular Working days(240 days)

#### **OUTCOME: Increasing Corporate Value**

#### **OUTCOME: Creating Shared Value**

#### **Cultivating Human Resources** that have earning power

#### **Financial Impacts**

Turning renewable energy sources into primary energy sources

Additional profit

¥ 100 billion

EV charge service business Storage battery solution business **Degitalization business** Real estate business

Business areas to which human resources with earning power will be reallocated

**Existing electricity business** 

#### **Decent Work** and Economic Growth

#### "The Future of the TEPCO Group" as Seen by New Employees

In April 2019, 276 employees joined the TEPCO Group (TEPCO Holdings, Inc., TEPCO Fuel & Power, Inc., TEPCO Power Grid, Inc. and TEPCO Energy Partner, Inc.). During the "cultivating future intentions" program implemented as part of new employee training, participants thought up catchphrases that capture their future vision of the TEPCO Group and presented them to other trainees with fervor.





An energy company that illuminates the world

We want to contribute to various endeavors to bring a smile to all and make Fukushima, and countries all over the world, plentiful!



Thinking 10 moves ahead to bring peace of mind to the world

Bringing new industries, such as wireless power transmission, to the world. As a company that will fulfill its responsibilities to recover from the Fukushima Daiichi Nuclear Power Station Accident, we will think not just one move ahead, but 10 moves ahead to bring peace of mind to the world!



Transitioning from creating electricity to creating with electricity ~Changing the future through

We aim to be a company at the heart of society that innovatively uses new technology to create the future. I want to be an employee that helps bring a bright future to Fukushima by becoming world from Fukushima! a decommissioning professional!



**Hope from Fukushima** to the World

I want to create places in Fukushima for interaction between people that can solve the world's food problems and protect the health of individuals. I want to spread hope to the



Connecting people and everything

I want us to connect not just customers, but everything, from employees, to the hearts of people, to land, etc. I want to help as much as I can to achieve this!

## Social and Relationship Capital 🔞



#### **Basic Information** (As of end of FY2018)

Number of customer contracts	
Residential	17,800,000
Commercial and industrial	216,000
others	7,450,000

Average retail electric rate	
Residential	¥24.47/kWh
Commercial and industrial	¥23.05/kWh
Typical monthly electric bill for	residential customers
500kWh	¥13,044
1,000kWh	¥40,549

19 minutes
0.13 times
146.15 minutes/times
0.455kg-CO <sub>2</sub> /kWh

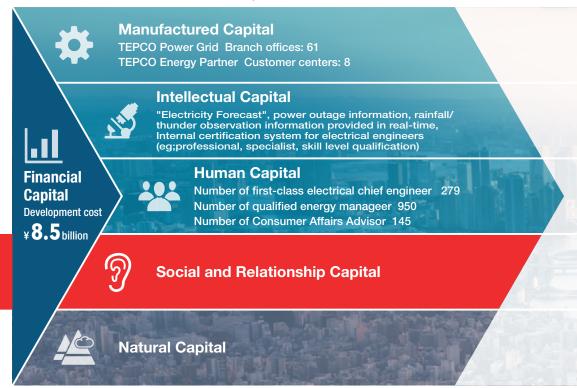
GOZ GITIOGICI I TROTTORY	0.400kg 002/kmi
Customer Satisfaction	
Number of improvements made based on customer opinions	62

We believe that creating value based on social and relationship capital entails engaging with communities and stakeholders related to the TEPCO Group to learn what they desire from the TEPCO Group's business endeavors and make it a reality.

The approach to this value creation process will differ depending on the attributes of the stakeholders, so here we will define our relationship with customers that purchase power from us, and the siting communities in which power supply facilities have been built.

On the following page we shall introduce TEPCO Group initiatives that aim to provide a stable supply of power, offer inexpensive rates, and consider the environment, which are the basic services demanded of an electric company by communities and customers, through engagement with the community and our customers that takes into consideration our initiatives based on financial and manufactured capital.

**INPUT: 6 capitals** 



\*Cost of sales promotion of new services under the full liberalization of entry to electricity retail business

#### Examples of "Livelihood Support Services": TEPCO Energy Partner (Japanese only)



#### **ACTIVITY & OUTPUT**

#### **Responding to Power Outages**

TEPCO Power Grid makes efforts to minimize the areas affected by a power outage and restore power quickly using automatic power restoring systems, manual circuit switchovers, which are conducted by personnel onsite 24 hours a day, and by sending maintenance personnel that reside at branch offices to the areas affected to make emergency repairs.

Based on the lessons learned from making repairs in the wake of Typhoon #15 we have implemented equipment countermeasures and made changes to our repair system an effort to further improve our resilience to such disasters by quickly ascertaining the extent of damage in the event of a power outage and disseminating accurate information.

#### **Demand Side Management**

Saving energy, cost and CO<sub>2</sub> ⇒p57
Renewable energy sales Business ⇒p58
Value chain for renewable energy ⇒p62
EV ⇒p31

**OUTCOME:** Increasing Corporate Value

OUTCOME: Creating Shared Value

#### **Restoring Trust and Branding**

Financial Impacts

**TEPCO Energy Partner** 

¥ 450 billion

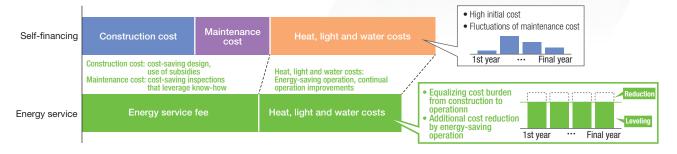
FY2019 sales target for growth businesses

Sustainable Cities and Communities

#### **Energy Service Provider Business**

TEPCO Energy partner is developing its business as an energy service provider (ESP) so as to provide one-stop shopping that offers everything from energy sales (electricity/gas) to the introduction, operation, and maintenance management of highly efficient systems. Through these efforts we shall contribute to large savings in energy, costs, and CO<sub>2</sub> emissions thereby enabling our customers to reduce and equalize total costs for everything from construction to operation.

TEPCO aims to transcend mere electricity sales and grow in other profitable business areas to meet the needs of our customers. And, through the promotion of ESP we shall improve the energy efficiency of society as a whole.



## Natural Capital 😩

#### **Basic Information**

The Oze National Park		
Land owned by TEPCO	16,000ha	approximately 40% of the entire Oze National Park, and approximately 70% of the special conservation zone
FSC-certified forests	16,334ha	
Wetlands registered under the Ramsar Convention	8,711ha	

# \* Examples of quantitative evaluation of ecosystem services at Oze Forest carbon fixation 10,000 t-CO2/year Wetland carbon fixation 1,000 t-CO2/year Groundwater recharge 120 million m³/year (average 2006-2010) Soil-runoff prevention Reduced to 1/44 Amount of soil runoff if no vegetation

<reference> Other natural capital that TEPCO owned;

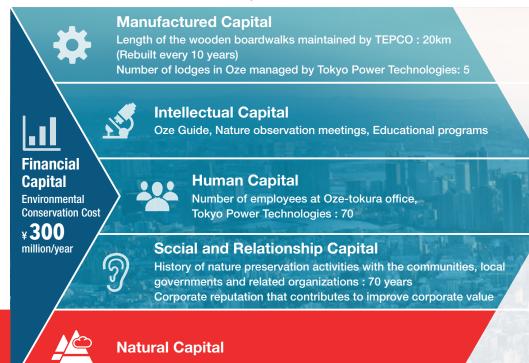
Water conservation forests around hydro power plants: 68 ha, Forests around Transmission and transformation equipment: 338 ha, Forests in Atemakogen highlands, Niigata Pref.: 169 ha

The Oze National Park that straddles Gunma, Fukushima, Niigata, and Tochigi Prefectures is a special natural monument of Japan that has also been designated as a wetland of international importance under the Ramsar Convention. This land that was acquired by electric companies during the Taisho Era in order to build power plants was inherited by TEPCO when the company was founded, and over the 70 years that have followed community residents have worked together with Tokyo Power Technology, a TEPCO Group company, to conserve these wetlands.

When developing our value creation process the benefits from "ecology services" in Oze were quantitatively assessed and the value created through many years of nature conservation activities was deemed to be "natural capital" unique to the TEPCO Group.

The nature conservation activities in this region have a positive impact on the environment, preparedness, economy, and living of the aforementioned region and creates value in the form of improved resilience. Promoting business activities were rooted in the region, the TEPCO Group aims to prioritize "consideration for the environment" and "symbiosis with the region" and apply the value creation model from Oze to various business activities.

INPUT: 6 capitals



#### Oze Rebranding Project

The goal of the TEPCO Group's Oze rebranding project is to coordinate not just with the local governments of the siting community and organizations/companies involved with the natural conservation of Oze, but also those people who can spread the appeal of Oze, to convey the natural value of Oze to as many people as possible, and especially the next generation, both within and outside of Japan, in order to share information about the problems that exist and find a solution.

In August 2019, we planned and held an Oze Yoga event for people to enjoy yoga in the natural beauty of Oze as an attempt to find new value in Oze. The event helped to revitalize the region and improve the appeal of both hiking and yoga through the synergistic effect caused by enabling hikers and yoga enthusiasts to share their sense of values. We will continue to discover new value in Oze and convey it to the world.



Oze Yoga, Aug. 2019

#### **ACTIVITY & OUTPUT**

#### Promoting Initiatives based on "New Oze Vision"\*

\*The action plan formulated by Oze National Park Committee (representing executive branches, Oze preservation Foundation, land owners and administrators, including TEPCO, tourism associations and experts)

#### **Preserving Oze Together**

 Continuous environmental conservation activities, (Development of STEM (Science, Technology, Engineering and Mathematics) educational program)

#### **Enjoying Oze Together**

Re-discovering the value of Oze

#### **Sharing Oze**

■ Elaborate and share with society the appeal of Oze by assessing and analyzing it using quantified data

Adopting Oze's value creation model to all aspects of our corporate activities

#### **OUTCOME:** Increasing Corporate Value

## Developing Oze's Value Creation Model

#### **Financial Impacts**

Examples of economic evaluation of ecosystem services in Oze

Forest and wetland carbon fixation

Equivalent to ¥ 100-150 million/year

(Estimated by the average price of J-credit, forest absorption, 2017)

Soil-runoff prevention

Equivalent to ¥15.9 billion/year

(Estimated using the construction cost of a check dam (¥5,780/m³))

Economic effect of the area as a tourist attraction

Equivalent to ¥9.8 billion/year

(Estimated using the number of visitors in 2015 (326,100))

#### **OUTCOME: Creating Shared Value**

#### **Life on Land**



Oze and TEPCO

www7.tepco.co.jp/about/esg/ environment/oze/index-e.html

#### \* "Quantitative Assessment of Ecological Services in Oze" overview

We performed an assessment of the ecological services created by the environment within the Oze National Park, which is owned by TEPCO Holdings and in which TEPCO Holdings engages in nature conservation activities, by looking at the physical amount of substances that can be calculated from geologic and statistical information, and performing an economic assessment of these substances where possible.

- Implementation Period: August 2017~March 2008
- Scope of Assessment: Area managed by TEPCO Holdings (approximately 16,000ha)

#### ■ Primary substances assessed

#### • Fixed carbon content from forests:

In this analysis, the carbon sequestration function of only those areas of forests in which forestry is performed was assessed under the assumption that there is no net carbon absorption affect in natural forests because the amount of carbon sequestered from the atmosphere through photosynthesis should be in equilibrium with the amount of carbon emitted into the atmosphere through the metabolic processes of respiration and apoptosis in sufficiently mature forests.

