

Integrated Report 2022

#### **TEPCO Group's Mission**

### **Develop the future of energy Deliver a comfortable life**







### We are pursuing the possibilities of energy in order to provide value that exceeds the expectations of our customers.

In anticipation of changes to our energy supply-demand structure, we at the TEPCO Group are developing independent and distributed demand-side energy systems as we seek to create social value that centers around carbon neutrality and preparedness.

The TEPCO Group views the trend towards carbon neutrality as a business opportunity and we shall leverage our strengths, such as interaction with our customers and our technical prowess, etc., to drastically shift the focus of our business model from the sale of electricity to facility services that revolve around electricity thereby increasing corporate value.







### **TEPCO Integrated Report 2022 Executive Summary**

#### Mission

#### Develop the future of energy Deliver a comfortable life

We commit to fulfilling our responsibilities to Fukushima. We pursue expanding possibilities in the world of energy and deliver value beyond the expectations of individual customers.

#### Vision

We strive to earn the trust of our customers and partners. We create value focusing on global carbon neutrality and regional disaster preparedness for a safe and sustainable society.

#### Materiality

During FY2022, we identified 18 key business issues through significance assessments and are in the process of setting objectives for each of these issues. We have also selected executive officers to be in charge of each of these business issues and the degree to which objectives have been achieved will be one of the factors used to determine the remuneration given to these parties.

Examples of issues in important areas (Board of Director management)	key management issues (Material Issues Managed by the Board of Executive Officers)	Financial objectives
[Eukushima Initiatives] Ralancing	Involvement in urban development and initiatives for eliminating harmful rumors	Create annual profits on the order of ¥450 billion from FY2030 onward (Renewable energy business) Earn net profits on the order of ¥100 billion in FY2030
recovery with decommissioning (steady initiatives for disposing of treated water)	Contributing to recovery in Fukushima through the steady implementation of decommissioning/ contaminated water countermeasures based upon the Mid/Long-Term Roadmap	
[Business foundation] Human resource development and establishment of a new corporate culture	Strategic development/deployment of human resources to maximize corporate value	
[Nuclear power business] Nuclear power/nuclear fuel cycle (thoroughly implementing safety measures at the Kashiwazaki-Kariwa Nuclear Power Station	Cooperating with inspections and implementing safety measures in order to recommence operation of the Kashiwazaki- Kariwa Nuclear Power Station	
[Increasing corporate value] Customer value creation/enlargement in anticipation of a carbon neutral society (promotion of key businesses)	Revamping our business portfolio in new areas of business in order to increase corporate value	
	Implementing measures based on ESG strategies	
	Increasing the value of offered retail energy services	
	Establishment of a world-leading business management foundation	
	Use of renewable energies for primary power sources	

Refer to pages 28-29 for details.

#### Fulfilling our responsibilities to Fukushima

In order to fulfill our responsibilities to Fukushima, the TEPCO Group is quickly and appropriately providing compensation, engaging in activities to promote recovery, and safely and steadily engaging in the decommissioning process while prioritizing efforts to regain the trust of regional residents.

#### Compensation and recovery initiatives based upon our "three resolutions""

In conjunction with the lifting of evacuation orders, the situations of evacuees are changing in various ways. In light of this, we continue to listen carefully to each individual to understand their situation, and quickly provide suitable compensation based upon our three resolutions. Furthermore, we are providing both manpower and technical cooperation to ensure that the environment to which evacuees return is livable by contributing to national and local government projects to help businesses rebuild, and restoring/revitalizing town/city functions.

#### Completing decommissioning while coexisting with the region

In order to move safely and steadily forward with the decommissioning of the Fukushima Daiichi and the Fukushima Daini nuclear power stations, which includes initiatives to handle water treated with multi-nuclide removal equipment (ALPS treated water), and promote "balancing recovery with decommissioning" by vitalizing decommissioning-related industries, we shall engage in two-way communication with regional residents as we aim to complete decommissioning while coexisting with the region.

\*1. Provide compensation to everyone who needs it; 2. Provide compensation quickly and meticulously; 3. Respect settlement proposals

Refer to pages 78-87 for details.

#### Stable supply

The TEPCO Group engages in initiatives to secure supply and minimize price fluctuations so that our customers can use electricity without worry.

#### Securing supply

The power supply-demand situation from the end of March until the end of June 2022 was tight, however by implementing supply-side countermeasures along with demand-side countermeasures, such as enlisting the cooperation of society to save electricity, etc., we were able to avoid power outages. As we head into winter, we shall secure enough supply through a public appeal for additional supply power. Furthermore, in order to stabilize supply-demand, we are aiming to recommence operation of nuclear power stations by making every effort to improve safety, such as cooperating with additional inspections by the Nuclear Regulatory Agency, and obtaining the understanding of regional residents, which is the most important matter.

#### Minimizing price fluctuations

In light of the drastic fluctuations and rising prices in Japan's wholesale power market, we have revised electricity rates for our special high-voltage and high-voltage customers. We know that this will cause an inconvenience, but we are accelerating initiatives to save energy and electricity along with customers in order to reduce this burden. In particular, we are expanding our energy-conservation/electricity-saving services and also providing assistance for air-conditioning cleaning and the purchase of equipment used to manage power use, which are unique measures taken by the TEPCO Group.

#### Aiming to increase corporate value and create social value ~An overview of ESG initiatives~

#### Environment <Carbon neutrality strategy>

The TEPCO Group views the trend towards carbon neutrality as a business opportunity and we have announced our carbon neutrality business plan as a strategy for creating value that will help us achieve our vision. Furthermore, we are also developing information disclosure pertaining to climate change, which includes carbon neutrality objectives, based upon stakeholder engagement and TCFD guidance that was revised in 2021.

#### **Carbon neutrality declaration**

FY2030 objectives	2050 objectives
Reduce CO <sub>2</sub> emissions originating from the sale of power to 50% of FY2013 levels <sup>+1</sup>	Reduce CO <sub>2</sub> emissions originating from the supply of energy to essentially zero

\*1: From Scope 1, 2 and 3 power sales. Scope 1 and 2 emissions will be reduced to FY2019 levels

• The achievement level of the FY2030 objective is approximately 85% (CO<sub>2</sub> emissions: 80 million tons  $CO_2$ <sup>\*2</sup> and the  $CO_2$  emission coefficient is 0.452 kg- $CO_2$ /kWh<sup>\*2</sup>

\*2: Latest figures

#### Scenario analysis

The results of our analysis of multiple carbon neutrality scenarios suggest several things.

- We expect an increase in demand-side electrification and distributed power sources, household power generation and consumption, as well as locallyproduced/locally-consumed power.
- The fluctuation output of solar and wind power creates the risk of mismatched supply and demand, so the key to stable supply is to "store and use" power by leveraging storage batteries and hydrogen, etc.
- We expect an increase in the use of CO<sub>2</sub>-free electricity, such as renewable energies, etc., as well as the use of hydrogen/ammonia, etc.

#### Reflecting the revised TCFD guidance

We are further disclosing information pertaining to climate change based on the revised TCFD.

- Director remuneration reflects ESG performance level
- Carbon neutrality measure cost
- · Carbon neutrality-related investment
- Internal carbon pricing
- Climate-related assets
- The financial impact of risks/opportunities and response strategies
- Transition plan

#### Business model reform and urban development initiatives

We will drastically shift the focus of our business model from electricity (kWh) sales to facility services that closely impact our customers. Furthermore, we shall promote initiatives to enlarge the scope of these new services on the order of entire communities.



#### Social

#### Human capital investment linked to management strategy

Our human resource management strategy focuses on for priority issues (1)Human resource strategies that accelerate "ambidextrous management" (2) Diversity and inclusion (3) TEPCO work innovation (4) Foundation strengthening

Refer to pages 50-55 for details.

#### Promoting initiatives to respect human rights

In August 2021, we announced the TEPCO Group's Human Rights Policy that is based on the United Nations' Guiding Principles on Business and Human Rights, and we engage in human rights due diligence while also constructing mechanisms to handle complaints and taking remedial action.

Refer to pages 57-58 for details.

#### Governance

#### Improving the effectiveness of the Board of Directors

In order to ensure the objectivity of assessment processes and results, we enlisted the assistance of a third party during our FY2021 effectiveness assessment. As with last fiscal year, the Board of Directors has been deemed effective, but we are striving to further improve effectiveness through further improvements.

Refer to pages 23 for details.

### Purpose and value creation TEPCO history and business development

# TEPCO's history of self-reforms to meet the demands of the times and provide care-free and comfortable living.

Since its creation, the TEPCO Group has focused on creating customer value by meeting the demands and needs of society and has not shied away from reforms in order to change along with the times and the environment. Going forward, we will continue to expand the possibilities of energy in order to enable our customers to live care-free and comfortably, while also solving social issues and contributing to social development through the creation of value that exceeds the expectations of our customers.



#### **Sales**

#### 1883

#### Social background/needs

• Electricity essential for the modernization of Japan

#### **TEPCO's history**

Founding of Tokyo Dento (Predecessor to TEPCO) In 1883, Japan's first electric company, Tokyo Dento, was founded. In 1887, Japan's first thermal power station, Daini Dentokyoku, came online.



Dentokyoku transmission panel

 Increased need for power during the period of rapid economic growth

#### Founding of TEPCO

1951

TEPCO was founded in 1951 in conjunction with we organization of the electric industry. Through proactive power source development and technical innovation focused on highly efficient, large-capacity, cutting-edge thermal power, TEPCO was able to provide a stable supply of electricity at low-cost thereby supporting Japan's "rapid economic growth."



Sign from when TEPCO was founded

Countermeasures for pollution generated during the period of rapid economic growth

Basic Law for Environmental Pollution Control (1968)
 Tokyo Environmental Pollution Prevention Ordinance (1969)

#### Pollution countermeasure initiatives

1961

In order to reduce soot and smoke, nitric oxide, and sulfur oxide emissions from thermal power plants, TEPCO started using LNG that does not contain sulfur or nitrogen as fuel for power generation, and commenced operation of the Minami-Yokohama Thermal Power Station, the world's first mono-firing thermal power plant. Minas crude, which contains approximately 0.1% sulfur, was also employed to start operation of the Oi Thermal Power Plant, Japan's first Minas crude-firing thermal power plant.



Minami-Yokohama Thermal Power Station



Oi Thermal Power Station

• Extrication from dependence on oil as a thermal power fuel in the wake of the second oil crisis in the 1970s • Act on the rational use of energy (Energy Efficiency Act) (1979)

#### Transitioning from the oil crisis to a best mix

The second oil crisis had a huge impact on TEPCO. In order to extricate itself from dependence on oil as a power source, we switched to using LNG as a thermal power fuel. As a result, in FY1979 we became the first company to generate more power from LNG then crude oil. One other factor that helped to reduce our dependency on oil was the development of nuclear power stations. In addition to providing stable power, nuclear power stations do not emit CO<sub>2</sub> thereby contributing to global warming countermeasures. Furthermore, we also focused on the development of large-capacity pumped-storage hydropower plants that

perform superbly during peak demand periods, and initiatives to increase output from existing hydropower plants. We didn't just reduce our dependency on oil, but rather diversified power sources through the use of nuclear, LNG thermal, coal-thermal and hydropower, and leveraged the unique attributes of each to generate power efficiently thereby finding our way to a "best mix" that enables us to flexibly respond to fluctuations in demand and changes in international resource availability.



Promoting the "1L per person" policy during the second oil crisis in 1979



Deregulation of retail power market (2000)
 Increased social interest in environmental action

#### Enlargement of new services

With the deregulation of the retail market in 2000, we began a service that allows general household customers to inform us via the Internet if they plan to move in accordance with our desire to "manage the company more from the perspective of our customers." In the same year, we commenced operation of the Hachijojima Wind Power Plant, Japan's first commercial wind power plant. Furthermore, in cooperation with 10 other companies, TEPCO jointly established the Japan Natural

Energy Company, Inc., which generates power from natural energy sources on behalf of customers. TEPCO also engaged in initiatives to expand the use of natural energies that put a small burden on the environment through, for example, the development of the Green power certificate system, which is a new mechanism for companies.



Green power mark

• Great East Japan Earthquake and Tsunami (2011)

#### Recovery in Fukushima

Since the Great East Japan Earthquake and Tsunami and the accident at the Fukushima Daiichi Nuclear Power Station, TEPCO has quickly and suitably provided compensation, engaged in activities to promote recovery, and has moved forward steadily and safely with decommissioning in order to fulfill our responsibilities to Fukushima, such as providing compensation to victims of the disaster and completing disaster cleanup.