#### • Fixed carbon content from wetlands:

Just like forests, wetlands also sequester carbon and in general the ability of wetlands to sequester fixed carbon is high due to the fast rate of decomposition of plants. The quantity of fixed carbon dioxide per unit area for each type of wetland (high elevation wetland, intermediate elevation wetland, low-lying wetland) is calculated.

#### • Groundwater replenishment:

Lakes and marshes gradually enable water to flow downward by allowing precipitation to permeate into the ground. in this analysis we assessed the replenishment of Groundwater, which makes up part of this water. this was calculated by subtracting the amount of evapotranspiration, surface runoff and intermediate runoff from the amount of annual precipitation.

#### Soil-runoff prevention:

the amount of Soil runoff prevented by forests and farmland was assessed because trees and plants have the ability to retain Soil in their systems. the difference in the amount of Soil runoff caused by the presence or absence of vegetation is calculated as the amount of Soil runoff prevented by vegetation.

#### • Economic effect of the area as a tourist attraction:

The number of visitors from Tokyo and the entire country was examined using lodging information from mountain cottages. In order to simplify the calculation, an average of ¥30,000/person in travel and accommodation costs was used as the standard unit.

## **ESG** Highlights

#### **ESG Management Structure**

In 2019, the TEPCO Group established an ESG Committee and ESG Office, a department dedicated to handling ESG, within TEPCO Holdings and appointed an ESG Officer (Vice President/CFO) in order to flexibly address ESG-related issues as we enhance our ability to address key management issues.

#### ■ Committee Structure



#### Member Composition

Chair	President
Vice chair	Executive Vice President (CFO / ESG Officer)
Committee member	Executive Vice President (Corporate Planning / Investor Relations), Executive Vice President (Employee Relations & Human Resourses / Shareholder Relations), Managing Executive Officer (Disaster Prevention / Safety), Managing Executive Officer (Accounting & Treasury), Managing Executive Officer (Corporate Communications), Executive Officer (Corporate Planning), President of each key business company
Observer	Organization, Employee Relations & Human Resources Office Manager, Business Promotion Office Manager, Corporate Planning Office Manager, ESG Office Manager, Corporate Communications Office Manager, Overseas Business Office Manager, Audit Committee Member
Secretariat	ESG Office, Corporate Planning Office



#### 1<sup>st</sup> ESG Committee (February 22, 2019)

#### Agenda

- 1. ESG Committee / Revise Management Principles
- 2. ESG Committee objectives and issues, FY 2019 measures for addressing these issues
- 3. Future issues/points for discussion

#### Primary Discussions (Comments made during the meeting)

#### <Regarding inauguration of the committee>

As a body for debating and overseeing general measures for addressing ESG, this committee shall select ESG issues important to management strategies, deliberate the basic direction of these policies, and examine strategic measures for handling information disclosure. It is generally said that ESG information disclosure improves the reputation of an organization amongst institutional investors and attracts investment. However, this committee will not stop here and will rather also debate how the company can create an ideal future, how it should supply power in that future, and the form that ESG management should take in the future.

#### Recent Issues

In regards to expressing support of TCFD recommendations/participation in "EV100," how each of these is positioned needs to be clarified upon giving an explanation of the direction of the company's ESG management to the Board of Directors.

#### ■ Mid/long-Term Issues

It is important to categorize current initiatives from the perspective of ESG and create a story for the direction that the company should take.

#### <ESG in General>

- Analyze the cause-and-effect relationship of ESG assessment scores, prioritize issues to address and measure effectiveness.
- Examine how to improve the reputation of our corporate brand from the perspective of ESG.

#### <Environment>

- In detail, what the company will do in order to support TCFD recommendations?
- In order to achieve the goals of EV100, I would like to narrow down strategies for assessing costs in creating leeway for negotiation in the market when purchasing large quantities of electric vehicles.
- In regards to rousing interests in "natural conservation activities in Oze," we need to make it easier to understand how these initiatives have had a positive impact on corporate management.

#### <Society>

- What should be given priority as we move forward with social initiatives?
- We need to debate whether or not Fukushima endeavors should be handled as ESG topics.
- Engagement with our customers and the regional communities is an important element
- It's important to have employees organize and understand social initiatives.

#### <Governance:

• I'd like to discuss boundaries and how we view Group companies and the supply chain.

#### 2<sup>nd</sup> ESG Committee (August 22, 2019)

#### Agenda

- 1. ESG Management Strategy
- 2. "TEPCO Integrated Report 2019" Overview
- 3. Addressing Environmental Goals **Concerning Power Sources** (Midterm Report)



Primary Discussions (Comments made during the meeting)

#### ■ ESG Management Strategy

- All the Group's businesses were inventoried from the perspective of ESG, and several hundred products and businesses were analyzed to create a draft of a portfolio map. Sharing this information with the people implementing these projects will lay the foundation for supporting the deliberation of new forms of cooperation within the Group and how to pioneer new areas of business.
- When organizing our businesses, we must also figure out to what extent the TEPCO Group's boundaries encompass contractors and partners.
- We need to organize the objectives of portfolio map creation, such as what businesses should the TEPCO Group focus on from the perspective of ESG, and what is our thinking in regards to these objectives.
- If we're going to formulate objectives based on how we mix new businesses, classifying them based upon business structure rather than visibility will be more suitable for supervision.
- Manufacturers have a model where products are made in consideration of ESG and then provided to the customer, but the electricity business has a different nature/structure. But, we have to leverage the unique attributes of our business to our advantage



Tomoaki Kobayakawa



Exective Vice Pres./CEO/ESG Officer

#### ■ TEPCO Integrated Report 2019

- In regards to how Fukushima projects are being handled, we have to paint a portrait of the state of engagement with community residents and a Fukushima that is recovering.
- We should mention our stance on coal-thermal. Can't we mention that even though we are facing headwinds, such as the trend to divest, TEPCO can contribute both within and outside of Japan using technology for generating power from highly efficient coal life and thermal that reduces the burden on the environment?
- We should add a statement about the entire TEPCO Group's business portfolio and how we are going to balance stable supply with the environment into the future.
- TEPCO's current stance is that we have two missions: fulfilling our responsibilities to Fukushima and providing a stable supply of power. If we factorize stable supply we get a power portfolio and network reliability. We should indicate that in addition to our responsibilities to Fukushima, we also have the responsibility to provide a stable supply of low cost, low CO<sub>2</sub> electricity while taking into consideration Japan's state of affairs.

#### ■ Power Source Portfolio

- When we look forward to 80% reductions in greenhouse gases by 2050, we need to ascertain how our power mix will look from the market environment. Within this we should look at how to leverage coal-thermal from the standpoints of stable supply, economic feasibility, and environmental friendliness.
- As we predict higher ratios of renewable energies, we need to show how this will be achieved through in-house development of renewable energies and purchasing as a retailer.



Seiichi Fubasami Exective Vice Pres./Corporate Planning



Takeshi Nomura General Manager of ESG Office

### **Environment**

#### **Environmental Indicator Record**

1. TEPCO Group (\*1)

(1) Global Environment

During equipment removal

Emissions submitted based on the law (\*4)

HFC emissions



Initiatives for the Environment

www7.tepco.co.jp/about/esg/ environment/index-e.html

	Items	Units		Results		GRI
	iterns	UTILS	FY2016	FY2017	FY2018	Standard
	Fuel consumption					
	Fuel/energy for power generation					
	Coal	kt	8,137	8,306	8,145	301-1
1	Heavy oil, crude oil	ML	2,134	978	552	
	Gas (LNG, city gas, etc.)	kt	23,565	22,957	22,542	
	Biomass	kt	- [	74	200	
	Fuel for nuclear power plants	t	N/A	N/A	N/A	
	Electricity production					
	Thermal power	TWh	190.3	184.2	179.2	
	Hydropower (including pumped-storage hydroelectricity)	TWh	10	12.2	11.1	
2	Solar Power	TWh	0.03	0.03	0.03	-
	Wind power	TWh	0.03	0.04	0.04	
	Geothermal power	TWh	0.01	0.01	0.00	
	Nuclear power	TWh	N/A	N/A	N/A	
	Direct GHG emissions (Scope 1 (*2))					
3	CO <sub>2</sub> emissions from power generation	10 kt-CO <sub>2</sub>	8,890	8,420	8,200	305-1
3	CO <sub>2</sub> emissions from vehicles (gasoline and diesel)	10 kt-CO <sub>2</sub>	1.4	0.9	0.8	
	CO <sub>2</sub> emissions intensity / emissions (TEPCO Energy Partner)					
4	Adjusted emissions intensity (Basic emissions intensity (*3))	kg-CO <sub>2</sub> /kWh	0.474 (0.486)	0.462 (0.475)	0.455 (0.468)	305-4
	Adjusted emissions		11,440	10,770	9,970	305-5
	(Basic emissions (*3))	10 kt-CO <sub>2</sub>	(11,740)	(11,080)	(10,270)	
5	Electricity sales (TEPCO Energy Partner)	TWh	241.5	233.1	219.4	
6	Electricity sales (includes some of subsidiaries)	TWh	243.8	240.3	230.3	_
7	Gas sales (TEPCO Energy Partner)	10 kt	151	183	177	_
8	Electricity procured outside the TEPCO Group	TWh	53.0	47.9	42.6	_
9	N₂O emissions From power generation	10 kt-CO <sub>2</sub>	5.8	6.0	5.9	305-1 305-5
10	SF6 emissions From gas insulated circuit breakers, etc.	10 kt-CO <sub>2</sub>	6.1	6.1	6.1	305-2 305-5
_	SF <sub>6</sub> recovery rate					
11	During equipment inspections	%	99	100	100	305-2
	During aguinment removal	0/	100	00	00	305-5

%

10 kt-CO<sub>2</sub>

100

0.4

0.5

99

0.6

305-2 305-5

- \*1 The TEPCO Group referred to in this list refers to four companies: Tokyo Electric Power Company Holdings, TEPCO Fuel & Power, TEPCO Power Grid and TEPCO Energy Partner
- \*2 Scope 1 refers to direct emissions of greenhouse gases (GHG)
- 2 October National Control and Control
- \*4 The Act on Promotion of Global Warming Countermeasures
  \*5 The Act on Rational Use and Proper Management of Fluorocarbon
- \*6 Scope 2 refers to indirect emissions from consuming electricity and the use of heat/steam
- \*7 Total heat from fuel used for thermal power / electricity from thermal power
- \*8 Renewable energy refers to hydroelectric power, geothermal power, solar power, wind power and biomass, etc.
- \*9 Unused energy refers to heat, blast furnace gas and other gas byproducts produced from the incineration of waste not including waste heat and biomass from factories, etc.
- \*10 Scope 3 refers to all other indirect emissions (not included in scope 2) that occur in the value chain \*11 Results for FY2016 and FY2017 revised in accordance with revisions to calculation method