Recovery promotion activities

Total deregulation of retail power market (2016)
 Total deregulation of retail gas market (2017)
 Legal separation of transmission sector (2020)

#### Transition to a holdings company

In 2016, as we entered the era of reform kicked off by the total deregulation of the retail power market, TEPCO split into TEPCO Fuel & Power Inc., TEPCO Power Grid Inc. and TEPCO Energy Partner Inc., thereby transitioning to a holdings company. In 2019, our fuel and thermal power businesses were integrated into JERA Co., Inc. in accordance with an alliance with Chubu Electric Power Company, Inc. thereby making renewable energies and nuclear power the mainstays of the TEPCO Group's power generation infrastructure. Furthermore, TEPCO Holdings, Inc.'s renewable energy business was taken over by a new company, TEPCO Renewable Power, Inc., in 2020.

#### · Expectations for carbon neutrality

#### Aiming to create a carbon neutral society

In our 4th Comprehensive Special Business Plan announced in 2021, we put forth our objective of, "reducing carbon emissions originating from the supply of energy to essentially zero by 2050." While continuing to provide a stable supply of power, the TEPCO Group will shift its business model to focus on carbon neutrality and contribute to improving resilience, while working with business partners, local governments, and each and every customer to create a carbon neutral society by 2050.

### Leveraging our strengths and capital for the continuous creation of value

Since our foundation, we have continued to respond to the needs and demands of society throughout our long history and create value through our business thereby cultivating unique strengths and increasing our capital. Our strength lies with the competitiveness of the TEPCO Group, which is the driving force behind our growth, and our capital allows us to create new value. Going forward, we shall strengthen both of these assets to continue to create value amidst our incessantly changing business environment.

#### The strengths and attributes of the TEPCO Group

As we move into the future, the world and Japanese society aims to move away from fossil fuels with which most of energy is produced at the moment, and move toward the use of renewable energies, or in other words, a sustainable society.

As all of society aims to complete this transformation, the TEPCO Group must show our core competence as an energy operator and leverage our four supply/demand-side strengths, namely, our connection with our customers, our coordination with regional communities, our grid management assets, and our existing power source assets, as we aim to be a corporate group that continues to be chosen by society.



#### Demand side The basis of our strengths/competitive superiority · Supplying electricity to customers in the metropolitan area and number one in the country in terms of power sales volume Connection Areas of further strengthening with our · Respond to various needs through alliances, etc., as we transition to a distributed system, such as household generation/household customers consumption, and locally-produced/locally-consumed power The basis of our strengths/competitive superiority Trust cultivated through building social infrastructure rooted in the community and improving preparedness/resilience Coordination Areas of further strengthening with regional • Expand/strength and preparedness agreements pertaining to improving resilience to fiercer natural disasters communities Supply side The basis of our strengths/competitive superiority · Based on our mission to provide a stable supply of power, we are striving to maintain wide-area balance to maintain grid stability as distributed power sources expand. • O&M<sup>\*1</sup> know-how pertaining to power facilities used for grid linkage in the metropolitan area, which has a healthy appetite for power Areas of further strengthening · Operation of new grids that utilize storage battery technology, etc., as power sources become more distributed in the future. The basis of our strengths/competitive superiority Power source portfolio built from the perspective of S+3E<sup>\*2</sup> Power facility O&M knowhow Areas of further strengthening Existing power · Develop/leverage power sources, such as renewable energies that source assets can help create a carbon neutral society

\*1 Operation management and maintenance inspections

\*2 The basic point of view of Japan's energy policy. To achieve Energy security, Economic efficiency, and Environmental friendliness while providing Safety

#### **Accumulated capital**

Through our electricity business, the TEPCO group has steadily accumulated not only tangible capital, such as manufacturing capital, but also intangible capital, such as human, intellectual, and social capital to provide services with high added value. In order to continue to meet the needs and demands of society and our customers, we believe it is important to acquire advanced business skills and know-how based on stable supply, and coordinate/co-create with society and our customers. Accordingly, we shall accelerate investment in each of these capitals, and further develop the strengths of the TEPCO Group as an energy operator as we aim to continually increase corporate value.



Capital	Capital attributes/superiority	Areas of further strengthening
Human	<ul> <li>Number of employees: 37,939</li> <li>Employees with power facility O&amp;M know-how</li> </ul>	Cultivate human resources that can create business     Cultivate DX human resources     Employ skilled human resources from outside the company
Intellectual	<ul> <li>Have know-how pertaining to hydroelectric/nuclear power facilities, grid linkage and O&amp;M</li> </ul>	<ul> <li>Promote DX and advancing technology through digitalization and the proactive use of data</li> <li>Acquire technical prowess pertaining to offshore wind power and hydrogen usage</li> </ul>
Manufactured	Amount of power generated from non- fossil fuels (including-pumped storage) (Hydroelectric: 9.88 million kW/ Nuclear: 8.21 million kW)     Transmission lines: 28,453km (aerial), 12,513km (underground)     Distribution Lines 344,208km (overhead), 39,207km (underground)     Approximately 1,800 substations	<ul> <li>Develop 6~7 million kW of renewable energy</li> <li>Leverage distributed power sources</li> </ul>
Natural	Renewable energy resources such as our wealth of water     Natural environment of the Oze National Park	<ul> <li>Leverage natural capital more effectively (develop offshore wind power, hydroelectric repowering)</li> <li>Ensure biodiversity</li> </ul>
Social and relationship	<ul> <li>Relationship with the local governments in the Kanto region, which includes the capital, Tokyo, and has an appetite for power</li> <li>Number of preparedness agreements signed with local governments/ companies: Over 300</li> </ul>	• Strengthen alliances with other companies to create a carbon neutral society
Financial	• Approximately ¥70 billion procured through the issuance of green bonds	<ul> <li>More than three times the carbon neutrality-related investment goal of "a maximum of ¥3 trillion by FY2030" stated in the 4th Comprehensive Special Business Plan</li> <li>Utilization of sustainable finance</li> </ul>

#### Purpose and value creation

### Value creation process

The business environment surrounding the TEPCO Group is largely changing due to the global trend towards a carbon neutral society, demand for stronger resilience against ever fiercer and widespread natural disasters, and the soaring price of fuel all over the world resulting from the situation in Ukraine. However, even amidst these difficulties, the TEPCO Group is gaining the trust of society and our customers through our economic projects and Fukushima initiatives, and will become indispensable.



Business Global trend towards carbon neutrality/Issues pertaining to the stable supply of power, such as fiercer and more widespread natural disasters, soaring fuel prices, environment tight power supply-demand situations, etc./Fierce competition in the retail market since deregulation

#### Value chain business model reforms

While the TEPCO Group is using hydroelectric and nuclear power as baseload power sources and developing renewable energies, such as offshore wind, the way that society uses energy is changing as the transition on the demand side to independent/distributed power facilities, such as household power generation/ household consumption and locally-produced/ locally-consumed power, accelerates.

In order to convert the social demands to business opportunities, we must go beyond the supply and sale of electricity and reform our business model into one that provides energy services that includes everything from the purchase and installation of power equipment to long-term maintenance/management of such equipment.

Furthermore, we will provide energy services that utilize storage batteries and electric vehicles to not only households and corporate clients, but also regional society and communities thereby contributing to urban development that is carbon-neutral and resilient in the face of disaster.

In order to focus on these initiatives, we shall create departments and develop technology while also coordinating with local government and promoting alliances with other companies.

#### **Action for Change**



## Opinions expressed and editing policy **Dear Readers**,

The TEPCO Group is Japan's largest electricity operator and it manages energy supply infrastructure for primarily the Kanto region, which includes the capital, Tokyo.

The TEPCO Group is engaged in various business reforms in order to fulfill our responsibilities to Fukushima, however in addition to the global trend towards carbon neutrality, demands to strengthen resilience to fiercer and more widespread natural disasters, and the transformation of the economy and society brought upon by the Covid-19 pandemic, soaring fuel prices caused by the situation in Ukraine have led to dramatic changes in the TEPCO Group's business environment.

In order to respond to these changes in our business environment, the TEPCO Group announced "business structural reforms aimed at balancing long-term stable supply with carbon neutrality" on April 28, 2022, which is based on our 4th Comprehensive Special Business Plan, and is focused on maintaining the current stable power supply. At the same time, we are transitioning to a business model that offers new value based on carbon neutrality and preparedness as we aim to further improve profitability and increase corporate value. In order to maintain stable supply, it is vital that we can recommence operation of nuclear power stations upon ensuring safety. However, we must first prioritize the rebuilding of trust with communities and members of society that have been damaged by the string of improprieties that occurred in our nuclear power division. Furthermore, as we dispose of water treated with multi-nuclide removal equipment (ALPS treated water) in accordance with the government's basic plan that was announced in April 2021, we shall lead efforts to minimize reputational damage and ensure safety.

The TEPCO Integrated Report details the steps that the TEPCO Group is currently taking in order to "increase corporate value" and "create social value" as well as the business initiatives that we shall engage in in the mid/long-term. When writing this report, we referred to the integrated reporting framework put forth by the IFRS and made sure that the report reflects the TEPCO Group's business philosophy of incorporating financial and non-financial information into our business strategies based on integrated thinking. The entire TEPCO Group was involved in the writing of this report, and we hereby declare that all information contained within is fair and true.

Yoshimitsu Kobayashi

J.VU

Tokyo Electric Power Company Holdings, Inc. Chairman of the Board

Tomoaki Kobayakawa

Tomake Kobagakang

Representative Executive Officer and President

#### **TEPCO Integrated Report 2022**

Reporting period	April 2021 ~March 2022 (Some important information obtained outside this period has also been included)
Report subjects	51 consolidated companies of the TEPCO Group (Some important information outside of the scope he has also been included)
Period of publication	October 2022
Planned Date of Next Report	September 2023

#### A note on future forecasts included in the report

Plans, strategies and performance forecasts included in this report are based upon information available to TEPCO at the time of publication. These forecasts/predictions contain various uncertainties, such as the business environment surrounding TEPCO, competitive environment, related laws, business development plans, and exchange rates, etc., and it is possible that latent risks with the potential to reverse these predictions/forecasts may manifest. Therefore, we ask that you please be aware that the actual performance/ business environment in the future may differ from what has been noted in this report.



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#### Commitment of upper management

# Message from the President

Aiming to balance carbon neutrality with the stable supply of power

Tomoaki Kobayakawa

Tomake Kobagakana

**Representative Executive Officer and President** 

#### Foreword

#### Fulfilling our responsibilities to Fukushima

Fulfilling our responsibilities to Fukushima is the biggest mission of the TEPCO Group. In 2022, evacuation orders for the specified recovery and revitalization areas in Katsurao Village, Okuma Town and Futaba Town were lifted on June 12, June 30, and August 30, respectively. In order to ensure that regional residents can return to their homes without worry, it is of vital importance that we move safely and steadily forward with the decommissioning of the Fukushima Daiichi Nuclear Power Station. We must also move forward with decommissioning while prioritizing safety and keeping in mind that decommissioning is the basis for recovery in Fukushima.

At the same time, we are also gradually moving forward with the handling of water treated with multi-nuclide removal equipment (ALPS treated water), in accordance with the government's basic policy, which is one of our most important decommissioning initiatives. We have also started to take real steps forward with our projects to accumulate decommissioning industries in the Hamadori region, such as establishing a company for the manufacturing of decommissioningrelated products. Going forward, we hope to obtain the understanding and cooperation of local residents in regards to everything from construction to manufacturing.

By moving steadily forward with decommissioning in this manner we shall create infrastructure for revitalizing the regional economy through the decommissioning process and "balance recovery with decommissioning" hand-in-hand with regional residents.

We will continue to ensure that everyone in the TEPCO Group realizes that our origins lie in Fukushima, and make every effort to fulfill our responsibilities to Fukushima.

### Dealing with changes to our business environment

### Ensuring a stable supply of power and revising electricity rates

The earthquake that occurred off the coast of Fukushima Prefecture on March 16, 2022 caused damage to many thermal power stations along the coast of the Pacific Ocean thereby resulting in frequent tight supplydemand situations caused by the lack of supply power. The entire TEPCO Group made every effort to implement measures on the supply side, and we also enlisted the cooperation of our customers to save energy and improve our demand response, thereby preventing large-scale power outages. We are very grateful for the cooperation of our customers. Going forward we must remain vigilant, and coordinate with the national government and the Organization for Nationwide Coordination of Transmission Operators as we maximize our efforts on both the supply and demand sides.

On the other hand, Japan's ability to procure energy is weakening due to soaring fuel prices caused by the situation in Ukraine this year and also the abrupt weakening of the yen. In conjunction with this, prices in the power market (Japan Electric Power Exchange price) have increased remarkably over the short term thereby resulting in not only a worsening in revenue for retail electricity operators (TEPCO Energy Partner), but also difficulty with handling additional contract requests from customers. In order to solve this problem, on September 20 we announced a revision to our electricity rates for special high-voltage and high-voltage customers.

The main points of these revisions are a "reflection of current thermal power source composition" in the fuel cost adjustment system, and "new establishment of market price adjustments for reflecting current prices of procurement from the Japan Electric Power Exchange" upon incorporating additional power procurement fees that correspond to additional demand (approximately 20 TWh/ year) from additional contract requests that we have yet to be able to fulfill.

These revisions will for the most part eliminate the risk of worsening revenues in conjunction

with fluctuating fuel/market prices, but it is also important to engage in initiatives to reduce the impact of procurement from the Japan Electric Power Exchange within which current prices are soaring.

Therefore, the recommencement of operation of nuclear power stations has been partially incorporated into our rate cost price calculation in order to minimize the burden on our customers as much as possible. In particular, we have assumed that Kashiwazaki-Kariwa Nuclear Power Station Unit 7 will account for 75% (nine months-worth) of power in FY2023, which is the rate calculation period. We do not know when we will be able to recommence operation of the Kashiwazaki-Kariwa Nuclear Power Station, but we are continuing to cooperate with additional inspections by the Nuclear Regulatory Agency and making every effort to improve the safety of our power stations.

Regardless, in order to ensure energy security and also avoid the impact from soaring fuel prices, the entire TEPCO Group is working earnestly to recommence operation of nuclear power stations as quickly as possible. In order to do this, we shall complete nuclear reforms that are currently underway, and engage in more initiatives with the strong intention of operating our nuclear power business in the future with strong roots in the community and on the ground. The TEPCO Group will also strengthen initiatives related to energy conservation and energy-saving in order to reduce the burden felt by customers by these electricity rate revisions.

While coordinating with government projects, we have offered demand response options for corporate clients and also energysaving incentive options, such as the Energy-Saving Challenge 2022, etc., for households. Going forward, we will offer services unique to the TEPCO Group, such as assistance with the purchase and installation of energyconservation equipment, assistance with air-conditioning cleaning, and energy management services, as measures to work hand-in-hand with customers through facility maintenance and upgrades.

Through these measures, we aim to conserve approximately 3% of the annual power sales volume of the TEPCO Group, which corresponds to approximately 6 TWh, by FY2024.

Our current power supply-demand situation is quite serious, but addressing this issue aligns with our vision of creating a carbon neutral society in that we seek to create a society that is not dependent upon fossil fuels. In this respect, we at the TEPCO Group believe that this is an excellent opportunity for us to convert risk into business structure reforms to not only respond to the current crisis, but also achieve carbon neutrality in the future.

### The TEPCO Group's value creation and progress status of business strategies

#### Progress with the 4th Comprehensive Special Business Plan and a business model reforms

In the 4th Comprehensive Special Business Plan announced in 2021, the TEPCO Group announced that it is aiming for carbon neutrality by 2050. Chairman of the Board Kobayashi and outside directors have repeatedly discussed our carbon neutrality strategy, and agreed on goals for 2030 and 2050 after which on April 28, 2022, we announced our "Business Structure Reforms to Achieve Balancing Longterm Stable Supply and Carbon Neutrality." The main objectives of these reforms are to lower our dependence on fossil fuels over the mid/long-term, and promote the use of renewable energies on the supply side as primary power sources while also constructing locally-produced/locally-consumed energy systems on the demand side and linking the two thereby creating a new robust and flexible power system. Our approach to achieving these objectives is to maximize use of the resources of the TEPCO Group and leverage alliances with other companies to make a dramatic shift to a business model that focuses on facility services, such as distributed power sources and storage batteries, etc., and try to create new corporate value. According to this new business model, we will carefully watch the use of energy and

facilities by our customers and offer energy service provider (ESP) packages that promote energy-conservation and electrification with each customer, and help them to optimally manage power use. Based on this business we shall enlarge our coverage area and provide a supplement for unstable renewable energies, such as storage batteries and platforms that strengthen demand response functions. Since this service business will be closely tied to the buildings and facilities of customers, we must enlarge and shift to an energy service business model that integrates supply-side electricity business with demand-side needs. The key to succeeding with these initiatives is to form alliances with different industries that have strengths pertaining to urban development, home, building, and factory [construction], etc., and companies with new energy facilities/technology.

In order to promote these business structure reforms that aim for carbon neutrality, in April 2022 we selected chief innovation officers and alliance directors to create a structure for engaging in group business transformation.

#### Leveraging the strengths of the TEPCO Group

I believe that the TEPCO Group must not lose the "capability it has cultivated as an operator." This capability includes the ability to respond and make improvements that has been cultivated through the course of operating power stations and electric facilities and handling troubles, and accumulated knowhow lined with various experiences, including failures. I believe that this is where the strength of the TEPCO Group lies.

In order to create a carbon neutral society, we mustn't be confined to thinking in terms of "supply-side" and "demand-side," but rather need the ability to operate integrated and seamless energy systems upon understanding the attributes of both.

I believe that in order to implement business reforms aimed at carbon neutrality, we can utilize the strength of the TEPCO Group that lies with the "capability it has cultivated as an operator."

In particular, this strength should contribute greatly to system design, optimal management, and the standardization of safety and reliability, etc., as we spread the use of new electrification facilities.

A definitive example of this is the ability of the TEPCO Group to provide various technical services from the perspective of the user, such as asset management for maintaining the longevity and safety of new equipment, such as storage batteries, etc., and the stabilization of local grids by using demand response control that is synchronized with customer equipment. I believe that the role of the TEPCO Group in this age of carbon neutrality is to stand in the shoes of our customers to provide energy facilities that are superior in terms of environmental friendliness, economic efficiency, convenience, and resilience, and continue to provide services that are trusted by our customers and can be used with them for a long time without worry. And, through these initiatives we shall "increase corporate value" and "create social value."

### Aiming to turn annual profits on the order of ¥450 billion

In order to fulfill our responsibilities to

Fukushima we aim to turn net profits on the order of ¥450 billion annually. In order to achieve this goal, we have speedily implemented discontinuous reforms that include business reorganization and integration. In particular, we have engaged in so-called "upstream development," such as the integration of our fuel and thermal power business into JERA Co., Inc. and the expansion of our renewable energy business by TEPCO Renewable Power Inc., etc., in order to improve global competitiveness.

In the future we believe that the energy





industry will also focus on the "locally-produced/ locally-consumed" approach as we aim for urban development that balances preparedness with carbon neutrality, which is a global trend. In other words, facility service businesses that look to distribute power sources on networks close to customers and centralize storage battery facilities, and area/energy/management platforms for effectively controlling these facilities. TEPCO is currently examining areas in which to focus investment in anticipation of this type of business reforms that will contribute to a carbon neutral society.

We originally plan to invest approximately ¥3 trillion in these new areas of investment that focus on mainly renewables, nuclear power and grid facilities as noted in the 4th Comprehensive Special Business Plan. However, if we include the investment in new areas pertaining to carbon neutrality, for example, distributed power resources, the construction of value chains for our storage battery business, demand response, and the construction of an aggregation business, etc., then we believe we will need to more than triple the amount of investment to approximately ¥9 trillion.

Investing in this manner in new areas will require alliances with different industries and department reorganization/integration, so TEPCO plans to identify potential alliance partners and fields of investment during FY2022.

#### A message to stakeholders

We would like to thank our shareholders and investors for their support of the TEPCO Group even in the wake of the Great East Japan Earthquake and Tsunami.

We continue to engage daily in discontinuous reforms based on the 4th Comprehensive Special Business Plan.

The TEPCO Group has chosen the difficult path of "balancing carbon neutrality with stable power supply." Amidst the recent changes to the global environment, we are putting all effort into rebirthing the company in order to deal with issues that energy operators have never experienced before.

Rebuilding trust is a priority management issue since we always keep in mind that we can only exist with the trust of the regional communities and society. With a strong understanding that we are the ones that create the future of energy, we shall fulfill our responsibilities to Fukushima and increase corporate value. We ask all our stakeholders for their continued understanding and support.

# Message from the CFO

Pave the way to ¥450 billion through the 5th Comprehensive Special Business Plan

Hiroyuki Yamaguchi

Hiroyuki Yamaguchi

Representative Executive Officer, Executive Vice President, Chief Financial Officer (CFO)

#### FY2021 performance

### Harsh business environment caused by soaring fuel prices

Spurred by soaring fuel prices and the impact of the Russia/Ukraine situation since February 2022, the external environment during FY2021 became even harsher. FY2022 continues to put not only the TEPCO Group, but the entire power industry in a disadvantageous position with even higher fuel prices resulting from changes on the international stage. As a result of the aforementioned conditions, it is impossible for us to make any detailed performance forecasts at this point in time. We expect poor performance in the future as long as fuel prices continue to soar as they have, so on August 31, 2022, TEPCO decided to underwrite a capital increase in order to prop up the financial standing of TEPCO Energy Partner (EP). EP announced on September 20 of the same year that it has revised its rate options for special high-voltage and highvoltage customers. Going forward the entire TEPCO Group will strive to improve revenue.

In regards to fuel prices, since most of the fossil fuels used for power generation are procured from overseas, to what extent we can avoid expensive spot fuel purchases will be key. To achieve this, we need to work with the government on energy-saving programs and enlist the cooperation of customers to save energy, and then give back to the customer by keeping electricity rates low. In regards to nuclear power, we must first and foremost ensure the S, or "Safety," in our S+3E approach. And, since nuclear power is superior in terms of the 3E's, we hope to get these power stations back up and running. EP is also currently starting initiatives to get customers to install solar panels and storage batteries within their current electricity budget so that they can use electricity without using expensive fuels, or in other words, fossil fuels.

#### Looking back at the 4th Comprehensive Special Business Plan and our plan for FY2022

#### Measures for strengthening earning power

The annual ¥450 billion profit goal of the 4th Comprehensive Special Business Plan assumes and includes profits from new businesses, and since the development of asset services in particular is a mid/ long-term initiative, reorganizing our electricity business, which is the current base for our forecast, is a pressing issue. Amidst this situation, TEPCO Renewable Power, Inc. (RP) plans to newly develop a total of  $6 \sim 7$ GW of renewable energy in Japan and overseas which will ensure that we will turn a profit of approximately ¥100 billion annually as of FY2030. We already manage three hydrologic power stations in other countries and are strengthening infrastructure here in Japan by increasing the output potential of aging small and medium-sized hydroelectric power plants through repowering.

EP is currently rolling out asset services in order to achieve its quantitative goals. However, any company can provide just asset services. In terms of the technical skill involved, it's not something that only TEPCO is able to provide. It's important for us to create a world in which the TEPCO Group alone can provide such asset services by offering everything from technical support, and maintenance to after service. Whether we're talking about prices or services, the only way to turn large profits is to construct a business model that only the TEPCO Group can offer, and spread it nationwide. JERA Co., Inc. is also working steadily to achieve its FY2025 consolidated net profit goal of ¥200 billion, and TEPCO Power Grid Inc. (PG) is also building a strong revenue foundation. PG also has the potential to expand its business into the spheres of data centers and 5G by leveraging its assets, so were going to take advantage of all of these possibilities to reach our ¥450 billion profit goal. We understand that the timeline for achieving this goal is an issue, but this will be addressed in the 5th Comprehensive Special Business Plan.

Alliances are indispensable for achieving our goals. While JERA, RP and our nuclear power stations are essential for fulfilling our power generation requirements, as our customers move toward carbon neutrality, we plan to examine alliances with partners outside our existing framework in addition to alliances with manufacturers and installers.

#### Using our cash flow to achieve carbon neutrality

The 4th Comprehensive Special Business Plan sets a maximum investment goal of ¥3 trillion, but as we announced in April 2022, we believe that in order to achieve carbon neutrality throughout all of Japan, we need to contribute another ¥6 trillion or more in investment. The original ¥3 trillion was to come from support from financial institutions as well as the issuance of green bonds from RP. However, this will be used by RP to establish new renewable energies business. Looking forward to the future, we are considering the use of sustainable finance, and if we

have the power to create cash flow from these new businesses, we will be able to expand the various means by which capital is procured. If investors except the business model we are proposing, there should be other means by which to procure capital in addition to project financing. Furthermore, we are examining how to increase capital that we cannot procure through alliances.

I must reiterate that I personally believe it is important to think about what type of business model we can create before we think about the means for procuring capital. I believe that if we can propose an outstanding business model and cash flow creation process, then the money will follow. Our chief innovation officer (CINO) and Vice President Kojima is working at a fevered pitch to examine how to construct this new business model. It has already been announced that we shall propose this new business model in April 2023, and it is my role to propose methods for how to procure capital at the same time.

#### **Financial policy**

### Our financial policy in anticipation of achieving carbon neutrality

How capital is distributed differs depending on the timeline. Since fuel prices are currently soaring, our first priority is to support our current electricity business. However, we cannot stop our march to achieving carbon neutrality in the future. Furthermore, as the base of our electricity business is lifted, it will be possible to distribute capital into new areas and turn ourselves in the direction of new businesses. Firstly, we will strive to strengthen our revenue base so as to get investors on board by creating cash flow based on our electricity business. In that respect, we realize that the time until the 5th Comprehensive Special Business Plan is announced is extremely important for achieving our annual goal of ¥450 billion in profits.