	Items	Units	Results			GRI
	iteriis	Units	FY2016	FY2017	FY2018	Standard
	Fluorocarbon emissions					005.0
13	Amount of fluorocarbons leaked submitted based on the law (*5)	10 kt-CO <sub>2</sub>	0.7	1.1	1.3	305-2 305-6
14	Total amount of energy used for business activities (crude oil equivalent)	kL of crude oil equivalent GJ	41,061,000	39,114,000 1,516,054,000	37,976,000 1,471,920,000	302-1 302-4
15	Indirect GHG emissions (Scope 2 (*6))	10 kt-CO <sub>2</sub>	370	350	310	305-2
16	Thermal power generation efficiency (lower-heating value) (*7) (TEPCO Fuel & Power)	%	49.0	49.6	49.7	302-3
17	Nuclear power plant capacity utilization rate	%	N/A	N/A	N/A	302-5
	Renewable energy (*8) in electricity sales (TEPCO Energy Partner) Volume	TWh	22.9	27.0	27.5	
18	Rate of use	%	9.48	11.6	12.5	302-4
	Unused energy (*9) in electricity sales (TEPCO Energy Partner)					302-5
	Volume	TWh	2.6	1.6	2.9	
	Rate of use	%	1.06	0.68	1.31	
19	Electricity transmission and distribution losses	%	4.1	3.8	4.1	-
	Other indirect GHG emissions (Scope 3 (*10))					
	No. 1 Purchased goods and services	10 kt-CO <sub>2</sub>	0.2	0.2	0.2	
	No. 2 Capital goods (*11)	10 kt-CO <sub>2</sub>	187.0	198.4	210.7	
	No. 3 Fuel- and energy-related activities (not included in Scope 1 or Scope 2) (*11)	10 kt-CO <sub>2</sub>	3,967.4	3,307.6	2,887.9	
	No. 4 Upstream transportation and distribution (*11)	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	
	No. 5 Waste generated in operations	10 kt-CO <sub>2</sub>	3.1	2.9	2.9	
	No. 6 Business travel	10 kt-CO <sub>2</sub>	0.4	0.5	0.5	
20	No. 7 Employee commuting	10 kt-CO <sub>2</sub>	-	-	-	305-3
20	No. 8 Upstream leased assets	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	303-3
	No. 9 Downstream transportation and distribution	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	
	No. 10 Processing of sold products	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	
	No. 11 Use of sold products	10 kt-CO <sub>2</sub>	-	-	-	
	No. 12 End-of-life treatment of sold products	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	
	No. 13 Downstream leased assets	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	
	No. 14 Franchises	10 kt-CO <sub>2</sub>	0.0	0.0	0.0	
	No. 15 Investments	10 kt-CO <sub>2</sub>	-	-	-	
	Total of Scope 3	10 kt-CO <sub>2</sub>	4,158.1	3,509.6	3,102.2	

#### (2) Local Environment

	Items	Units		GRI		
	iterns		FY2016	FY2017	FY2018	Standard
	Sulfur oxide (SOX) from thermal power plant (*12)					
1	Emissions intensity	g/kWh	0.05	0.03	0.03	305-7
	Emissions	10kt	1.0	0.7	0.6	
	Nitrogen oxide (NOX) from thermal power plant (*12)					
2	Emissions intensity	g/kWh	0.10	0.09	0.09	305-7
	Emissions	10kt	1.9	1.7	1.6	
	Rate of power lines underground (*13)					
3	TEPCO Power Grid's service area	%	10.1	10.1	10.1	-
	Tokyo Metropolitan area (23 wards)	%	47.1	47.3	47.5	

#### (3) Resource Environment

	Items	Units	Results			GRI
	iterns	UTILS	FY2016	FY2017	FY2018	Standard
	Industrial waste (*11)					306-2
	Total volume	kt	1,140.8	1,094.1	1,084.0	
'	Recycling rate	%	99.5	99.6	99.8	
	Landfill treatment volume	kt	5.2	3.8	2.6	
	PCB equipment (remaining units)					
2	PCB contamination pole transformer	10,000 Units	41	32	27	-
	High-voltage transformer/capacitors (high contaminated)	Units	493	302	186	
	PCB waste treatment volume					
3	PCB waste treatment volume	10,000 Units	7.0	8.0	7.5	306-2 306-4
3	Insulating oil inadvertently contaminated PCB	ML	4.2	5.1	4.2	
	High-voltage transformer/capacitors (high contaminated)	Units	797	190	116	

#### (4) Environmental Management

	Items			GRI		
	items	Units	FY2016	FY2017	FY2018	Standard
	Building energy consumption intensity					302-3
L'	Per floor space of office (headquarters, branch offices, etc.)	MJ/m <sup>2</sup>	1,427	1,400	1,410	302-3
2	Electricity consumption of office	GWh	156	146	140	302-1 302-4
	Water withdrawals for power generation					
3	Industrial water, etc.	10,000 m <sup>3</sup>	993	962	994	303-1
	River water (for hydropower)	100 mil. m <sup>3</sup>	510	553	491	
	Water withdrawals for domestic use					
4	Municipal water supplies	10,000 m <sup>3</sup>	129	119	110	303-1
	Groundwater	10,000 m <sup>3</sup>	3	2	2	
5	Discharged water (amount of wastewater treated)					306-1
	From thermal power plants	10,000 m <sup>3</sup>	497	469	401	300-1

	Items			Results		GRI
	iteriis	Units	FY2016	FY201	FY2018	Standard
6	COD emissions					306-1
L	In wastewater from thermal power plants	t	-	15	14	300-1
7	Vehicle fuel consumption					302-3
	Fleets (ICE, EV, PHV)	km/L	12.3	12.0	12.1	302-4
8	Number of EV	No.	478	503	470	302-4 302-5
9	Green procurement rate of total purchase amount					
9	Office products	%	94.1	99.6	99.7	-
10	Copy/printer paper (A4 size conversion) (*11)	100 mil.	3.1	3.0	2.8	-
11	Non-compliance with environmental laws and regulations	No.	0	0	0	307-1
	Significant spills					
12	With a severe impact on surrounding environment due to					306-3
	spill of chemical substance or petroleum fuels	No.	0	0	0	

#### 2. Subsidiaries and Affiliates (\*14)

	Items	Units		GRI		
	items	Units	FY2016	FY2017	FY2018	Standard
	Direct GHG emissions (Scope 1 (*2, 11))	10kt-CO <sub>2</sub>	990	1,343	1,379	
1	Energy consumption	kL of crude oil equivalent	-	3,875,000	3,989,000	302-2 305-1
	Energy consumption	GJ	-	150,176,000	154,620,000	
	Indirect GHG emissions (Scope 2 (*6, 11))	10kt-CO <sub>2</sub>	2	17	18	
2	Energy consumption	kL of crude oil equivalent	-	86,000	91,000	302-2 305-2
	Energy consumption	GJ	-	3,344,000	3,525,000	000 2
3	CO <sub>2</sub> emissions by transport (*15)	10 kt-CO <sub>2</sub>	2.4	2.4	0.9	305-1
4	ISO14001 (environmental management system) certified locations	No.	29	28	35	-
	Water withdrawals (*11)					
5	For domestic use (municipal water supplies)	10,000 m <sup>3</sup>	82	105	115	303-1
	For power generation (industrial water and river water)	10,000 m <sup>3</sup>	500	489,000	380,000	
6	Capacity of solar power generation (*11)	MW	140	155	155	305-5
7	Capacity of wind power generation (*11)	MW	1,010	977	1,019	305-5
8	Capacity of generation from other renewable sources (*11, 16)	MW	80	467	559	305-5
9	Industrial waste recycling rate	%	95.5	95.5	96.8	306-2
10	Number of EV	No.	-	-	40	

<sup>\*12</sup> Excludes internal combustion power generation in Tokyo islands
\*13 Rate of power lines underground = {{power cable underground length /{power cable overhead length + power cable underground length}} x 100 (%)
\*14 The scope is TEPCO group's subsidiaries and affiliates that responded (excluding TEPCO HD, TEPCO Fed & Power, TEPCO Power Grid and TEPCO
Energy Partner)and totaled after dividing the results for each company by the voting ratio (however, values for category 4 and 10 are the total).
\*15 CO<sub>2</sub> emissions generated in accordance with the use of energy reported in measures related to the transporter as mentioned in the Act on the Rational

Use of Energy
\*16 Hydroelectric power, biomass, etc.

# Social

#### TEPCO Group (•1)

#### (1) Employee-Related Indicators

	Category				Perforr	mance		GRI			
	Catego	ory	Units -	FY2010	FY2016	FY2017	FY2018	Standard			
		Total		38,671	33,197	32,546	31,726				
1	Number of employees	Males	People	33,939	29,158	28,566	27,816	102-7 405-1			
	ciripioyees	Females		4,732	4,039	3,980	3,910	400-1			
		Total		40.9	43.7	44.2	44.7				
2	Average age	Males	Age	41.3	44.0	44.5	44.9	405-1			
		Females		37.8	41.7	42.2	42.7				
		Total		20.9	23.2	23.6	24.1				
3	Average number of years on the job	Males	Years	21.4	23.5	23.9	24.3	-			
	, , , , , , , , , , , , , , , , , , , ,	Females		17.6	21.1	21.6	22.0				
		Total		2.3	2.8	3.0	3.7				
4	Separation rate	Males	%	2.3	2.8	3.1	3.7	401-1			
		Females		2.2	3.0	3.0	3.3				
		Age of youngest employee that management position is offered	Age	38	36	35	35				
5	Management promotions	Number of women in management positions	People	75	168	197	221	405-1			
	Ratio of women in management pos		%	1.45	3.26	3.78	4.24				
6	Employment of physically challenged individuals	Employment rate	%	2.09	2.12	2.19	2.41	405-1			
		Total		1,092	555	281	276				
7	Number of newly hired employees	Males	People	879	486	223	215	401-1			
		Females		213	69	58	61				
	Number of career	Total		10	52	50	76				
8	employees hired (highly skilled human	Males	People	9	47	47	67	401-1			
	resources)	Females		1	5	3	9				
	Number of employees	Total		12	11	13	15				
9	that have used the system for taking leaves of	Males	People	5	5	8	9	-			
	absence for nursing care	Females		7	6	5	6				
	Percentage of employees	Total		11.9	13.4	14.1	18.6				
10	that have used the system for taking leaves of	Males	%	0.5	0.4	2.1	2.4	401-3			
	absence for child rearing	Females		100	100	100	100				
	Percentage of employees	Total		94.7	95.6	96.4	100				
11	that have returned to work after taking leaves of	Males	% [	100	100	100	100	401-3			
	absence for child rearing	Females		94.5	95.5	95.8	100				
12	Average age of execu	tives (*2)	Age	60.4	56.1	54.8	55.3	-			
13	Ratio of employees in	unions	%	100	100	100	100	102-7			

#### (2) Health and Safety-Related Indicators

						GRI			
	Catego	Category		FY2010	Perfori FY2016	FY2017	FY2018	Standard	
		Total		28	9	11	6		
1	Number of injured employees	Males	People	23	7	11	5	403-2	
	3.1.p.oy 000	Females		5	2	0	1		
2	Number of injured contractors/consignors		People	115	74	67	73	403-2	
3	Lost time incident rate (LTIR) (employees)		-	0.42	0.15	0.20	0.11	403-2	
		Total		2	0	0	0		
4	Number of fatalities (employees)	Males	People	2	0	0	0	403-2	
	(	Females		0	0	0	0		
	Number of fatalities	Total		6	1	0	1		
5	(contractor/	Males	People	6	1	0	1	403-2	
	consignors)	Females		0	0	0	0		

#### (3) Human Resource Cultivation and Training-Related Indicators

	Category	Units		GRI			
	Calegory	Offics	FY2010	FY2016	FY2017	FY2018	Standard
1	Employee training expenses (common training for all companies etc.)	Million yen	-	-	161	235	404-1
2	Number of employee training hours (common training for all companies etc.)	Cumulative hours	-	-	110,778	82,123	404-1

<sup>\*1</sup> The TEPCO Group referred to in this list refers to four companies: Tokyo Electric Power Company Holdings, TEPCO Fuel & Power, TEPCO Power Grid and TEPCO Energy Partner

<sup>\*2</sup> Excludes outside directors and part-time workers

# Governance

#### **Basic Views on Corporate Governance**

Tokyo Electric Power Company Holdings (TEPCO Holdings) is working to develop organizational structures and policies for thorough legal and ethical compliance, appropriate and prompt decision-making, efficient business execution, and enhanced auditing and supervisory functions. To further improve the objectivity and transparency of its management, TEPCO Holdings has adopted a "Company with Nominating Committee, etc." management structure, thereby stepping up the effort to secure solid corporate governance.