#### Hedging price fluctuation risks

Foreign exchange rate fluctuations have an impact on fuel procurement. JERA is already hedging fuel prices, but we must secure quantities sufficient for maintaining stable supply. In other words, the only thing the TEPCO Group can do is hedge quantity. Saving energy also results in a reduction in the amount of expensive fossil fuels used, and as a result, leads to reducing the impact of the exchange rate. The foreign exchange rate also impacts nuclear power fuel procurement, but since the volume of fuel is minimal compared to the amount of power generated, engaging in initiatives to recommence operation of nuclear power stations and shifting our focus away from coal and LNG will help us hedge these risks. In other words, a best mix of power sources is extremely important.

### A message to shareholders and investors

#### Autonomous management of the TEPCO Group In order for the TEPCO Group to engage in autonomous management, we mustn't merely

solve the aforementioned issues, but also maintain a high rating in the market. We must increase the profitability of our base electricity business and then construct a business portfolio aimed at carbon neutrality, or in other words, the entire TEPCO Group must move towards the same goal and understand that everything is connected. My role, and mission, is to open up the pathway to ¥450 billion by the announcement of the 5th Comprehensive Special Business Plan.

### Problems we perceive as we contemplate our ideal state

We have steadily engaged in the business of providing power, but lack know-how when it comes to asset services. Furthermore, we have had little interaction with customers outside of the provision of power, so we need the cooperation of partners to engage in businesses through which we directly engage with customers. In regards to capital procurement, I already mentioned that procuring capital will come after we formulate a business model, but we are currently diversifying our means for capital procurement. It's important for not only the people that handle capital in the accounting division, but also people engaged in business on the ground to have know-how pertaining to these matters. I believe by doing so we can engage in both capital procurement and business effectively. I believe we must increase the number of people that have this type of financial skill.

#### **Expectations for employees**

I believe that people of like mind can only do like things. I want employees to think, "well, I can't do what others can do, but I can do this." Successful people are not necessarily doing anything that's terribly difficult, they've just persevered on a certain path, and discovered their potential. And, as a result, they have found the path to success. Going forward, I hope to work with employees as CFO to contribute to the growth of the TEPCO Group.

#### A message to shareholders and investors

In closing, let me just say to shareholders and investors that I apologize for not being able to distribute dividends since the disaster. I know you all are waiting for two things; stable dividends and share price recovery. We are striving to turn that dividend number into a plus figure for you. And, in order to meet your expectations, we have to achieve three things: we must show that we can complete decommissioning and provide compensation, stably secure capital to do so, and build a robust financial foundation. In order to provide dividends, we need distributable amounts and cash, and share price may increase if we can show our vision for the future to the market. Presenting our pathway to turning annual profits of ¥450 billion in the 5th Comprehensive Special Business Plan will promote dialogue between us and shareholders/investors, and if the market sees that, it may be reflected in our share price. In order to meet your expectations, we shall present in detail our pathway in the 5th Comprehensive Special Business Plan.

### Message from the Chairman

I will be the driving force behind an effective Board of Directors, support the continued existence and sustainable growth of the TEPCO Group, and contribute to the creation of a carbon neutral society

### The direction we should take in light of the business environment surrounding the TEPCO Group

It is said that the intense environmental changes we have witnessed around the world in recent years are the result of climate change caused by an increase in greenhouse gases. I personally believe that these environmental changes are an important issue that will dictate the fate of the human race, and feel a sense of crisis. Definitive action must be taken quickly as we move into the future. In Japan, the public and private sector have come together to launch initiatives aimed at creating a carbon neutral society, such as starting discussions about the government's implementation of GX (green transformation). I personally believe that the role of the TEPCO Group, which produces a relatively large amount of  $CO_2$ emissions, is important for achieving this goal. On the other hand, the TEPCO Group, and Japan as

#### Yoshimitsu Kobayashi

p. Vin

Tokyo Electric Power Company Holdings, Inc. Chairman of the Board a whole, has found itself in a harsh situation when it comes to the stable supply of power due to a lack of fuel, such as LNG, resulting from the situation in Ukraine. In addition to this, foreign exchange rate fluctuations have caused prices to soar in various sectors, including electricity rates, and as such, supplying a stable source of power at low-cost has become even more pressing of an issue in order to reduce the burden on the economy and our lives.

Amidst this situation, the TEPCO Group is engaged in fierce competition with other companies as a result of deregulation of the retail power market, and, due to the added difficulty of soaring fuel prices, is finding it very hard to generate revenue. However, in addition to fulfilling our responsibilities to Fukushima, we also have a responsibility as an energy operator to secure a stable source of power and contribute to the creation of a carbon neutral society. In order to do this, we must ensure that the company lives on and continues to grow; and it is necessary that the entire Group realizes this. In order to enable the company to live on and grow, we must expand our sphere of business even more than ever. Up until now the TEPCO Group has sold a single product, kilowatt hours, and enlarged our energy solutions business, such as by providing support for energyconservation, however with the extreme speed at which our lives are changing as a result of changes in the world's energy situation and the progress of digital transformation, we must guickly provide detailed solutions in the form of various services that meet the expectations of our customers and society as well

as changes in the environment, and contribute to society.

In our 4th Comprehensive Special Business Plan, the TEPCO Group put forth goals of enabling the company to survive, enabling continued growth, and turning annual profits on the order of ¥450 billion. In order to achieve these goals, we are engaged in initiatives to provide a stable supply of power, create a carbon neutral society, and provide services that will satisfy our customers.

#### The role of the Chairman of the Board

I am involved in the management of TEPCO in a unique manner that differs from other companies. In addition to being an outside director, I am also Chairman of the board, Chairman of the nominations committee, and members of the compensation and auditing committees. As I supervise the executive branch of the company in this manner, I also attend executive meetings and give my opinions. All this while the majority of shares of the company are owned by the Nuclear Damage Compensation and Decommissioning Facilitation Corporation.

The reason why this is the way it is, is because the company supports important infrastructure for society; namely, power. Additionally, it must safely and steadily complete decommission the Fukushima Daiichi Nuclear Power Station and fulfill its responsibilities to Fukushima in the form of promoting Fukushima to recover. In order for the TEPCO Group to complete this mission, executive initiatives must be continually supervised. Also, at the sake of being repetitive, I must mention that the TEPCO Group serves an important role and has tremendous responsibility when it comes to creating a carbon neutral society, so I feel it is necessary to engage in initiatives in unity with the executive branch, and as so, I will continue to do my best as Chairman of the Board.

### Assessment of the Board of Directors' FY2021 initiatives

For approximately three years from 2012 until 2015, I supervised the TEPCO Group's management reforms implemented immediately after the Great East Japan Earthquake and Tsunami as an outside director. After stepping down from this position, I was involved in the management of the TEPCO Group from various positions, such as a member of the Nuclear Damage Compensation and Decommissioning Facilitation Corporation's operations committee and was appointed Chairman of the Board in 2021. Compared to when the disaster occurred, the current Board of Directors is more open and freer when it comes to discussions with company executives. On the other hand, when I look back at the discussions held by the Board of Directors during FY2021, I feel that a lot of time was spent discussing current management issues, such as measures to address revenue issues and the progress status of nuclear reforms, etc., and not enough time was spent discussing "earning power" needed for the sustainable growth of the entire Group. Going forward, I would like to have many discussions about mid/long-term topics for

the sustainable growth of the TEPCO Group while linking these topics to, for example, initiatives aimed at creating a carbon neutral society.

#### Initiatives to improve the effectiveness of the Board of Directors

The current TEPCO Board of Directors, which includes six outside directors, is currently comprised of 13 members with diverse backgrounds and experience in other industries.

I mentioned earlier that discussions by the Board of Directors are open and free, but in order to have these discussions fit more with the actual situation of the TEPCO Group and conditions on the ground, and to improve the effectiveness of the Board, outside directors must maintain broad and objective viewpoints while also understanding the conditions that the TEPCO Group bases and actual conditions on the front lines in the field.

After being appointed Chairman of the Board, I have made time to visit the front lines in the field, see equipment, and exchange opinions with employees. By seeing the actual condition of facilities, and hearing the opinions of employees



that work there and how they approach their jobs, I have been able to notice new things. Therefore, from FY 2022, we have been creating opportunities for other outside directors to visit the front lines and exchange opinions with employees.

In regards to the structure of the Board of Directors, I believe we must be more aware of diversity in light of changes to the domestic and overseas business environment, for example, the construction of new supply chains in accordance with changes in globalism, changes to the innovation environment brought upon by digital transformation and green transformation, and the state of competition with other companies.

#### A message to our stakeholders

Currently, addressing energy issues is a pressing matter for Japan, but even in the mid/long-term, if we intend to create a carbon neutral society, we must implement various measures on both the power supply and demand sides, and reduce our dependency on fossil fuels. These are very difficult issues to solve for Japan, which has a low energy self-sufficiency rate, but it's something we must succeed at for Japan's continual development and the next generation. In that respect, it is energy operators like the TEPCO Group that can, and must, solve these issues head on.

Based on our new corporate philosophy of "pioneering the future of energy for peace of mind and comfort" we will do our best for all of our stakeholders. Thank you for your continued understanding and support.

### **Board of Directors**

#### **Board Effectiveness**

Tokyo Electric Power Company Holdings Inc. is striving to improve the effectiveness of the Board of Directors, which is the linchpin of governance, by engaging in lively debate during which a diverse group of outside directors with a plethora of experience and knowledge voice their opinions. Furthermore, once a year, the effectiveness of the Board is assessed through questionnaires distributed to directors and discussions by the Board. In addition to questionnaires, the objectivity of the effectiveness assessment was ensured by having a third-party assess and analyze questionnaire responses, which are then discussed by mainly outside directors.

#### Assessment method

- Questionnaires are distributed to all members of the Board of Directors, nominations committee, and compensation committee.
- •A third-party agency analyzes/assesses the responses from the questionnaire, which are then discussed by primarily outside directors prior to review by the Board.

#### Assessment result summary

The TEPCO Board of Directors has been deemed effective because it is comprised of a suitable number of diverse members, allows free debate, has been ranked highly through questionnaires in continuation from FY2020, and because there have been no serious issues pointed out with the Board.



#### Questions for which responses improved

#### Questions for which responses worsened

- Addressing risks such as by providing information pertaining to significant risk
- Board director are proactively speaking out
- Analysis and reflection in business plans of monitoring results and debates concerning mid/long-term strategies
- Time allocation by the Board of Directors
- Support for executives to enable quick decision-making
- Holding of discussions pertaining to strategies for improving earning power

#### Status of initiatives to address issues

In continuation from last fiscal year, during FY2021, the following initiatives were undertaken based upon the issues identified during the effectiveness assessment.

The Board of Directors will continue to make further improvements as it strives to improve effectiveness.

Issues identified during FY2020	Status of FY2021 initiative
<ul> <li>Further develop discussions pertaining to mid/long-term strategies and strategies for improving earning power.</li> </ul>	<ul> <li>Have the Board of Directors get reports on, and hold discussions pertaining to, the progress with achieving goals put forth in the business plan.</li> </ul>
<ul> <li>Provide more information on risk to the Board of Directors.</li> </ul>	<ul> <li>Provide risk information to the Board of Directors as needed and have the board continually discuss significant risks in particular.</li> </ul>
<ul> <li>Strengthen supervisory functions for the nuclear power division.</li> </ul>	<ul> <li>Share the latest information about the nuclear power business as necessary.</li> </ul>
<ul> <li>Create opportunities for outside directors to visit TEPCO facilities.</li> </ul>	<ul> <li>Enable outside directors to visit TEPCO facilities and exchange opinions with employees in the field.</li> </ul>



Visit to the Management Skills & Strategies Research Center



Visit to the Aomori Office

Refer to pages 91 for details.

## Board of Directors Outside directors

Name	Position	FY2021 attendance	Company	Energy	Engineering	Financial accounting	Legal	ESG	International operations	Sales/ marketing	Status of important multiple positions
Yoshimitsu Kobayashi Reappointment Outside ind.	Chairman of the Board	Board of Directors: 15/15 Nominating Committee: 7/7 Audit Committee: 16/16 Compensation Committee: 9/9	•	•	•			•	•		• Outside Director, Mizuho Financial Group, Inc.
Hideko Kunii Reappointment Outside ind.	A C★ 8-year tenure	Board of Directors: 18/18 Nominating Committee: 2/2 Audit Committee: 16/16 Compensation Committee: 10/10	•		•			•			
Hideo Takaura	At C S-year tenure	Board of Directors: 18/18 Audit Committee: 21/21 Compensation Committee: 9/9				•					• Certified Public Accountant
Shigeo Ohyagi	N C 2-year tenure	Board of Directors: 18/18 Nominating Committee: 9/9 Compensation Committee: 10/10	•					•	•	•	<ul> <li>Advisor, Teijin, Ltd.</li> <li>Outside Director, Mitsubishi UFJ Bank, Ltd.</li> <li>Outside Auditor, JFI Holdings, Inc.</li> <li>Outside Director, KDDI Inc.</li> </ul>
Shoichiro Onishi Reappointment Outside ind.	N A 2-year tenure	Board of Directors: 18/18 Nominating Committee: 9/9 Audit Committee: 21/21	•				•				<ul> <li>CEO, Frontier Management, Inc.</li> <li>CEO, FCD Partners, Inc.</li> <li>Attorney at Law</li> </ul>
Asa Shinkawa Reappointment Outside	N 1-year tenure	Board of Directors: 15/15 Audit Committee: 16/16		•			•				• Partner, Nishimura & Asahi • Outside director, Nintendo

TEPCO, but has not been registered as an independent director.

Outside Director ind. Independent directors: Independent directors as stipulated by the Tokyo Stock Exchange Group, Incorporated. TEPCO has registered its independent directors with the Tokyo Stock Exchange Group, Inc.

A Audit C Compensation ★ : Chair

N Nominating

### Directors

	Name		Position	FY2021 attendance	Company	Energy	Engineering	Financial accounting	Legal	ESG	International operations	Sales/ marketing	Status of important multiple positions
	Tomoaki Kobayakawa	Reappointment	Director N 6-year tenure	Board of Directors: 18/18 Nominating Committee: 9/9	•	•	•					•	
	Seiji Moriya	Reappointment	Director 5-year tenure	Board of Directors: 18/18	•	•		•		•			
C.	Hiroyuki Yamaguchi	New	New	N/A		•		•					* The reasons for appointment and a brief
P	Chikara Kojima	New	New	N/A				•			•	•	personal history are described on pages 12- 22 of the 98th NOTICE OF CONVOCATION. https://www.tepco.co.jp/
	Toshihiko Fukuda	New	New	N/A		•	•						en/hd/about/ir/stock/ pdf/220526_1-e.pdf
	Shigehiro Yoshino	Reappointment	N 1-year tenure	Board of Directors: 15/15 Nominating Committee: 7/7		•							
	Yoshihito Morishita	Reappointment	A 3-year tenure	Board of Directors: 18/18 Audit Committee: 21/21				•					

### Strategies for creating value Roadmap for achieving our vision

#### Strategic system for enabling "a comfortable life"

The TEPCO Group is engaged in various types of value creation that revolves around "carbon neutrality" and "preparedness," and we believe it is our purpose to enable everyone connected to our company to live "a comfortable life." In order to achieve this goal, we are steadily implementing the strategies put forth in the 4th Comprehensive Special Business Plan and working towards our carbon neutrality goals.



#### Summary of carbon neutrality roadmap

A world in which society can live a comfortable life is indispensable for achieving carbon neutrality in 2050, and the TEPCO Group aims to make such a world. We shall draw up scenarios and strategies aimed at achieving carbon neutrality, and turn the new possibilities from value based on the energy delivered to our customers (= "the possibilities that energy holds") into something tangible thereby contributing to carbon neutrality in Japan.



### Strategies for creating value Recognizing the business environment and materiality

#### The TEPCO Group's materiality

The TEPCO Group separates measures for creating value and issues that require deliberation from a long-term standpoint into four categories: Fukushima matters, business foundation, nuclear power matters, and corporate value increase. At the same time, the significance of each issue is assessed by determining its social and financial impact in order to identify key management issues (materiality) to be handled by the Board of Directors.

#### Materiality identification process



In addition to the trend towards carbon neutrality, the business environment surrounding the TEPCO Group is changing greatly due to, for example, soaring fuel prices resulting from the global situation. We are analyzing various business environments in order to address these changes.

Significant business risks are analyzed/identified and discussed by the Risk Management Committee, while the same is done for significant opportunities by the Future Management Committee Committee. Furthermore, due to considerable social interest in ESG and sustainability, etc., issues that management should address are discussed by the ESG Committee. The details of discussions and assessments conducted by each committee are leveraged to identify risks and opportunities when performing significance assessments. Significance assessments of management issues are performed while focusing on social impact and financial impact.

The largest mission of the TEPCO Group is to fulfill our responsibilities to Fukushima, so the "responsibilities to Fukushima" category is considered to have a large social impact. Other management issues with the potential to have considerable social and financial impact are brought before the Board of Directors, which audits and supervises them.

#### FY2022 materiality

Through significance assessments, key management issues comprised of 18 categories were identified during FY2022, and specific goals were set for each. Furthermore, managers and executive officers were selected for each management issue, and the degree of achievement of each goal is used as a factor when determining remuneration.

FY2022 managem	nent categories	Status of FY2021 initiatives					
Examples of categories in key segments (Managed by the Board of Directors)	Example of key management issues (Managed by the executive Board)	Objectives	Achievements				
[Fukushima matters] Balancing recovery with decommissioning	Contribute to recovery in Fukushima through involvement in urban development and initiatives to eliminate harmful rumors	<ul> <li>Make measures for contributing to urban function and environment recovery/revitalization a reality</li> <li>Increase the quantity of products from Fukushima Prefecture that are bought and sold by merchants</li> <li>Steadily continue to provide compensation</li> </ul>	Goals on the left have been achieved	淤			
(Steady initiatives aimed at disposing of treated water)	Steady implementation of decommissioning/contaminated water countermeasures based on the mid/ long-term roadmap	<ul> <li>Reduce the amount of contaminated water being generated to less than 150m<sup>3</sup>/day</li> <li>Manufacture equipment for the trial removal of fuel debris from the first unit (Unit 2) and build mockups</li> <li>Composition of symbolic deals with local companies</li> </ul>	Goals on the left have been achieved	淤			
[Business foundation] Cultivating human resources and establishing a new corporate culture	Strategic development/deployment of human resources in order to maximize corporate value	<ul> <li>Implement key strategic measures based on an optimal overall viewpoint, and create resources for deployment to new spheres of business</li> </ul>	More personnel deployed than planned				
[Nuclear power business] Nuclear power/ nuclear fuel cycle (Thorough implementation of safety measures at the Kashiwazaki- Kariwa Nuclear Power Station)	Safety measures/reviews aimed at the recommencement of operation of the Kashiwazaki-Kariwa Nuclear Power Station	• Implement activities to foster understanding amongst community members about the Kashiwazaki-Kariwa Nuclear Power Station	Nuclear reforms promoted in light of the series of improprieties	- Andrew Contraction of the second se			
	Revise business portfolio in new spheres of business in order to increase corporate value	• Position each business in consideration of the future vision that the TEPCO Group aims to achieve in order to increase corporate value	Goals on the left have been achieved	×۲.			
[Increasing corporate value]	Making measures based on ESG strategy a reality	<ul> <li>Obtain the best ESG ranking for domestic power companies and formulate a decarbonization roadmap</li> </ul>	Goals on the left have been achieved				
Creating/enlarging value for customers in anticipation of a carbon neutral society (Promoting key businesses)	Increase the value of providing retail energy services	Achieve ordinary income goals	Ordinary income: - ¥66.4 billion	- Andrew Contraction of the second se			
(romoting key businesses)	Establish a global-leading business management foundation	<ul> <li>Build a future transmission/distribution network by optimizing power facility investment/cost (Formulate facility configuration plan)</li> </ul>	Goals on the left have been achieved				
	Turn renewable energies into primary power sources	<ul> <li>Move forward with preparations to win the bid for domestic offshore wind power contracts (bid on to ocean areas during the first public offering)</li> </ul>	Bid lost during first public offering	- Andrew Contraction of the second se			

# Strategies for creating value Stable supply

An increase in demand caused by unseasonably cold weather and record-breaking heat at the end of March and the end of June of this year, the shutdown of multiple power stations as a result of earthquakes, etc., and the arrival of power station regular inspection periods, caused a tight power supply-demand situation.

In order to combat these issues, the TEPCO Group came together to implement supply-side countermeasures while also implementing demand-side countermeasures in the form of asking customers for their cooperation in saving electricity, thereby enabling us to avoid power outages. To address the lack of supply power this winter, we made a public appeal to general transmission/distribution operators nationwide, including TEPCO Power Grid, for additional supply power thereby securing the necessary amount, and we have kept supply stable through coordination with the government and the Organization for Nationwide Coordination of Transmission Operators.

#### Energy-conservation effect (March 22 estimate)



#### Lifergy-conservation effect (kw)

Maximum: 3.5 GWh

### Causes of tight power supply-demand

End of March *March 22: Government issues tight supply- demand warning	<ul> <li>Multiple power stations in the Tohoku/Tokyo area shutdown on March 16 as a result of an earthquake that occurred off the coast of Fukushima Prefecture (Approximately 4.7GW)</li> <li>Heat demand greatly increased as a result of unseasonably cold weather</li> <li>Low solar power output caused by bad weather (generated power output was approximately 10% of the facility capacity)</li> <li>Some power stations were conducting regular inspections in preparation for an increase in power demand during the summer (July/August)</li> </ul>
End of June *June 27~30: Government issues tight supply- demand warning	<ul> <li>Large increase in cooling demand caused by a record number of extremely hot days (abnormal weather)</li> <li>Some power stations were conducting regular inspections in preparation for an increase in power demand during the summer (July/August)</li> </ul>

#### Main countermeasures implemented

TEPCO Power Grid	Additional supply power countermeasures activated Power received from other areas Customers in areas awaiting power were asked to conserve electricity
TEPCO Energy Partner	Demand response activated Customers asked to conserve electricity and to produce additional output with household generators
TEPCO Renewable Power	Accurate operation of pumped storage hydroelectric plants Output increased from hydroelectric power plants Power station repair arrangements made
JERA	Output increased from thermal power stations Off-line power stations (publicly call for power) brought back online Power station repair arrangements made

(Approximately 3% of the daily power volume for March 22)

31.4 GWh

### Electricity rate revisions in light of soaring fuel prices and initiatives to reduce the burden of rate hikes

Prices in the Japan Electric Power Exchange (JEPX) continue to soar in conjunction with the rising fuel prices caused by changes to this year's international situation. The situation has resulted in electricity rate hikes that are having a huge burden and impact on economic activities, society, and our customers. However, it is the mission of the TEPCO Group to provide a stable supply of electricity and stabilize rates even amidst this situation.

Currently, TEPCO Energy Partner is seeing an increase in consultations from customers that have not yet been signed, and the cost of procurement from JEPX is one factor choking revenues. In light of this situation, we have decided to revise electricity rate options for special high-voltage and high-voltage customers who are particularly impacted by the wholesale market price.

In addition to the conventional fuel cost adjustment system, the direction of these rate revisions shall be threefold: The new introduction of a mechanism for adjusting fluctuations in market price; standard contract option unit price revisions; and, the reflection of revisions to consigned rates in conjunction with the introduction of the consignment revenue cap system. Furthermore, in order to minimize the burden on our customers, assumed operation of nuclear power plants has been incorporated into our rate revision estimate. In light of the fact that we predict an increase in rates even after including nuclear power, we shall further develop energy-conservation and energy-saving initiatives as measures to further reduce the burden on our customers. In particular, in addition to offering demand response (DR) options for corporate clients and also our "Energy-Saving Challenge 2022" for household customers, we have added plans that will reduce the burden on our customers through energy-conservation and are developing similar programs. Furthermore, a unique service being offered by the TEPCO Group is assistance with air-conditioning cleaning and the purchase of equipment for managing power usage in order to continually increase the energy-saving effect for our customers. Furthermore, by further promoting measures to assist customers with the purchase of facilities that will help to achieve carbon neutrality, and getting society and our customers to experience the benefits of such practices, we will get through these tough times hand-in-hand with you.



#### Measures to reduce the burden on our customers ~Energy-conservation initiatives ~



### Strategies for creating value Carbon neutrality strategy



#### Carbon neutrality strategy

In April 2022, the TEPCO Group announced its plan for achieving carbon neutrality as a strategy for creating value as we look to achieving our vision. Since we became the first Japan energy company to support the TCFD recommendations in 2019, TEPCO has engaged in leading initiatives, such as creating a separate renewable energy company, etc., and we will continue to reform our business structure so as to balance stable supply with carbon neutrality while also enabling sustainable growth along with society.