Moreover, having adopted a holding company system in April 2016, TEPCO Holdings is striving to further enhance its corporate value through the optimal allocation of management resources and a robust corporate governance system encompassing the entire TEPCO group.

#### Management of the Board of Directors and Each Committee (As of October 1, 2019)

#### **Board of Directors**

Number of outside directors

13

- The Board of Directors of TEPCO Holdings, which is a company with Nominating Committee, etc., is comprised of various people of different genders, expertise, and backgrounds. The board makes important executive decisions, receives reports about important management issues and performance from executives, and oversees the performance of duties.
- TEPCO Holdings also has a Nominating Committee and Audit Committee of which the majority of members are outside directors, and a Compensation Committee is comprised of all the outside directors.
- In FY2018, the Board of Directors met 19 times.

Nominating Committee

Number of outside directors



- The Nominating Committee determines the details of proposals concerning the selection or dismissal of directors that is submitted to the general shareholders meeting based upon corporate law.
- Furthermore, whereas the committee has no authority based upon corporate law, it also debates issues related to executive officer selection and dismissal.
- During FY2018 the Nominating Committee met 9 times.

Corporate Governance Report

www7.tepco.co.jp/about/ir/management/governance/report-e.html

#### Special Circumstances Which May Have Material Impact on Corporate Governance

TEPCO Holdings accepts officers from Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF). Management teams of TEPCO Holdings and its core operating companies assume responsibility in terms of promoting management reforms based on the special business plans, while the NDF provides backup support and monitors progress in that regard.

More specifically, TEPCO Holdings implements the special business plans, and otherwise makes business judgments and decisions on business operations under the direction of the management teams. Meanwhile, NDF is furnished with reports as needed from the officers and employees it sends to TEPCO Holdings and requests that TEPCO Holdings and its core operating companies take action when necessary from the perspective of ensuring sound performance with respect to the special business plans.

#### **Audit Committee**

Number of outside directors





- The Audit Committee appropriately and adequate the monitors the performance of duties by directors and executives based upon auditing plans, and verifies that duties are being performed while prioritizing safety and security, energy is being supplied in a stable manner, and initiatives are underway to strengthen earning power.
- The Audit Committee, Internal Audit Department and accounting auditors all perform strict audits in their fields of expertise, and mutually cooperate by periodically exchanging opinions in regards to auditing plans and audit results.
- During FY2018, the Audit Committee met 13 times and participated in opinion sharing meetings with auditors 10 times in addition to attending management meetings held by the board of executive officers. The Committee also engaged in opinion sharing meetings with accounting auditors and the Internal Audit Department, and conducted audits of headquarters and primary offices.

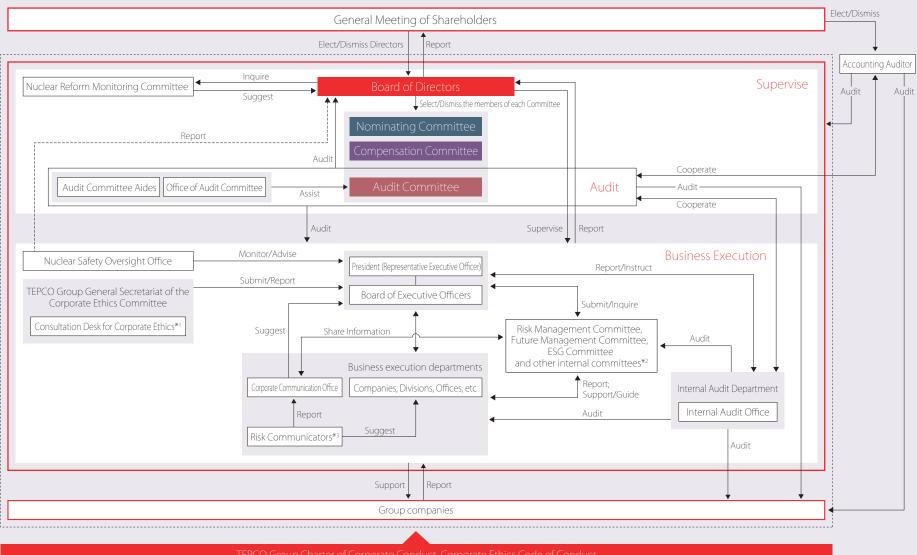
#### Compensation Committee Number of outside directors





- The Compensation Committee formulates policies for determining the details of compensation for individual directors and executives, and decides on the compensation that individual directors and executives are to receive.
- During FY2018 the Compensation Committee met 6 times.

#### Corporate Governance Structure (As of October 1, 2019)



<sup>\*1</sup> This desk is available for the use of persons related to the work of TEPCO group such as the staff and TEPCO group companies. \*2 Investment Management Committee, etc. \*3 Experts in risk communication

#### Indicators Related to Corporate Governance

	Units	Performance
Structure of the Board of Directors		
Number of directors	People	13
Number of employee representatives on the Board of Directors	People	0
Classified Board system	<u> </u>	N/A
Number of auditors	People	0
Corporate officer system	_	Applicable
Number of directors also corporate officers	People	0
Ratio of directors also corporate officers	%	0.00
Independency of the Board of Directors		
Number of outside directors	People	6
Ratio of outside directors	%	46.15
Number of independent directors	People	6
Ratio of independent directors	%	46.15
CEO duality	<u> </u>	N/A
Independent chairperson	_	Applicable
Independent lead director	_	Applicable
Presiding director	_	N/A
Former CEO or director with the same qualifications	_	N/A
Diversity of the Board of Directors		
Number of female directors	People	1
Ratio of female directors	%	7.69
Female CEO (or person with equal qualifications)	_	N/A
Female chairpersons (or person with equal qualifications)	_	N/A
Number of executives, management executives, corporate officers	People	48
Internally promoted CEOs (or person with equal qualifications)	_	Applicable
Number of outside executives	People	6
Number of female executives	People	3
Ratio of female executives	%	6.25
Age of youngest director	Age	49
Age of oldest director	Age	79
Range of ages of directors	Age	30
Average age of directors	Age	61.38
Upper age limit for directors	_	N/A
Term of office of directors (years)	Years	1
Term of office of executive directors	Years	1

<sup>\*</sup> When disclosing corporate ESG information, items for which there have been many requests for disclosure from assessment institutions are selected

<sup>\*</sup> Attendance ratio of meetings such as Board of Directors was calculated based on results for FY2018 for the directors selected at the regular general shareholders meeting held on June 26, 2019.

,6		
	Units	Performance
Board of Directors		
Number of meetings	Times	19
Attendance ratio of meetings	%	97.89
Attendance ratio of independent directors	%	96.49
Directors with a Board of Directors attendance rate of less than 75%	People	0
Nominating Committee		
Number of members	People	6
Number of independent directors	People	4
Ratio of independent directors	%	66.67
Independent chairperson		Applicable
Number of outside directors	People	4
Number of meetings	Times	9
Attendance ratio of meetings	%	96.30
Audit Committee		
Number of members	People	4
Number of independent directors	People	3
Ratio of independent directors	%	75.00
Independent chairperson	—	Applicable
Number of outside directors	People	3
Number of meeting	Times	13
Attendance ratio of meetings	%	97.44
Compensation Committee		
Number of members	People	3
Number of independent directors	People	3
Ratio of independent directors	%	100.00
Independent chairperson		Applicable
Number of outside directors	People	3
Number of meeting	Times	6
Attendance ratio of meetings	%	100.00
Outside compensation advisor nominations		N/A
Board of Directors/Executive Board Activities		
CSR/Sustainability Committee		Applicable
CSR Outside Directors	L	N/A
Executive Director (in charge of CSR)		Applicable
ESG-related executive compensation	Yen	7. Applicable 0
ESG-related director compensation	Yen	N/A
Lou-related director compensation	1611	11//
Stockholder's Rights		
Poison pill provision		N/A
Poison pill plan stockholder approval		N/A
Poison pill TIDE provision		N/A
Poison pill sunset provision		N/A
Blank check preferred stock authorization		N/A
Dual class unequal voting rights		N/A

#### **Total Amount of Compensation**

	Number of people paid (person)	Total amount of compensation (million yen)
Directors	7	92
Executive officers	15	340

Note 1. TEPCO Holdings does not pay director compensation to executive officers that also serve as directors, so the above numbers for the total number of people paid does not include the number of directors that also serve as executive officers.

Note 2. ¥69 million in of the above total was paid as compensation for 6 outside directors.

#### Policy on Determining Remuneration for Directors and Executive Officers

The main duty of each Director and Executive Officer of TEPCO Holdings is to minimize the burden on the people by enhancing corporate value based on a strong commitment to achieving stable supply of electric power beyond the world's highest level for ensuring safety and under competitive conditions, while fulfilling TEPCO's responsibility for the Fukushima Daijchi Nuclear Power Station accident.

In order to achieve this, the basic policies for the determination of remuneration are securing outstanding human resources capable of leading business operations and management reform to achieve both "responsibility and competitiveness," clarifying responsibilities and outcomes and increasing incentives for improved performance and increase in the stock value.

The remuneration system for Directors and that of Executive Officers are different based on the different duties of the Directors, who are in charge of supervising corporate management, and the Executive Officers, who are in charge of executing business operations. Officers who concurrently serve as Director and Executive Officer receive only the remuneration paid to Executive Officers.

#### (1) Remuneration paid to Directors

The remuneration paid to Directors comprises only basic remuneration.

The amount of basic remuneration paid to each Director is determined taking into consideration whether he/she is full time or part time, the committee to which he/she belongs and his/her job description.

#### (2) Remuneration paid to Executive Officers

The remuneration paid to Executive Officers comprises basic remuneration and productivity-linked remuneration. The proportion of the productivity-linked remuneration is set according to the proportions at other companies and other factors <Basic remuneration>

The amount of basic remuneration paid to each Executive Officer is determined based on his/her specific rank, whether he/she holds the right to represent TEPCO and his/her job description.

<Productivity-linked remuneration>

The amount of productivity-linked remuneration paid to each Executive Officer is set based on his/her specific rank, whether he/she holds the right to represent TEPCO and his/her job description. It is also determined according to results of TEPCO and personal performance.