#### 〈Grids〉

Coexistence of large-scale power sources and mass power transmission, and locally produced and locally consumed power sources **〈Supply**〉

Zero emission of electricity

### **Carbon neutrality declaration**

FY2030 objectives

(Social)

Electrification of energy demand

Reduce CO<sub>2</sub> emissions originating from the sale of power to 50% of FY2013 levels\*

2050 objectives

Reduce CO<sub>2</sub> emissions originating from the supply of energy to essentially zero

\* From Scope 1, 2 and 3 power sales. Scope 1 and 2 emissions will be reduced to FY2019 levels

#### Strategies for creating value | Carbon neutrality strategy Governance Risk management

#### Governance/risk management

The TEPCO Group regards the handling of ESG, including climate change risks and opportunities, as important business issues, and as such the Board of Directors has selected managers (ESG Managing Executives) to oversee these matters. The managing executive gives quarterly reports to the Board of Directors on the status of these issues, and the Board of Directors overseas climate change risks and opportunities by reviewing strategies, action plans, achievements and the progress with achieving goals. Furthermore, the ESG Committee, for which the President serves as Chairman, regularly discusses ESG-related issues and coordinates with the Future Management Committee and the Risk Management Committee. The Board of Directors engages in lively discussions about important topics.

#### Structure



#### Primary topics discussed by, and reported to, the Board of Directors (FY2021)

- Future direction of TEPCO's offshore wind power business
- The direction of initiatives aimed at achieving carbon neutrality by 2050
- The overall state of electrification and plans going forward
- The direction of 2050 carbon neutral strategies
- The direction of shifts in business structure in anticipation of a carbon neutral society

### The degree of achievement of ESG-related objectives is reflected in executive remuneration.

As we aim to promote ESG-based operation, KPI pertaining to non-financial ESG performance are included in indicators for the performance-related remuneration for executives involved, and as such, achievement level, such as the aforementioned KPI, etc., is considered when the Compensation Committee determines salary.

Remuneration type	Payment base	Indicators	Payout rate	
Base salary	The amount paid reflects the executive's title, whether or not they have representative rights, and the duties of their position	_	_	
Performance- related	A percentage is set based on the executive's title, whether or not they have representative rights, and the duties of their position.	Company performance (Company performance as stipulated in the business plan (consolidated ordinary income prior to deduction of special liabilities based upon the Nuclear Damage Compensation and Decommissioning Facilitation Corporation Act))	0~145%	
remuneration	The amount paid also reflects company performance and personal performance.	Personal performance (Cost reduction indicators for each department the executive is in charge of, and other KPI)* * KPI that indicates the personal performance of involved executives includes non-financial ESG performance		

TCFD Strategy

#### Scenario analysis (for the entirety of Japan)

TEPCO envisions two scenarios selected from multiple reference scenarios. In scenario 1 by which TEPCO aims for carbon neutrality in 2050, electrification on the demand-side, and the spread of distributed power sources, continues. As the use of solar power and storage batteries increases on the demand-side, it is expected that there will be an increase in household power generation/household consumption, and locallyproduced/locally-consumed power. This is effective for improving resiliency to disasters. However, there is the risk of mismatched demand and supply due to the large fluctuations in output from solar and wind power. In order to stabilize supply, it is extremely important that we match power sources used for baseloads (hydroelectric/nuclear/geothermal) with power sources for which the supply-demand balance can be adjusted (zero-emission thermal). In particular, the idea of "store and use," by which energy storage (storage batteries, hydrogen, etc.) is leveraged, is the key to stable supply.



	Reference Scenario	Scenario Analysis Results	Scenario Analysis Results
TEPCO Scenario1	IEA WEO NZE scenario Scenario created by TEPCO 6th Basic Energy Policy	<ul> <li>As regulations pertaining to climate change become stricter all over the world, technical innovation will occur and spread thereby greatly reducing CO<sub>2</sub>.</li> <li>The use of fossil fuels will be strictly limited as countermeasures are not implemented in various fields.</li> <li>Temperature rise is kept within the range of approximately 1.5 ~2° C, and natural disasters, such as typhoons, etc., become fiercer, but on a limited scale.</li> </ul>	<ul> <li>The technological development of hydrogen/ammonia, etc. accelerates and a certain number of thermal power stations that leverage these technologies remain in operation.</li> <li>The use of offshore wind power increases, but operation of a certain number of nuclear power stations is required.</li> <li>Highly cost-effective energy/conservation/electrification progresses demandside electrification and the spread of distributed power sources progresses (solar power spreads as a package with storage batteries)</li> </ul>
TEPCO Scenario2	IEA WEO CPS	<ul> <li>Legal regulations pertaining to climate change become stronger in advanced nations only, and innovation, if it occurs, does not spread due to economic incompatibility thereby resulting in slow progress with CO<sub>2</sub> reductions.</li> <li>The global economy, and developing nations in particular, is still dependent to a certain extent on fossil fuels in 2050.</li> <li>Temperature rises approximately 4° C leading to fiercer natural disasters caused by typhoons, etc.</li> </ul>	<ul> <li>Even though distributed power sources spread, since there are no technical substitute measures, and a certain number of thermal power stations remain in operation.</li> <li>Even if cost-effective energy-conservation/electrification progresses with existing technology, most of the energy systems will still be dependent upon fossil fuels.</li> </ul>
## Strategies for creating value | Carbon neutrality strategy

## TCFD Strategy

## **Energy flow**

There are many paths to creating a carbon neutral society by 2050. One of the paths being examined by the TEPCO Group is to shift from a model where fossil fuels are changed into heat and electricity and used for energy, to a model where CO<sub>2</sub>-free electricity generated domestically using renewable energies and nuclear power, etc., and hydrogen/ammonia, are primarily used.

## How energy is used (currently)



## How energy will be used (2050)



## **Power composition**

The number of thermal power stations for which hydrogen/ammonia countermeasures cannot be implemented will gradually decrease, and ultimately be replaced by non-fossil fuel power sources, such as zero-emission thermal, renewable energies and nuclear power, etc.

## Trends in the amount of generated power



## The cost of carbon neutrality measures

Many measures must be implemented in order to create a carbon neutral society, but it cannot be created through initiatives unjust of the supply/ materials-side. Initiatives on the demand-side are also imperative. The electrification of demand (household/commercial/transportation) is especially cost-effective. Since it will take time to make facilities that have been used for many years carbon-neutral, is necessary to implement measures where currently possible, and in that respect, accelerating the electrification of the demand-side is most effective.

## Carbon neutrality-related investment

We estimate that by 2030 and 2050, approximately ¥20 trillion and anywhere from ¥80~100 trillion, respectively, of energy-related investment will be necessary as we aim to create a carbon neutral society. This investment will focus on non-fossil fuel power sources and be directed at locally-produced/locally-consumed power sources, such as solar and storage batteries, as well as power grids.

TCFD Strategy



## 2050 carbon neutrality cost curve



TCFD Strategy

Scenario	Envisioned risks/opportunities		Envisioned details Possibility Degre		Degree of impact	Financial impact on TEPCO (estimated)	Response strategies
		【Risk】 Policy and Legal	<ul> <li>Increase in costs caused by energy policy revisions and the strengthening of regulations pertaining to global warming</li> </ul>	Possible	Extremely large	<ul> <li>If the procurement ratio of non-fossil fuel power sources needs to be increased by 1% due to stronger regulations on retail operators, costs will increase by approximately ¥1.2 billion</li> </ul>	<ul> <li>Recommence of operation of nuclear power stations</li> <li>Develop renewable energy sources</li> <li>Apply internal carbon pricing</li> </ul>
		【Risk】 Technology	<ul> <li>In conjunction with the large-scale increase in the use of renewable energies, power quality will decline as output fluctuates due to poor weather and consistent frequency cannot be maintained, etc., thereby hindering stable supply.</li> <li>The development/introduction of storage battery technology does not proceed, power supply is hindered and consignment revenue decreases.</li> </ul>	Possible	Large	<ul> <li>If the large-scale increase in the use of renewable energies does lead to a hindrance of power supply, power supply volume will decrease and revenue will decrease (net profit from consignment supply in FY2021 was ¥70.9 billion)</li> </ul>	<ul> <li>Pumped storage power generation, Demand response, Storage batteries, Use of zero-emission thermal, Recommencement of operation of nuclear power stations</li> </ul>
		【Risk】 Market/Service	• Conventional power sales business models will see decreases in revenue due to the market need for an increase in distributed power sources and CO <sub>2</sub> -free electricity	Very likely	Extremely large	<ul> <li>If power demand decreases by 1%, electricity fee revenue would decrease by approximately ¥33.1 billion</li> </ul>	Business shift to facility services     business
		【Risk】 Market/Service	<ul> <li>The increasing demand for carbon neutrality leads to a stagnation of investment in the upstream development of fossil fuels, and insufficient development, thereby resulting in a lack of fossil fuel supply that will cause prices to soar.</li> </ul>	Very likely	Extremely large	<ul> <li>Revenue worsens as a result of soaring natural resource prices (in FY2021, TEPCO Energy Partner saw a decrease in revenue of approximately ¥24 billion)</li> </ul>	<ul> <li>Put together highly competitive power portfolio</li> </ul>
TEPCO scenario 1	Transition	[Risk] Reputation	<ul> <li>The company gets a reputation for being passive when it comes to climate change countermeasures due to the large percentage of power procured from thermal power stations</li> </ul>	Possible	Small	<ul> <li>Capital procurement costs increase as a result of the poor reputation</li> <li>In order to restore the company's reputation, a switch is made to procuring power sources that are not economically feasible, thereby worsening revenues (if 100 GWh of power from thermal power stations is replaced with renewable energies, it will have an impact of approximately ¥400 million*1)</li> </ul>	Disclose more information related to climate
		【Opportunity】 Resource efficiency	<ul> <li>Electric vehicles become prolific due to the increasing demand for carbon neutrality</li> <li>Storage batteries become prolific in conjunction with the use of large amounts of renewable energies</li> </ul>	Very likely	Medium	<ul> <li>Power demand increases in conjunction with the electrification of vehicles, and the increase in the demand for EV-related businesses/storage battery businesses, etc. contributes to the creation of annual profits of ¥150 billion from 2030 onward*<sup>2</sup></li> </ul>	• Expand EV-related businesses and storage battery-related businesses
		【Opportunities】 Energy source	•Recommencing operation of nuclear power stations and expanding the company's renewable energies business will reduce the amount of power procured from the thermal power stations of other companies, which is costly, thereby reducing costs Medium Extremely large	Possible	Extremely large	<ul> <li>The recommencement of operation of one nuclear power reactor will have a positive impact on annual revenue of approximately ¥110 billion</li> <li>Net profit forecasts from renewable energy power generation business is on the order of ¥100 billion annually</li> </ul>	<ul> <li>Recommence operation of nuclear power stations</li> <li>Develop renewable energy sources</li> </ul>
		【Opportunities】 Products and Service	<ul> <li>Increasing demand for carbon neutrality promotes electrification thereby having an impact on electric fee revenue and consignment revenue</li> <li>Changes in the behavior of consumers caused by an increase in demand for CO<sub>2</sub>-free electricity Medium Large</li> </ul>	Possible	Large	<ul> <li>If power demand increases 1%, electricity fee revenue will increase by approximately ¥33.1 billion</li> <li>Increase in CO<sub>2</sub>-zero contract option sales</li> </ul>	<ul> <li>Expand electricity fee options</li> <li>Develop and procure renewable energy sources</li> </ul>
			【Opportunities】 Market	<ul> <li>Increasing demand for carbon neutrality in developing nations will drive TEPCO's overseas business</li> <li>Increasing need for sustainable finance</li> </ul>	Very likely	Medium	<ul> <li>Sales from overseas business shall increase thereby creating annual profits of ¥150 billion from 2030 onward*<sup>2</sup></li> <li>Capital procurement choices will increase through the issuance of green bonds (amount of green bonds issued in FY2021: approximately ¥40 billion)</li> </ul>
TEPCO scenario 2	Physical	【Risk】 Acute	· Damage to power facilities by fiercer natural disasters	Possible ~Very likely	Extremely large	<ul> <li>Approximately ¥20.8 billion of special loss shall be incurred if the impact is approximately the same as the typhoon in FY2019 (no appropriation of special loss from natural disasters in FY2020 onward)</li> </ul>	<ul> <li>Raise facility bank heights, install tide wall plates, waterproof power facilities, etc.</li> <li>Appropriate disaster loss reserves</li> <li>Purchase damage insurance</li> </ul>
		【Risk】 Chronic	Fluctuations in rainfall/snowfall impacts hydroelectric power plant     operation	Possible	Large	<ul> <li>Costs will increase by approximately ¥700 million*1 if 100 GWh of hydroelectric power is replaced with thermal power</li> </ul>	<ul> <li>Optimal operation through highly accurate weather/flow forecasts</li> </ul>
			【Opportunity】 Resilience	Further increase in demand for preparedness due to fiercer natural disasters	Very likely	Medium	<ul> <li>Increase in revenue from urban development that addresses preparedness needs</li> </ul>

## The primary financial impacts of risk/opportunity on the TEPCO Group, and strategies for addressing such impact

\*1 Estimate based on power generation unit cost by the Power Generation Costs Review Working Group \*2 Create annual profits of ¥150 billion from 2030 onward in the four new key areas of business of renewable energies, mobility electrification, data/communications, and overseas

## TCFDIEST Strategy TCFDIEST Metrics and Targets

## Internal carbon pricing

TEPCO will leverage internal carbon pricing, which takes into account the impact of future carbon costs, when making decisions about investment/procurement, etc., as necessary while referring to domestic and international carbon prices.