#### (3) Level of remuneration to be paid

When determining the level of remuneration to be paid to Directors and Executive Officers, TEPCO takes into consideration its management environment, the remuneration levels of other companies and the current salaries of employees, etc., with the aim of setting remuneration at levels commensurate with their abilities and responsibilities to be required as Directors and Executive Officers.

<sup>\*</sup> Information on the number and age of directors is valid as of June 26, 2019

<sup>\*</sup> Number of meetings such as Board of Directors is the result of FY2018

Note 3. The compensation amount for executive officers includes the ¥0.2 million difference between the productivity-linked compensation paid in FY2018 to 11 executive officers for their service during FY2017, and the productivity-linked compensation included in compensation disclosed in the FY2017 business report.

# **Group Companies**

(As of March 31, 2019)

#### **Tokyo Electric Power Company Holdings**

TEPCO Fuel & Power, Inc.

TEPCO Power Grid, Inc.

TEPCO Energy Partner, Inc.

Toden Real Estate Co., Inc.

Tokyo Power Technology Ltd.

Tokyo Electric Power Services Company, Limited

TEPCO SYSTEMS CORPORATION

TEPCO RESOURCES INC.

TEPCO HUMMING WORK CO., LTD.

Toso Real Estate Management Co., Ltd.

Tepco Partners Co., Ltd.

TEPCO Ventures.Inc.

The Tokyo Electric Generation Company, Incorporated

Recyclable-Fuel Storage Company

ATEMA KOGEN RESORT INC.

TOSETSU CIVIL ENGINEERING CONSULTANT INC.

TEPCO Innovation & Investments US. Inc.

TOKYO RECORDS MANAGEMENT CO., INC.

TRENDE

TNcross CORPORATION

THE Power Grid Solution Ltd.

T. T. Network Infrastructure Japan Corporation

Eurus Energy Holdings Corporation

Fukushima Soden Godo Kaisha

Viet Hydro Pte. Ltd.

Hitachi Systems Power Services. Ltd.

Energy Asia Holdings, Ltd.

Conjoule GmbH

Japan Nuclear Fuel Limited

The Japan Atomic Power Company

TOKYO ENERGY & SYSTEMS INC.

Nuclear Fuel Transport Company, Ltd.

JAPAN NUCLEAR SECURITY SYSTEM CO., LTD.

International Nuclear Energy Development of Japan Co., Ltd.

Sap-Japan Inc

Battery Utility of Ohio, LLC

Harajuku-no Mori Ltd.

HAKUSAN CORPORATION

#### **TEPCO Fuel & Power**

Bio Fuel Co., Inc.

Fuel TEPCO

TOMATOH OIL STORAGE CO., LTD

FUKUI OIL STORAGE CO., LTD

SHIBUSHI OIL STORAGE CO., LTD

TOKYO WATERFRONT RECYCLE POWER CO., LTD.

KAWASAKI STEAM NET CO., LTD.

AKITA OIL STORAGE CO., LTD

Ohgishima City Gas Supply Co., Ltd.

FUKUI (OIL) STORAGE MARINE COMPANY, LTD

NANSO SERVICE CO., LTD.

FUKUI .(OIL) STORAGE SECURITY SERVICE COMPANY, LTD

JERA Co., Inc.

Kimitsu Cooperative Thermal Power Company, Inc. KASHIMA KYODO ELECTRIC POWER Co., Ltd.

Soma Kyodo Power Company, Ltd.

Joban Joint Power Co., Ltd.

Japan Coal Development Co., Ltd.

AKITA (OIL) STORAGE MARINE SERVICE COMPANY, LTD

As of April 1, 2019, JERA Co., Inc. will be the only affiliate of TEPCO Fuel & Power, Inc. as a result of the merger.

#### **TEPCO Power Grid**

Tokyo Densetsu Service Co., Ltd.

Tepco Town Planning Co., Ltd.

Tokyo Land Management Corporation

TEPCO IEC. Inc.

TEPCO LOGISTICS CO., LTD.

Energy Gateway, Inc.

TEPCO OPTICAL NETWORK ENGINEERING INC.

SHIN-NIHON HELICOPTER CO., LTD.

Deep C Green Energy (Hong Kong) Limited

Kandenko Co., Ltd.

GREENWAY GRID GLOBAL PTE. LTD.

TAKAOKA TOKO HOLDINGS CO., LTD.

AT TOKYO Corporation

The Japan Utility Subway Company, Incorporated

Grid Data Bank Lab. LLP

Daido Industrial Arts Co., Ltd.

Transmission Line Construction Co., Ltd. (TLC)

Toshiba Toko Meter Systems Co., LTD.

#### **TEPCO Energy Partner**

Tepco Customer Service Corporation Limited FAMILYNET JAPAN CORPORATION

Japan Facility Solutions, Inc.

TEPCO Frontier Partners, LLC

Morigasaki Energy Service Co.

PinT. Inc.

Houseplus Corporation, Inc.

Japan Natural Energy Company Limited

TEPCO HomeTech. Inc.

HFP Laboratory, LLC

Familynet Initiative Corporation

Tokyo Energy Alliance Co., Ltd.

TEPCO i-FRONTIERS, Inc.

YeST Corporation

TI Current Corporation

LIXIL TEPCO Smart Partners Incorporated

Evergreen Marketing Co.,Ltd.

Toranomon Energy Network Co., Ltd.

TOKYO TOSHI SERVICE COMPANY

HP Capital Co., Ltd.

NF Power Service

Houseplus Architectural Inspection, Inc.

<sup>\*</sup> The TEPCO Group is composed of Tokyo Electric Power Company Holdings, Incorporated and its subsidiaries and affiliates.

# **SASB INDEX**

The relevant achievements of the TEPCO Group have been noted based on Electric Utilities & Power Generators, an industry standard put forth by the Sustainability Accounting Standards Board (SASB).

Since the SASB standard was created for primarily companies and markets in the United States there are disclosure topics that do not apply to Japanese domestic business activities in the accounting metrics, but an attempt has been made to disclose as much information as possible in light of the purpose of this standard.

Furthermore, through participation in the SASB Standard Advisory Group the TEPCO Group is proactively involved in the process to revise this standard to enable its use globally.

Topic	Accounting Metric	Category	Unit of Measure	Code	Response
				Environn	nent
	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Quantitative	t-CO <sub>2</sub> , %	IF-EU-110a.1	(1) 82,148,000 [t-CO <sub>2</sub> ] (2) 0 [%] (There is no "regulated market" in Japan.) (3) 100 [%]  * Scope 1 emissions are direct emissions of GHG (CO <sub>2</sub> , N <sub>2</sub> O, SF <sub>6</sub> , HFC) based on the Act on Promotion of Global Warming Countermeasures.
	Greenhouse gas (GHG) emissions associated with power deliveries	Quantitative	t-CO <sub>2</sub>	IF-EU-110a.2	102,700,000 [t-CO <sub>2</sub> ] (99,700,000 [t-CO <sub>2</sub> ]) * CO <sub>2</sub> emissions from TEPCO Energy Partner. Figures in parentheses indicate the amount of CO <sub>2</sub> emissions after reflecting adjustments related to the renewable energy feed-in tariff system based on the Act on Promotion of Global Warming Countermeasures.
Greenhouse Gas Emissions & Energy Resource Planning	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	_	IF-EU-110a.3	Based on the 2030 energy mix ("Long-term Energy Supply and Demand Outlook") and GHG reduction target set by the Japanese government, an emission factor (around 0.37kg-CO <sub>2</sub> / kwh(user end)) has been set as an industry-wide target for the ELCS (Electricity Low Carbon Society Council).  We are working on the following to achieve our overall industry goals:  Turning renewable energy sources into primary energy sources  Making thermal power highly efficient  Utilization of nuclear power generation on the premise of ensuring safety  Our Scope 1 emissions are decreasing year by year in FY2016 (89,037 thousand tons), FY2017 (84,335 thousand tons), and FY2018 (82,148 thousand tons).  In May 2019, we announced that it would electrify about 4,400 commercial vehicles by 2030 and participated in the international initiative EV100.  We will continue to examine and proceed with the necessary efforts to achieve our goal of reducing GHG emissions in 2030.
	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market	Quantitative	Number, %	IF-EU-110a.4	(1) N/A (2) N/A  * The RPS law established RPS regulations in Japan was abolished in 2012 and has shifted to a feed-in tariff system. We purchase electricity generated by renewable energy at a fixed price.
Air Quality	Air emissions of the following pollutants: (1) NOx (excluding $N_2O$ ), (2) SOx, (3) particulate matter (PM10), (4) lead (Pb), and (5) mewrcury (Hg); percentage of each in or near areas of dense population	Quantitative	t, %	IF-EU-120a.4	(1) 16,000 [t] (100%) * Excludes combustion power in islands. (2) 6,000 [t] (100%) * Excludes combustion power in islands. (3) Not disclosed (4) Not disclosed (5) Not disclosed * (3), (4), and (5) are not disclosed because they do not use the measurement method recommended by the SASB standard.

Topic	pic Accounting Metric Category Unit of Measure Code				Response
				Environn	nent
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	1000m³, %	IF-EU-140a.1	(1) 82,673,000 (Fresh Water:49,131,000, Sea water:33,542,000) [1000m³], 0(%)  * Main applications, Freshwater: Hydropower generation water, Seawater: Indirect cooling water in thermal power generation (2) 6,000 [1000m²], 0(%)
	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	IF-EU-140a.2	0
Water Management	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	N/A	IF-EU-140a.3	TEPCO group manage risks about water resources which inevitable for power generation as below.  The hydroelectric power generation business, which accounts for approximately 6% of the TEPCO Group's power generation, complies with the amount of water taken in accordance with laws and regulations, as calculated from river water flow measurement data. In addition, hydroelectric power plants above a certain scale(*) release water to maintain the river environment. In thermal power plants, water for power generation is collected and reused to reduce water intake. Moreover, seawater is used as indirect cooling water for power generation facilities, and the temperature difference between intake and discharge is monitored.  (*) The length of the section where the river water flow is reduced by intake for hydropower generation is 10km and also water collection area is more than 200km², etc.
Coal Ash	Amount of coal combustion residuals (CCR) generated, percentage recycled Quantitative			IF-EU-150a.1	923,500 [t] (99.9%) * Amount of coal ash (fly ash and bottom ash) generated.
Management	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	Quantitative	Number	IF-EU-150a.2	Not disclosed * Most of the coal ash generated at thermal power plants is reused, and landfill at disposal sites is about 0.1% of the total
				Social Ca	pital
	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	Quantitative	JPY	IF-EU-240a.1	(1) 24.47[JPY] (2) & (3): 23.05[JPY] * We calculate (2) and (3) from contract types with a large number of contracts.
	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	Quantitative	JPY	IF-EU-240a.2	(1) 13,044[JPY] (2) 40,549[JPY]
Energy Affordability	Number of residential customer electric disconnections for non- payment, percentage reconnected within 30 days	Quantitative	Number, %	IF-EU-240a.3	(1) 50,435  * We do not disclose the number of disconnections but cancellations  * Except rate plan before liberalization of electricities (2) No results  * It is stipulated that if the payment is not made even after the due date, the supply and demand contract will be canceled (contract canceled) based on the Terms and Conditions.  * Shown as "No results" since supply suspension and resumption are not stipulated in the Terms and Conditions
	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	Discussion and Analysis	N/A	IF-EU-240a.4	According to Electricity Business Act, "A General Electricity Utility shall not refuse to supply electricity to meet general demand in its service area (excluding, however, demand at the Point of Business Commencement and Specified-Scale Demand) without justifiable grounds." Thus, we do not recognize there are any areas without electricity in all the service areas of the TEPCO group. We also recognize that external factors which impact electricity rates are fluctuations in the price of thermal power fuels and levies from the Feed-in-tariff law for renewable energies. (price based regulations: requires electricity companies to purchase renewable energy at a certain price)
				Human Ca	apital
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	%	IF-EU-320a.1	(1) <employees>:0.022, <contractor consignors="">:0.134 (2) <employees>:0 [person], <contractor consignors="">:1 [person] * Since calculation method for fatality rate is not indicated in SASB Standard, we report the number. (3) Not applicable * (3) is not disclosed because they do not use the measurement method recommended by the SASB standard.</contractor></employees></contractor></employees>