		(¥/t		
		Short-term		Mid/long-term
		Domestic	Overseas	Advanced nations
L Cradit	Renewable energy	3,278	—	—
J-Credit	Energy conservation	1,607	_	-
FIT non-fossil fuel certificate		700*1	_	-
Global warming countermeasure tax		289	_	-
EU-ETS		—	70 EUR*2	-
IEA WEO		—	—	130 USD*3

\*1 Converted using the lowest price, 0.433kg-CO<sub>2</sub>/kWh \*2 Emissions rights futures trading (as of September 30, 2022) \*3 World Energy Outlook 2021 Net Zero Emissions by 2050シナリオ

## **Climate-related assets**

The TEPCO Group has transferred its fuel/thermal power business to JERA Co., Inc., a joint venture with Chubu Electric Power Company, with the exception of internal combustion power facilities on islands. Thermal power facilities directly exposed to transition risks are limited.

### Main assets

()/(+ CO)

	Company	Book value (millions JPY)	Transition Risks	Physical risks	Opportunity
Nuclear power plant (1 location, 8.2 GW)	Holdings	952,666		0	$\bigcirc$
Hydro power plant (163 locations, 9.8 GW)	Renewable power	361,810		0	$\bigcirc$
Hydro power plant (77 locations, 190 MW)	Tokyo Electric Power Co.	18,591		$\bigcirc$	$\bigcirc$
New energy power plant (5 locations, 50 MW)	Renewable power	4,628		$\bigcirc$	$\bigcirc$
Internal combustion power plant (10 locations, 58 MW)	Power grids	7,916	$\bigcirc$	$\bigcirc$	
Transmission facility power grid	Power grids	1,247,495	$\bigcirc$	$\bigcirc$	$\bigcirc$
Substation facility power grid	Power grids	486,684	$\bigcirc$	$\bigcirc$	$\bigcirc$
Distribution equipment	Power grids	2,045,832	0	0	0

\*Power generation capacity is rounded off. The book value is for buildings, machinery, etc.

TCFDEE Strategy

## Resilience of the organization's strategy

We predict that in the future we shall shift from our current system of large-scale power sources/large-scale transmission, to a society in which power is locallyproduced and locally-consumed through household power generation/household consumption, for example. Regardless of the scenario, "vast and in-depth technical prowess and knowledge pertaining to energy with a focus on power," which is the TEPCO Group's strength, will be indispensable.

In light of this situation, the TEPCO Group will engage in initiatives to use hydroelectric, nuclear and geothermal as baseload power sources, and develop renewable energies, such as offshore wind. Furthermore, in order to promote the "store and use" system by which power is locally-produced and locally-consumed, we will dramatically shift the focus of our business model from the sale of electricity (kilowatt hours) to facility services that are closely connected to our customers. In conjunction with this, we will collect the energy resources produced by the facilities owned by our customers, and develop our aggregation business that can meet various needs, such as supply-demand adjustment and environment price trading, etc. Furthermore, we shall expand these new businesses on the scale of entire communities. When implementing business model reforms, we shall form alliances upon focusing on the national expansion of our facility services/aggregation businesses. Going forward, we shall deliberate business structure reforms without leaving out the possibility of group reorganization, which may include reorganizing our current business structure.



individuals, corporations and

local governments.

## **Strategies for creating value** | Carbon neutrality strategy

The Oze National Park in the background is one of Japan's special natural monuments and a registered wetland under the Ramsar Convention. For approximately 60 years the TEPCO Group has been involved in activities to conserve the natural environment (See page 59).

TCFD

TCFD Strategy

Pioneered household demand: 9.7 TWh

FY2030 10 TWh (corporate clients)

FY2025 15,000 units

FY2030 100% (EV100)

Metrics and Targets

## **Transition Plan**

In the future, the role that electricity supplied using CO<sub>2</sub>-free energy plays will grow. In order to turn this opportunity into increased revenue, the TEPCO Group is shifting to a business model that revolves around carbon neutrality. As we aim for our midterm goal of "cutting half of carbon by 2030," we also aim to invest approximately ¥9 trillion in carbon neutrality under the assumption that we will form alliances. We will then steadily reduce CO<sub>2</sub> emissions while growing our business by leveraging the strengths of "electricity" in the various fields of society, grids and supply as we create profits on the order of ¥450 billion as stipulated in the 4th Comprehensive Special Business Plan. The TEPCO Group will utilize all of its resources to contribute to the creation of a carbon neutral society by 2050.

Standards

 $CO_2$ 139.2 million tons

### FY2021 greenhouse gas emissions (10,000's tons)

Scope1	Scope2	Scope3
20	613	10,214

The targets of FY2030 CO2 reduction goals are Scope 1, 2 and 3 emissions that originate from the sale of power

### Green finance (FY2021)

Green innovation fund	Green bonds*4
Five years/¥10 billion	3-year bonds: ¥30 bil
(hydrogen projects)	5-year bonds: ¥10 bil

ion

lion

\*4 Other, Third bond issuance in September 2022 (procured capital: ¥29.9 billion)

#### Promoting electrification Society CO<sub>2</sub>-free contract options Spread of EV fast chargers Electric vehicles used for all company vehicles



Optimize/expand distributed resources/grid use

Use renewable energies as primary power sources Supply Leverage nuclear power generation Leverage highly efficient thermal power, which includes JERA

\*1 Around 1 GW/year (Federation of Electric Power Companies estimate) \*2 Annual CO2 reduction amount if thermal power heat efficiency is increased by 1%

CO<sub>2</sub> reductions: 2 million tons \*2

## Progress\*3

43% reduction in CO<sub>2</sub> 80 million tons

## Investment in carbon neutrality by FY2030



\*3 preliminary figures.

Goal 50% reduction in CO<sub>2</sub> 69.6 million tons

GLOOI

2050

N AN FR

CO<sub>2</sub> reductions: 2.5 million tons, Revenue improvement affect: Approximately ¥110 billion annually

CO2 reductions: 600,000 ~800,000 tons\*1, FY 2030: 6 ~7 million kW (Net profit: Approx. ¥100 billion annually)

2030

formed

Governance

## JERA's CO<sub>2</sub> reduction initiatives

JERA Co., Inc. (equity method affiliated company) is an important supply chain when it comes to achieving the TEPCO Group's carbon neutrality declaration. Even as the global demand for carbon neutrality increases, as a shareholder, the TEPCO Group will provide appropriate assistance and supervision to enable JERA to continually increase corporate value through the steady implementation of plans to abolish the use of a non-fossil fuel thermal power and introduce hydrogen/ammonia as put forth in its "JERA Zero-Emissions 2050" initiative.





This roadmap will be gradually developed in greater detail based on relevant conditions such as government policies. JERA will revise the roadmap when relevant conditions change significantly. \*The use of CO2 -free LNG is also being considered.

## Signal Section Section 2030 JERA environmental commitment 2030

JERA is proactively engaged in reducing  $CO_2$  emissions. It will achieve the following goals by FY2030 through domestic initiatives.

- Shut down all inefficient coal-thermal power stations (below super critical) and proceed with ammonia co-firing demonstrations at highly efficient power stations (Ultra Super Critical).
- Promote the development of renewable energies with a focus on offshore wind power and strive to further improve the efficiency of LNG thermal power stations.
- Reduce the discharge rate from thermal power stations throughout the nation by 20% based upon the government's long-term energy supply-demand forecast for FY2030

## JERA environmental commitment 2035

Through the following initiatives JERA aims to reduce  $CO_2$  emissions from domestic activities by more than 60% of FY2013 levels by FY2035.

- JERA will strive to develop/introduce renewable energies in Japan under the assumption that there is an increased use of renewable energies in accordance with the government's "carbon neutral by 2050" plan.
- ▶ JERA will promote the co-firing of hydrogen and ammonia, and strive to reduce the discharge rate of thermal power stations.

JERA Zero-Emission 2050 Japanese Roadmap and the JERA Environmental Commitments assume a business environment in which there is steady development of economical decarbonization technologies, and the goals of these initiatives fit with government policy.

## Strategies for creating value

## **Urban development by the TEPCO Group**



## New creation of an Area Energy Innovation Office

In order to accelerate the TEPCO Group's businesses and increase revenue, we newly established an Area Energy Innovation Office (AEI Office) as a department for promoting "businesses that enable a comfortable life living through urban development that is carbon neutral and resilient to disasters." Going forward, we will transcend the scope of household and corporate clients, and provide services that enable a comfortable life living, such as preparedness/crime prevention services, and focus on energy services that include everything from the purchase to the long-term operation of electrification equipment/ utility equipment, to entire communities and society. By strengthening cooperation with many companies and business partners, we shall provide new value to society and our community.



## Momoko Nagasaki

Tokyo Electric Power Company Holdings, Inc. Managing Executive Officer, Chief Marketing Officer, ESG Officer Chief Spokesperson/Area Energy Innovation Office General Manager

Momotes Magesati



# The AEI Office will be the TEPCO Group's focal point for co-creating new value with society and the community.

Through each of the TEPCO Group's strengths and products, the Area Energy Innovation Office will be a one-stop shop for providing total solutions to provide new value to our customers through co-creation (service development/alliances) and engineering.



## "Next-generation community development" based on carbon neutrality and disaster prevention

We will implement independent and dispersed energy systems that maximize the use of local renewable energy, in collaboration with local businesses and local governments, and work to enhance area value by strengthening carbon neutrality and disaster prevention performance of the entire region.



## "Next-generation community development" based on carbon neutrality and disaster prevention

#### Providing energy to entire regions through Example 1 urban re-development

To date, the TEPCO Group has built energy supply systems that meet the needs of the times, and has achieved much success. The Group will continue to work together to provide the latest technologies based on its achievements with supplying energy to important areas in Tokyo, and shall deliver "urban development" that is carbon neutral and resilient to disasters to society with technical prowess proven through success.

## Examples of urban development engaged in by TEPCO





Uchisaiwaicho 1-Chome District Development Project

#### Carbon neutrality and preparedness-based Example 2 services for detached housing

Nomura Real Estate has leveraged the TEPCO Group's solar power PPA service<sup>\*1</sup> "Enekari Plus<sup>\*2</sup>" to equip its "PROUD SEASON" detached housings in the Tokyo Metropolitan area with solar power equipment on par with mega solar (total output: 1000 kW). Both companies are promoting the use of this service in the metropolitan area, where fallow land is scarce, as an initiative to "locally-produce/locally-consume power" in effort to conserve and make energy.

## Contributing with our customers to the creation of a carbon neutral society through virtual mega solar



Solar power generation equipment can be used at no initial cost or monthly expenses

- \*1 Purchase Power Agreement abbreviation. Customers provide land or roof space to PPA operators who in turn install, operate and maintain solar power systems.
- \*2 Fixed-rate equipment usage service offered by TEPCO Energy Partner by which solar power equipment, which is installed free of charge, can be used by the customer who pays a fixed monthly fee.

# **Example 3** Using household IoT equipment for demonstration experiments aimed at creating preparedness/disaster mitigation services

In the Adachi District of Tokyo, we are engaged in Japan's first demonstration experiment that involves using power data to detect the signs of electrical fires in homes and transmit preparedness data.

We are examining if power sensor-equipped "household IoT equipment" installed in distribution panels can be used to detect signs of "tracking," which is a cause of electrical fires, and then identify and remove the cause thereby preventing electrical fires before they happen.

We will also examine if we can use household IoT equipment as a data hub for transmitting preparedness data from local governments, and the effect/ convenience of functions that enable residents to transmit information on their own safety situation to fire departments and local governments in the event of troubles.

### Sensor x Urban development x Preparedness



# Example 4 Unified management of electric buses and regional energy

With this project we are developing an electric bus energy management system (by CMS) by combining Michinori Holdings' bus operation management system with the TEPCO Group's energy supply-demand adjustment management system. We aim to promote electrification by reducing the lifecycle costs of electric buses and create a mechanism for balancing regional carbon neutrality with stronger resilience in the areas where the buses operate.



## **Example 5** Project for developing regions that will be first to decarbonize

The city of Saitama, Saitama University, Shibaura Institute of Technology and the TEPCO Group have submitted a joint application to participate in the Ministry of the Environment's project for the development of regions to lead the way in decarbonization (first term), and the application was approved in April 2022. Various large power users, such as all public facilities, to universities, commercial facilities and model homes in the Urawa Misono District, etc., will install solar power generation equipment on their facilities in an effort to coordinate with operators to maximize the efficiency of grids by managing supply-demand through energy management

systems (EMS). We aim to decarbonize the public, private, and academic sectors by leveraging various renewable energies, such as power generation from trash, floating solar power in urban and rural areas, and post-FIT power, etc. We also aim for the largescale enlargement of renewable energy-based shared multi-mobility services (miniature EV, EV scooters, battery stations, etc.). The TEPCO Group will strengthen regional resilience and improve the quality of life by building urban energy models that match regional attributes as we contribute to the creation of a carbon neutral society.