Topic	Accounting Metric	Category	Unit of Measure	Code	Response
			Bu	siness-Model	& Innovation
	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	Quantitative	%	IF-FU-420a.1	Not applicable  * There are no decoupled or LRAM system customers in Japan  * With regard to sales that have declined due to progress in energy conservation, we will increase sales by providing gas sales and various services that meet customer needs.
End-Use	Percentage of electric load served by smart grid technology	Quantitative	%	IF-EU-420a.2	The rate of smart meters installed in all service areas of the TEPCO Power Grid: 79% * Approx.22.77 million smart meters installed as of July 2019. (Target goals in FY2020: approx.29 million smart meters installed)
Efficiency & Demand	Customer electricity savings from efficiency measures, by market	Quantitative	MWh	IF-EU-420a.3	We disclose the following quantitative data instead of customer electricity savings.  • The number of customers to whom the TEPCO Group offers electricity saving solutions: Approx. 750 companies, and over 39,000 households  * TEPCO Energy Partner provides various solutions electrification and energy saving solutions to customers.  • Energy saving services introduced through online services: 8,277,559 (number of website registered members)  * Free online services offered by TEPCO Energy Partner, such as Denki-Kakei-Bo, Kurashi TEPCO, and Business TEPCO that provide useful information to customers, such as how to use graph comparisons of monthly electricity charges and usage.
			L	eadership & G	overnance
Nuclear Safety & Emergency Management	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	Quantitative	Number	IF-EU-540a.1	17 Units (Fukushima Daiichi: 6 Units, Fukusima Daini: 4 Units, Kashiwazaki-Kariwa: 7 Units)  * All units at Fukushima Daiichi are decommissioning. The decision has been made to decommission all units at Fukushima Daini.  All units at Kashiwazaki-Kariwa have been shut down.  * In the operation of the Kashiwazaki-Kariwa NPS, TEPCO makes efforts to gain the understanding of local residents. TEPCO will also sincerely respond to assessments conducted by the Nuclear Regulation Authority. Through these efforts, TEPCO will steadily implement safety measures at the nuclear power plant.
	Description of efforts to manage nuclear safety and emergency preparedness	Discussion and Analysis	N/A	IF-EU-540a.2	TEPCO has been moving ahead with nuclear safety reforms in accordance with the "Reassessment of the Fukushima Nuclear Accident and Nuclear Safety Reform Plan" formulated on March 29, 2013. Reform progress is checked and reported on quarterly. (cf. https://www7.tepco.co.jp/about/corporate/reform/nuclear-e.html)
	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	Quantitative	Number	IF-EU-550a.1	Not disclosed  * We do not disclose the results in light of the risks of cyber attackes that may be caused by disclosing the results.
Grid Resiliency	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	Quantitative	Minutes, Number	IF-EU-550a.2	(1) 19[minutes] (2) 0.13[times] (3) 146.15[minutes/times]

#### Activity metrics

Accounting Metric	Category	Unit of Measure	Code	Response
Number of: (1) residential, (2) commercial, and (3) industrial customers served	Quantitative	Number	IF-EU-000.A	(1) 17,980,000 (2) & (3): 216,000 * In addition, there are 7,450,000 contracts for low-pressure supply contracts excluding household use.
Total electricity delivered to: (1) residential, (2) commercial, (3)industrial, (4) all other retail customers, and (5) wholesale customers	Quantitative	MWh	IF-EU-000.B	(1) 64,900,000[MWh] (2) & (3) 146,500,000[MWh] (4) 188,800,000[MWh] (low-pressure supply contracts excluding household use) (5) Not disclosed  * (5) is not disclosed due to competition through electricity market liberalization.
Length of transmission and distribution lines	Quantitative	km	IF-EU-000.C	Transmission line: <0verhead>28,314[km], <underground>12,349[km] (Circuit length) Distribution line: &lt;0verhead&gt;341,184[km], <underground>38,540[km] (Line length)</underground></underground>
Total electricity generated, percentage by major energy source, percentage in regulated markets	Quantitative	MWh, %	IF-EU-000.D	(1) 191,000,000[MWh] (2) <coal>12.52[%], <lng>80.48[%], <nuclear>0 , <petroleum>1.16[%], <hydropower>5.80[%], <solar>0.02[%], <wind>0.02[%], <other renewables="">0.00[%], <other gases="">N/A  *Rounded to the nearest hundredth (3) Not Applicable  *There is no "regulated market" in Japan.</other></other></wind></solar></hydropower></petroleum></nuclear></lng></coal>
Total wholesale electricity purchased	Quantitative	MWh	IF-EU-000.E	Not disclosed * Due to competition through electricity market liberalization

# **Financial Highlights**

\* All dollar amounts refer to U.S. currency. Yen amounts have been translated, solely for the convenience of the reader, at the rate of ¥111.00 to US\$1.00 prevailing on March 31, 2019.

### 10-Year Financial Summary

•					(Millions	of yen)					(Million	ons of US dollars)
	2019/3	2018/3	2017/3	2016/3	2015/3	2014/3	2013/3	2012/3	2011/3	2010/3		2019/3
FYs ended March 31:												
Operating revenues	¥ 6,338,490	5,850,939	5,357,734	6,069,928	6,802,464	6,631,422	5,976,239	5,349,445	5,368,536	5,016,257	\$	47,756
Operating income (loss)	312,257	288,470	258,680	372,231	316,534	191,379	(221,988)	(272,513)	399,624	284,443		2,306
Income (loss) before income taxes and non-controlling interests	258,625	327,817	146,471	186,607	479,022	462,555	(653,022)	(753,761)	(766,134)	223,482		1,306
Net income (loss) attributable to owners of the parent	232,414	318,077	132,810	140,783	451,552	438,647	(685,292)	(781,641)	(1,247,348)	133,775		1,184
Depreciation and amortization	541,805	561,257	564,276	621,953	624,248	647,397	621,080	686,555	702,185	759,391		5,030
Capital expenditures	639,725	602,710	568,626	665,735	585,958	575,948	675,011	750,011	676,746	640,885		5,430
Per share data (yen):												
Net (loss) income (basic)	¥ 145.06	198.52	82.89	87.86	281.80	273.74	(427.64)	(487.76)	(846.64)	99.18	\$	0.74
Net income (diluted) 3	46.96	64.32	26.79	28.52	91.49	88.87	_	_	_	99.18		0.24
Cash dividends	_	_	_	_	_	_	_	_	30.00	60.00		_
Net assets	1,179.25	1,030.67	838.45	746.59	669.60	343.31	72.83	491.22	972.28	1,828.08		7.47
FYs ended March 31 (as of March 31):												
Total net assets	¥ 2,903,699	2,657,265	2,348,679	2,218,139	2,102,180	1,577,408	1,137,812	812,476	1,602,478	2,516,478	\$	20,935
Equity <sup>4</sup>	2,889,423	2,651,385	2,343,434	2,196,275	2,072,952	1,550,121	1,116,704	787,177	1,558,113	2,465,738		23,886
Total assets	12,757,467	12,591,823	12,277,600	13,659,769	14,212,677	14,801,106	14,989,130	15,536,456	14,790,353	13,203,987		109,436
Interest-bearing debt	5,890,793	6,022,970	6,004,978	6,606,852	7,013,275	7,629,720	7,924,819	8,320,528	9,024,110	7,523,952		53,525
Number of employees	41,086	41,525	42,060	42,855	43,330	45,744	48,757	52,046	52,970	52,452		_
Financial ratios and cash flow data:												
ROA (%) <sup>5</sup>	2.5	2.3	2.0	2.7	2.2	1.3	(1.5)	(1.8)	2.9	2.1		_
ROE (%) <sup>6</sup>	8.4	12.7	5.9	6.6	24.9	32.9	(72.0)	(66.7)	(62.0)	5.5		-
Equity ratio (%)	22.6	21.1	19.1	16.1	14.6	10.5	7.5	5.1	10.5	18.7		-
Net cash provided by (used in) operating activities	¥ 503,709	752,183	783,038	1,077,508	872,930	638,122	260,895	(2,891)	988,710	988,271	\$	5,980
Net cash used in investing activities	(570,837)	(520,593)	(478,471)	(620,900)	(523,935)	(293,216)	(636,698)	(335,101)	(791,957)	(599,263)		(4,265)
Net cash provided by (used in) financing activities	(117,698)	12,538	(603,955)	(394,300)	(626,023)	(301,732)	632,583	(614,734)	1,859,579	(495,091)		(5,383)

#### Notes

- 1. Amounts of less than one million yen have been omitted. All percentages have been rounded to the nearest unit.
- 2. Net income per share after dilution by potential shares for the years ended March 31, 2011 and March 31, 2013 is omitted despite the existence of potential shares as the Company recognized a net loss per share for both years. Net income per share after dilution by potential shares for the FY ended March 31, 2012 is omitted as there were no potential shares and the Company recognized a net loss per share for this year.
- 3. Equity = Net assets Stock acquisition rights Non-controlling interests
- 4. ROA = Operating income / Average total assets
- 5. ROE = Net income attributable to owners of the parent / Average equity

Presentations Back Number

www7.tepco.co.jp/about/ir/library/presentations/backnumber-e.html

#### Major Financial Information

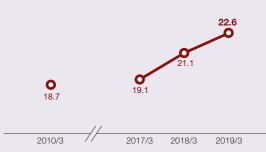
\* We have included financial information from March 2010 in order to compare our business conditions with those before the Great East Japan Earthquake and Tsunami that occurred on March 11, 2011.

#### Operating revenues (billion yen)



Although operating revenues for the March 2017 term decreased due to decreases in the unit price of electricity charge revenue caused by the fuel cost adjustment system, operating revenues increased in the March 2018 and 2019 terms due to increases in the unit price of electricity charge revenue caused by the fuel cost adjustment system.

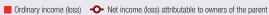
#### Equity ratio (%)



• Although equity ratio decreased to 5.1% during the March 2012 term in conjunction with the worsening of income and expenditure, it has increased to 22.6% (as of the end of March 2019) due to decreases in interest-bearing debt balance and initiatives to secure profits through continual and thorough cost-cutting measures implemented by the Group.

Equity ratio = (net assets - call options - minority interest)/total assets

#### Ordinary income (loss) & net income (loss) attributable to owners of the parent (billion yen)





Due to the rate revisions made during the March 2013 term and various cost reductions, we have remained in the black for six consecutive years since the March 2014 term.

#### Interest-bearing debt outstanding (billion yen) & debt-to-equity ratio



- Although interest-bearing debt balance increased to ¥9 trillion at the end of the March 2011 term due to a worsening of financial strength, it has continued to decrease due to the redemption of public bonds and was ¥5.8 trillion as of the end of March 2019.
- D/E ratio has dropped from 10.6 during the March 2012 term the after the disaster to 2.0, the level it was prior to the disaster, as a result of decreases in interest-bearing debt.

#### Capital expenditures & depreciation and amortization (billion yen)





- Capital investment (March 2019 term) increased YoY by 6% to ¥639.7 billion due to increases in investment in transmission equipment.
- Depreciation costs (March 2019 term) decreased YoY by ¥19.4 billion in conjunction with the course of fixed-rate depreciation.

#### **ROA & ROE (%)**

ROA ROE



- Although ROA decreased to -1.8% during the March 2012 term as a result of worsening income and expenditure, it has continually increased and recovered to the 2.0% range since the March 2015 term due to the rate revisions made during the March 2013 term and the securing of profits in conjunction with various cost reduction measures.
- Although ROE decreased in conjunction with the worsening of income and expenditure during the March 2011 term, it recovered during the March 2014 term as a result of the rate revisions made during the March 2013 term and various cost reduction measures. ROE remains at the level it was prior to the disaster in conjunction with continual increases in equity ratio.

ROA = operating profit/((total assets at the end of the previous term + total assets at the end of the current term)/2)ROE = net term income attributable owners of the parent/((equity at the end of the previous term + equity at the end of the curren

## Consolidated Balance Sheet

	(Millions	of yen)	(Millions of US dollars)		
FYs ended March 31:	2019/3	2018/3	2019/3		
ASSETS					
Property, plant and equipment:					
Property, plant and equipment	¥ 31,086,231	¥ 30,715,733	\$ 280,056		
Construction in progress	1,056,675	925,538	9,520		
	32,142,907	31,641,272	289,576		
Less:					
Contributions in aid of construction	432,056	414,446	3,893		
Accumulated depreciation	23,773,747	23,433,688	214,178		
Accumulated depreciation	24,205,804	23,848,134	218,071		
Property, plant and equipment, net	7,937,103	7,793,137	71,505		
20 Process of Processing 1992	, ,	,,,	. 1,000		
Nuclear fuel:					
Loaded nuclear fuel	120,482	120,509	1,085		
Nuclear fuel in processing	536,542	539,858	4,834		
	657,025	660,368	5,919		
Investments and other assets:					
Long-term investments	122,192	129,869	1,101		
Long-term investments in subsidiaries and associates	918,468	917,745	8,274		
Grants-in-aid receivable from Nuclear Damage Compensation and Decommissioning Facilitation					
Corporation	552,504	593,701	4,978		
Reserve for decommissioning of reactors	200,000	_	1,802		
Net defined benefit asset	142,023	147,499	1,279		
Other	128,401	127,371	1,157		
	2,063,589	1,916,186	18,591		
Current assets:					
Cash and deposits	1,000,681	1,187,283	0.015		
Notes and accounts receivable-trade	618,306	587,907	9,015 5,570		
Inventories	165,683	160,240	1,493		
Other	320,088	297,845	2.884		
	2,104,760	2,233,275	18,962		
Less:	, , , ,	, ,	. 0,002		
Allowance for doubtful accounts	(5,011)	(11,144)	(45)		
	2,099,748	2,222,131	18,917		
Total assets	¥ 12,757,467	¥ 12,591,823	\$ 114,932		

	(Millions	of yen)	(Millions of US dollars)
FYs ended March 31:	2019/3	2018/3	2019/3
LIABILITIES AND NET ASSETS			
Long-term liabilities and reserves Long-term debt Other long-term liabilities Provision for preparation of removal of reactor cores	¥ 2,126,510 310,552	¥ 2,685,175 372,839	\$ 19,158 2,798
in the specified nuclear power facilities  Provision for removal of reactor cores in the	6,099	1,929	55
specified nuclear power facilities Reserve for loss on disaster Reserve for nuclear damage compensation	505 448,829 549,042	442,402 600,647	4 4,043 4,946
Net defined benefit liability Asset retirement obligations	374,919 949,784	386,735 784,581	3,378 8,557
Current liabilities:	4,766,243	5,274,312	42,939
Current liabilities: Current portion of long-term debt Short-term loans Notes and accounts payable-trade Accrued taxes Other	991,887 2,772,395 264,510 111,163 940,378	1,756,527 1,581,266 208,576 131,566 974,829	8,936 24,977 2,383 1,001 8,472
	5,080,336	4,652,768	45,769
Reserve under special laws: Reserve for fluctuation in water levels Reserve for preparation of the depreciation of	-	581	_
nuclear power construction	7,188	6,895	65
Total liabilities	7,188 9,853,768	7,477 9,934,558	65 88,773
Net assets: Shareholders' equity: Common stock, without par value: Authorized — 35,000,000,000 shares in 2019 and 2018 Issued —1,607,017,531 shares in 2019 and 2018 Preferred stock:	900,975	900,975	8,117
Authorized — 5,500,000,000 shares in 2019 and 2018 Issued —1,940,000,000 shares in 2019 and 2018 Capital surplus Retained earnings	500,000 756,098 741,070	500,000 743,121 508,584	4,504 6,812 6,676
Treasury stock, at cost: 4,791,381 shares in 2019 and 4,765,505 shares in 2018 Total shareholders' equity	(8,469)	(8,454)	(76)
, ,	2,889,675	2,644,226	26,033
Accumulated other comprehensive income:  Valuation difference on available-for-sale securities  Deferred gains or losses on hedges  Land revaluation loss  Foreign currency translation adjustments  Remeasurements of defined benefit plans	3,663 2,723 (2,362) (6,977) 2,700	8,679 (454) (2,291) (7,846) 9,072	33 25 (21) (63) 24
Total accumulated other comprehensive income	(252)	7,158	(2)
Stock acquisition rights Noncontrolling interests	14,276	0 5,880	_ 128
Total liebilities and not assets	2,903,699	2,657,265	26,159
Total liabilities and net assets	¥ 12,757,467	¥ 12,591,823	\$ 114,932

## Consolidated Statement of Operations

	(Millions	of yen)	(Millions of US dollars)
FYs ended March 31:	2019/3	2018/3	2019/3
Operating revenues:			
Electricity	¥ 6,032,729	¥ 5,601,362	\$ 54,349
Other	305,761	249,576	2,755
	6,338,490	5,850,939	57,104
Operating expenses:			
Electricity	5,735,057	5,332,369	51,667
Other	291,176	230,099	2,624
0 " '	6,026,233	5,562,469	54,291
Operating income	312,257	288,470	2,813
Other income (expenses):			
Interest and dividend income	1,527	2,251	13
Interest expense	(55,541)	(63,247)	(500)
Loss on disaster	(26,943)	(21,302)	(243)
Grants-in-aid from Nuclear Damage Compensation	450.000	004.007	
and Decommissioning Facilitation Corporation	159,806	381,987	1,440
Compensation for nuclear damages	(151,069)	(286,859)	(1,361) 226
Equity in earnings of affiliates  Other, net	25,048 (6,749)	38,052 (10,665)	(61)
Other, net	(53,921)	40,216	(486)
	(33,321)	40,210	(400)
Income before special items and income taxes	258,336	328,686	2,327
Special items:			
Reversal of (provision for) reserve for fluctuation in water levels	581	(581)	5
Reversal of (provision for) reserve for preparation of the depreciation of nuclear power construction	(292)	(287)	(2)
Income before income taxes	258,625	327,817	2,330
Income taxes:	0.5.050	00.000	
Current	25,872	20,882	233
Deferred	198	(11,330)	235
Net income	26,071 232,553	9,552 318,265	2.095
Net illcome	202,000	310,203	2,000
Net income attributable to non-controlling interests	138	187	1
Net income attributable to owners of the parent	¥ 232,414	¥ 318,077	\$ 2,094
Per share information:	Ye	en	U.S. dollars
Net assets (basic)	¥ 1,179.25	¥ 1,030.67	\$ 10.62
Net income (basic)	145.06	198.52	1.31
Net income (diluted)	46.96	64.32	0.42
Cash dividends	_	_	_

## Consolidated Statement of Comprehensive Income

	(Millions	(Millions of US dollars)	
FYs ended March 31:	2019/3	2018/3	2019/3
Net income	¥ 232,553	¥ 318,256	\$ 2,095
Other comprehensive (loss) income:			
Valuation difference on available-for-sale securities	(3,799)	2,129	(34)
Foreign currency translation adjustments	(2,112)	875	(19)
Remeasurements of defined benefit plans	(6,140)	12,187	(55)
Share of other comprehensive (loss) income of affiliates accounted for under the equity method	4,712	(1,860)	42
Total other comprehensive (loss) income	(7,340)	13,332	(66)
Comprehensive income	¥ 225,212	¥ 331,597	\$ 2,029
Total comprehensive income attributable to:			
Owners of the parent	¥ 225,074	¥ 331,409	\$ 2,028
Noncontrolling interests	138	187	1

## Consolidated Statement of Changes in Net Assets

		Year ended March 31, 2019													
		Millions of yen													
			Shareholde	rs' equity				Accum	ulated other co	omprehensive	income				
	Common stock	Preferred stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Valuation difference on available- for -sale securities	Deferred gains or losses on hedges	Land revaluation loss	Foreign currency translation adjustments	Remeasurements of defined benefit plans	s Total accumulated other comprehensive income	Stock acquisition rights	Noncontrolling interests	Total net assets
Balance at April 1, 2018	¥900,975	¥500,000	¥743,121	¥508,584	¥(8,454)	¥2,644,226	¥8,679	¥(454)	¥(2,291)	¥(7,846)	¥9,072	¥7,158	¥0	¥5,880	¥2,657,265
Net income attributable to owners of the parent	_	_	_	232,414	_	232,414	_	_	_	_	_	_	_	_	232,414
Purchases of treasury stock	_	_	_	_	(16)	(16)	_	_	_	_	_	_	_	_	(16)
Sales of treasury stock	_	_	(1)	_	1	0	_	_	_	_	_	_	_	_	0
Change in parent's equity interest due to noncontrolling shareholders	_	_	12,978	_	_	12,978	_	_	_	_	_	_	_	_	12,978
Reversal of land revaluation loss	_	_	_	70	_	70	_	_	_	_	_	_	_	_	70
Other	_	_	_	_	0	0	_	_	_	_	_	_	_	_	0
Net changes in items other than															
shareholders' equity							(5,015)	3,178	(70)	868	(6,372)	(7,410)	(0)	8,395	984
Total changes	_	_	12,977	232,485	(14)	245,448	(5,015)	3,178	(70)	868	(6,372)	(7,410)	(O)	8,395	246,433
Balance at March 31, 2019	¥900,975	¥500,000	¥756,098	¥741,070	¥(8,469)	¥2,889,675	¥3,663	¥2,723	¥(2,362)	¥(6,977)	¥2,700	¥(252)	¥—	¥14,276	¥2,903,699

							Year ended Man	ch 31, 2018							
		Millions of yen													
			Shareholde	ers' equity				Accum	nulated other co	omprehensive	income				
	Common stock	Preferred stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Valuation difference on available- for -sale securities	Deferred gains or losses on hedges	Land revaluation loss	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Stock acquisition rights	Noncontrolling interests	Total net assets
Balance at April 1, 2017	¥900,975	¥500,000	¥743,123	¥193,404	¥(8,442)	¥2,329,061	¥5,109	¥(1,871)	¥(2,301)	¥17,098	¥(3,662)	¥14,373	¥-	¥5,244	¥2,348,679
Net income attributable to owners of the parent	_	_	_	318,077	-	318,077	_	_	_	_	_	_	_	_	318,077
Purchases of treasury stock	_	_	_	_	(15)	(15)	_	_	_	_	_	_	-	_	(15)
Sales of treasury stock	_	_	(2)	_	2	0	_	_	_	_	_	_	_	_	0
Change of scope of equity method	_	_	_	(2,888)	_	(2,888)	_	_	_	_	_	_	_	_	(2,888)
Reversal of land revaluation loss	_	_	_	(9)	_	(9)	_	_	_	_	_	_	_	_	(9)
Other	_	_	_	_	0	0	_	_	_	_	_	_	_	_	0
Net changes in items other than shareholders' equity			_		_		3,569	1,416	9	(24,944)		(7,214)	0		(6,579)
Total changes			(2)	315,179	(12)	315,165	3,569	1,416	9	(24,944)		(7,214)	0		308,586
Balance at March 31, 2018	¥900,975	¥500,000	¥743,121	¥508,584	¥(8,454)	¥2,644,226	¥8,679	¥ (454)	¥(2,291)	¥ (7,846)	¥ 9,072	¥ 7,158	¥ 0	¥5,880	¥2,657,265

		Year ended March 31, 2019													
		Millions of U.S. dollars													
			Shareholde	ers' equity				Accum	ulated other co	omprehensive	income				
	Common stock	Preferred stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Valuation difference on available- for -sale securities	Deferred gains or losses on hedges	Land revaluation loss	Foreign currency translation adjustments	Remeasurements of defined benefit plans	s Total accumulated other comprehensive income	Stock acquisition rights	Noncontrolling interests	Total net assets
Balance at April 1, 2018	\$8,117	\$4,504	\$6,695	\$4,582	\$(76)	\$23,822	\$78	\$(4)	\$(21)	(\$71)	\$82	\$64	\$0	\$53	\$23,939
Net income attributable to owners of the parent	_	_	_	2,094	_	2,094	_	_	_	_	_	_	_	_	2,094
Purchases of treasury stock	_	_	_	_	(O)	(O)	_	_	_	_	_	_	_	_	(O)
Sales of treasury stock	_	_	(O)	_	0	0	_	_	_	_	_	_	_	_	0
Change in parent's equity interest due to noncontrolling shareholders	_	_	117	_	_	117	_	_	_	_	_	_	_	_	117
Reversal of land revaluation loss	_	_	_	0	_	0	_	_	_	_	_	_	_	_	0
Other	_	_	_	_	0	0	_	_	_	_	_	_	_	_	0
Net changes in items other than shareholders' equity	_	_	_	_	_		(45)	29	(0)	8	(58)	(66)	(0)	75	9
Total changes	_	_	117	2,094	(O)	2,211	(45)	29	(O)	8	(58)	(66)	(O)	75	2,220
Balance at March 31, 2019	\$8,117	\$4,504	\$6,812	\$6,676	\$(76)	\$26,033	\$33	\$25	\$(21)	\$(63)	\$24	\$(2)	\$-	\$128	\$26,159

## Consolidated Statement of Cash Flows

	(Millions	of yen)	(Millions of US dollars)
FYs ended March 31:	2019/3	2018/3	2019/3
Cash flows from operating activities			
Income before income taxes	¥ 258,625	¥ 327,817	\$2,330
Depreciation and amortization	541,805	561,257	4,881
Decommissioning costs of nuclear power units	43,230	16,927	390
Loss on disposal of property, plant and equipment	30,319	25,442	273
Increase in provision for preparation of removal of reactor cores in the specified nuclear power facilities	4,721	1,929	43
Increase in reserve for loss on disaster	27,365	9,554	247
Net defined benefit liability	(13,015)	342	(117)
Increase in reserve for decommissioning reactors	(200,000)	_	(1,802)
Interest and dividend income	(1,527)	(2,251)	(14)
Interest expense	55,541	63,247	500
Equity in earnings of affiliates	(25,048)	(38,052)	(226)
Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation	(159,806)	(381,987)	(1,440)
Compensation for nuclear damages	151,069	286,859	1,361
Increase in notes and accounts receivable	(30,396)	(76,145)	(274)
Increase in notes and accounts payable	60,064	33,961	541
Other	(137,583)	75,212	(1,239)
	605,366	904,115	5,454
Interest and cash dividends received	5,513	6,594	50
Interest paid	(62,378)	(64,822)	(562)
Payments for loss on disaster due to the Tohoku-Chihou-Taiheiyou-Oki Earthquake	(19,613)	(32,944)	(177)
Receipts of Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation	797,000	893,900	7,180
Payments for nuclear damage compensation	(799,122)	(957,821)	(7,198)
Income taxes (paid) refunded	(23,055)	3,160	(208)
Net cash provided by operating activities	503,709	752,183	4,538

	(Millions	of yen)	(Millions of US dollars)
FYs ended March 31:	2019/3	2018/3	2019/3
Cash flows from investing activities			
Purchases of property, plant and equipment	(619,566)	(562,006)	(5,582)
Contributions in aid of construction received	17,670	22,328	159
Increase in long-term investments	(7,751)	(10,077)	(70)
Proceeds from long-term investments	2,186	155	20
Other	36,623	29,006	330
Net cash used in investing activities	(570,837)	(520,593)	(5,143)
Cash flows from financing activities			
Proceeds from issuance of bonds	959,106	523,639	8,641
Redemptions of bonds	(1,234,634)	(1,499,805)	(11,123)
Proceeds from long-term loans	_	498,289	_
Repayments of long-term loans	(1,049,209)	(226,315)	(9,452)
Proceeds from short-term loans	6,128,876	3,939,019	55,215
Repayments of short-term loans	(4,937,578)	(3,217,974)	(44,483)
Proceeds from payments from noncontrolling shareholders	21,277	462	192
Other	(5,537)	(4,775)	(50)
Net cash (used in) provided by financing activities	(117,698)	12,538	(1,060)
Effect of exchange rate changes on cash and cash equivalents	(194)	12	(2)
Net (decrease) increase in cash and cash equivalents	(185,021)	244,140	(1,667)
Cash and cash equivalents at beginning of the year	1,184,384	940,243	10,670
Cash and cash equivalents at end of the year	¥ 999,362	¥ 1,184,384	\$ 9,003

# **Stock Information**

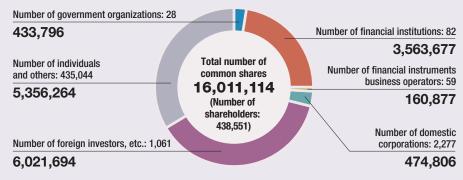
As of March 31, 2019

#### **Basic Stock Information**

Securities identification code	9501				
Stock listings	Tokyo Stock Exchange, First Section				
Total number of shares authorized to be issued	14,100,000,000				
Total number of issued shares	Common shares 1,607,017,531 Class A preferred shares 1,600,000,000 Class B preferred shares 340,000,000 Total 3,547,017,531				
Minimum units	Common shares 100 Class A preferred shares 100 Class B preferred shares 10				
Fiscal year	April 1 to March 31 of the following year				
General meeting of shareholders	s June				
Means of public notice	Electronic public notice posted on TEPCO's website*				
Handling of shares	Shareholder registry administrator Mitsubishi UFJ Trust and Banking Corporation Contact: Corporate Agency Division, Mitsubishi UFJ Trust and Banking Corporation Tel: 0120-232-711 (toll-free number in Japan) Postal address: Corporate Agency Division, Mitsubishi UFJ Trust and Banking Corporation PO Box 29, Shin-Tokyo Post Office, Tokyo 137-8081, Japan				

<sup>\*</sup> In the event that an electronic public notice cannot be posted due to an unavoidable reason such as an accident, the notice will be announced in the Nihon Keizai Shimbun published in Tokyo.

#### Breakdown of Shareholders (Share Unit) [in hundreds of shares]



#### Major Shareholders (Top 10 Shareholders)

Name of Shareholder	Number of Shares Held (Thousands)	Ratio (%)
Nuclear Damage Compensation and Decommissioning Facilitation Corporation	1,940,000	54.74
The Master Trust Bank of Japan, Ltd. (Trust Account)	59,195	1.67
TEPCO Employees Shareholding Association	50,545	1.43
Tokyo Metropolitan Government	42,676	1.20
Japan Trustee Services Bank, Ltd. (Trust Account 9)	39,145	1.10
Sumitomo Mitsui Banking Corporation	35,927	1.01
Japan Trustee Services Bank, Ltd. (Trust Account 5)	31,321	0.88
Nippon Life Insurance Company	26,400	0.74
Japan Trustee Services Bank, Ltd. (Trust Account)	24,707	0.70
STATE STREET BANK WEST CLIENT - TREATY 505234	24,505	0.69

The percentage of equity securities versus the total number of issued shares is calculated excluding treasury stock (3,221,148 common shares).

# **Editor's Note**

In April 2019, TEPCO Holdings established an ESG Office. This office will promote ESG management for the entire TEPCO Group and also further develop information disclosure in this report, which is an important tool for ESG communication.

Compiling information related to the climate, such as analyzing scenarios that address TCFD recommendations, and re-examining our value creation process based upon the six types of capital put forth in the IIRC Framework, has been a new challenge for us when writing this integrated report. We have also made a first attempt to mention indicators based on industry-based standards provided by the SASB in the hopes that it will be



useful for investors and other readers by improving comparability.

When making preparations to release this report, Typhoon #15, one of the largest typhoons to ever hit Japan, made landfall in the Kanto Region and a massive response from TEPCO was required to repair power outages. The TEPCO Group's most vital social mission is to provide a stable supply of power and quickly restore power in the event of power outages caused by an accident or disaster. We would like to once again deeply apologize for the great inconvenience that these widespread and persisting power outages caused. As we promote ESG management this report will be used going forward as one tool to disclose information on how we are enhancing countermeasures in light of our response to Typhoon #15.

We encourage and welcome the readers of this report to convey any frank opinions you may have.

October 2019

General Manager of ESG Office **Tokyo Electric Power Company** Holdings, Inc.

Takeshi Nomura

# **Corporate Profile**

Company name	Tokyo Electric Power Company Holdings, Incorporated
Head office	1-3, Uchisaiwai-cho 1-chome, Chiyoda-ku, Tokyo 100-8560, Japan Phone: +81-3-6373-1111
Representative	Tomoaki Kobayakawa, President
Established	May 1, 1951 (Trade name was changed on April 1, 2016.)
Equity capital	¥1,400.9 billion
Number of shareholders	657,744 (as of end of FY 2018)
Operating revenues (consolidated)	¥6,338.4 billion (FY 2018)
Ordinary income (consolidated)	¥276.5 billion (FY 2018)
Net income attributable to owners of the parent (consolidated)	¥232.4 billion (FY 2018)
Total assets (consolidated)	¥12,757.4 billion (as of end of FY 2018)
Number of employees (TEPCO Holdings and its consolidated subsidiaries)	41,086 (as of end of FY 2018)
Website	www.tepco.co.jp/en/



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Instagram

www.instagram.com/tepco.official/



www.youtube.com/user/OfficialTEPCOen



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