## Strategies for creating value

## **Restructuring our business portfolio**



## Aiming to increase the value of the TEPCO Group

As noted in the 4th Comprehensive Special Business Plan, the TEPCO Group is restructuring its business portfolio so as to provide value based on carbon neutrality and preparedness, and improve capital efficiency. As Chief Innovation Officer, I will create a business portfolio based upon business assessments of businesses outside of the electricity industry that are optimal for all companies, meticulously design our businesses, and build business structures while also making maximum use of the Group's resources in order to maximize corporate value.

Furthermore, I will be responsible for creating profits in new spheres of business while taking into consideration alliances with other companies if needed as we aim to turn ¥450 billion of profits as put forth in the 4th Comprehensive Special Business Plan, and promote the selection/merging of existing businesses while also exploring and commercializing new businesses.

## Chikara Kojima

Tokyo Electric Power Company Holdings, Inc. Executive Vice President Chief Innovation Officer

4 Lili



# Strategies for creating value New business strategies

The 4th Comprehensive Special Business Plan objective of creating ¥450 billion in profits annually cannot be achieved with our current business. We need to make those additional profits through new businesses.

In anticipation of a carbon neutral society, the TEPCO Group is selecting and concentrating businesses outside of the electric industry, as well as exploring/commercializing new businesses. Through these initiatives we shall build a business portfolio with high capital efficiency as we aim to achieve our goals.



# Strategies for creating value Human capital

## We are accelerating investment in human capital connected to our business strategies.

As the external environment greatly changes due to climate change issues and soaring fuel prices, etc., the TEPCO Group shall continue to utilize all of its resources to strengthen its business foundation and implement business structure reforms in order to achieve carbon neutrality as we aim to fulfill our corporate philosophy and achieve the objectives of the 4th Comprehensive Special Business Plan. We see "people" as an indispensable asset that drives the company and enables it to continuously grow, so we are proactively investing in human capital. In particular, we have selected four priorities as strategies for managing human assets connected with our business strategies and are engaging in key measures for each while considering global standards, such as ISO30414. Through the implementation of these key measures, each and every employee will gain autonomy, passion, and diversity as we push them to grow into professionals that embody the values of our corporate philosophy and can compete on the world stage. We will create an open and unified group of professionals with these employees that feel pride and motivation when it comes to their jobs, and utilize the synergy born from co-creation to provide each and every customer with value that exceeds their expectations, and continue to provide a never-ending "stable supply of power," which is the most important mission of the TEPCO Group.



Mitsushi Saiki Tokyo Electric Power Company Holdings, Inc. Executive Vice President (CHRO)

Mitsushi Saiki

**OUTPUT · OUTCOME** 

## Human asset management strategies

INPUT



\*1 Ambidextrous management: Selection/further development of existing businesses and the enlargement of new businesses \*2 Checked through employee awareness survey (weighted average on a five-step scale from -2-2)

Priority issues 1

## Priority issues 1 Human asset strategies for accelerating "ambidextrous operation"

In order to accelerate "ambidextrous management," we have formulated mid/long-term goals to improve the quality and quantity of human assets required to achieve our business strategies. Through personnel initiatives, such as employment, training and deployment, etc., we shall steadily secure strategic human assets and proactively provide opportunities for employees to challenge themselves while also creating an environment that enables them to grow independently and improve their performance.

## Developing training programs for multitrack human assets

Whether the goal is to become a business leader, a business creator, a power professional, a DX professional, or a global player, we are developing training and education programs that fit the qualities and goals of each and every employee while providing opportunities for them to become self-aware and challenge themselves by applying for different positions within the company.

### **Cultivating business leaders**

In order to stably and continuously produce business leaders that "have a head for business," we have established a Strategic Human Asset Training Committee and are developing a training cycle in which upper management



## Cultivating human assets that can create business

We are searching internally for human assets, regardless of age, that can create business. We search for these assets through basic education programs and post recruitment notices an effort to actually deploy these human assets to business creation-related departments.



## Developing training programs for multitrack human assets Cultivating power professionals

Upon gradually clarifying required technical knowledge and skills and the criteria for determining such knowledge and skills, we are using primarily OJT in conjunction with Off-JT (training and a kaizen education, etc.) for multi-skill development while cultivating power professionals that can maintain stable supply, improve safety/quality/efficiency and pass down technical knowledge and skills on the front lines in the field.

## Current position technical knowledge/skills certification system

	Technical knowledge/skill criteria	Number of people certified
Class S	Can provide recommendations within and outside the company, pass down technical knowledge/skill and cultivate human assets to ensure safety, and improve quality/efficiency.	647
Class A	Can handle advanced practical tasks and detect/respond to abnormal situations.	11,387
Class B	Can complete normal tasks pursuant to current position.	2,292
Class C	Can complete rudimentary tasks pursuant to current position	1,437

Substation facility status checks

\*As of March 31, 2022. Certified employees from amongst registered employees

## Promoting multi-skill development

(multi-skill development that transcends various jobs)

Distribution maintenance human assets Initial response to transmission/ communication equipment accidents and troubles

Duty reorganization and re-skilling

## Utilizing talent management to put the right people in the right jobs and secure human assets

By using a database to manage all human asset information, such as employee abilities and experience, etc., we are engaging in initiatives to "put the right people in the right jobs" and match tasks with certain human assets. Through coordination with various multi-track human asset education programs, we are expanding and leveraging human asset data needed to unearth and train human assets. Furthermore, we are proactively employing battle-ready human assets from outside the company in cases where the required human assets either do not exist, or are lacking, inside the company.

## Creating and leveraging a talent management foundation

By concentrating human asset information in a database and depersonalizing human asset requirements needed according to job descriptions, we are improving the quality with which we can match the right people with the right jobs.



## Priority issues 2 Diversity & Inclusion

We believe that a work environment in which each and every employee can work to their potential, and flexibly provide new value to customers that exceeds their expectations through cooperation with colleagues that have different insights, skills and experience, is the foundation of a company group that continues to be trusted and chosen to create a safe and sustainable society; and to that end we are promoting diversity and inclusion initiatives.

## Approach/roadmap

Raising Next-Generation Children

We aim for diversity and inclusion that respects all personalities by engaging in the cycle of acquiring human assets in a manner that enables diverse human assets to come together, cultivating a business climate that enables diverse human assets to actively participate, and creating value through the chemical reaction that diverse human assets generate; and to that end we are focusing on developing measures aimed at securing diversity.



## Promoting the active participation of women

In 2008, we launched full-scale initiatives to promote the active participation of women in the workforce. At the time, only 1.2% of management positions were held by women, but as of the end of FY2021 this had risen to 5.8%. Furthermore, in 2013 we saw the birth of the first female director, and as of the end of FY2021 the number of female directors had risen to eight\*.

By proactively training and hiring women we are enlarging the pool of next-generation female leaders. The leadership that women can provide through their experience and

sensitivity as females is a driving force behind the TEPCO Group's growth, and we will continue to create an environment that enables women to work to their potential.

	HD	EP	PG	RP	全体
Percentage of female managers	5.4%	11.7%	5.1%	2.9%	5.8%
Percentage of female employees	11.3%	28.9%	11.7%	5.9%	13.1%
Percentage of females hired right out of college	10.7%	38.9%	16.4%	10.3%	16.5%

\*Total for the TEPCO HD and core companies

## Promoting the participation of men in housework and child rearing

We aim to create a work environment in which both men and women can balance their jobs with child rearing without having the burden of housework and child rearing fall disproportionately on women. Through our initiatives to promote the participation in housework and child rearing, we hope to cultivate understanding amongst colleagues about individual work style reforms and balancing work with child rearing.



## Support for balancing careers with life events

In order to enable all employees to grow through their work regardless of life events, etc., we are developing our system for providing assistance to help employees to balance work with their private lives so that they can reach their potential, as well as support for employees that are challenging themselves in new careers.

## Developing our system for providing assistance to help employees balance work with their private life

We have implemented various measures and systems, such as our work from home system and flex time system, etc., to enable our employees to work flexibly in accordance with their situation, such as when they go through various life events like childbirth.



We are cultivating awareness, providing assistance for choosing career paths, and cultivating leaders so as to enable each and every person to continue to be motivated and grow to their potential regardless of gender. During the Covid-19 pandemic we have continued to provide support for developing skills, such as providing online training.

- · Career design training
- · Career consulting
- · Mindset seminar
- · Logical thinking training
- Management skill improvement training Other training is also offered for selected participants

Challenging themselves in new careers

## Initiatives to promote the active participation of diverse human assets

We understand that when it comes to gender, race, age, sexual orientation, sexual expression and work style, each and every individual is different, and we are promoting the creation of an environment in which all of our differences are respected.



## Diversity training for managers and surveys

We have implemented training and taken surveys with the knowledge that improving the understanding of managers is important for promoting diversity and inclusion. Based on the assessment of third parties, we are promoting initiatives for managers in order to cultivate understanding and support throughout the office that is based on correct knowledge.

## VOICE (Comment from ewoman, Inc.)

Standard deviation exceeds 50 overall for both diversity-related basic knowledge and company climate, which is a good score, and we can see that sincere efforts are being taken in regards to diversity measures. However, issues were found, such as the relatively low assessment of inclusion (Is there a mechanism, or is the environment prone to, incorporating various opinions?) from women during the attribute-based comparison. Going forward, managers that were the subject of this survey should promote "self-involvement in diversity management" by which individuals act to promote diversity in their own departments, in order to accelerate initiatives to address apparent issues.



## iority issues 3 TEPCO Work Innovation

In order to enable a new work style by which employees are healthy in both body and mind, and co-creativity and employee autonomy is promoted, we are promoting the creation of an environment that enables "anyone to work anywhere at any time" comfortably. We are integrally engaged in work style reforms, such as promoting remote-work and introducing in-house systems to support working from home, etc., as well as work reforms that utilize kaizen/DX. Going forward, we will continue to engage in initiatives to improve the flexibility of work styles, such as abolishing the core-time element of the flex time system, and transferring employees in a manner that does not force them to live away from home. Furthermore, since communication will become more important as work styles become more flexible, we are urging supervisors to take the lead in one-on-one meetings in order to engage in detailed dialogue. In order to drive these initiatives, we are developing management education and creating opportunities for dialogue in order to help each and every individual to grow and improve energy in the workplace.

## Promoting remote work





## TWI-related performance

Degree to which work style reforms are being felt		0.61 (YoY +0.13) points	
Degree to which kaizen activities are being promoted		0.85 (YoY +0.08) points	
	Diversification of workplaces	Home/satellite office/shared office	
	Allowances	Remote work support allowance ¥300/day (when working from home)	
Remote	Daily average number of people that work remotely	5,050 people	
WORK	Daily average percentage of people that work from home	19.6% (HQ: 43.7% Front lines: 10.9%)* *Number of people/percentage that worked remotely at least once during the fiscal year Number of people that worked remotely: 23,177, Percentage of employees that worked remotely at least once: 90.0%	

Note) Actual figures are from FY2021. Degree to which reforms, etc. are felt was confirmed through an employee awareness survey (weighted average based on a five-step scale from -2-2)

## ority issues 4 Employee engagement

We believe it is extremely important to improve the quality/quantity of human assets as well as employee engagement through human asset management strategies, and have set engagement indicators for each employee's "level of motivation," "sense of growth," and "work-life balance" that are measured through employee awareness surveys distributed to all employees. By improving engagement, we believe employees will be able to balance their work life with their private life while performing to the best of their ability, so we measure employee "happiness level" as an important indicator. Results of employee engagement surveys are used as input for upper management via the Corporate Ethics Committee, etc., and also reviewed by external experts to get their advice in regards to deliberating/implementing company-wide measures. Furthermore, feedback is quickly given to each department so that they can independently implement measures that will improve engagement based on the department's strengths and weaknesses.

## Employee engagement survey results



Happiness level score: Weighted average on an 11-step scale from 0~10

# Strategies for creating value Stakeholder engagement

The TEPCO Group aims to be a corporate group that meets the expectations of, and is trusted and continually chosen by, not only customers that use our services, but also everyone involved with the TEPCO Group, such as regional residents, shareholders/ investors, business partners, and employees, etc., through repeated dialogue with these parties. Upon this foundation we shall fulfill our responsibilities to Fukushima, increase corporate value, and contribute to the creation of a sustainable society.

[From the TEPCO Group's charter of corporate code]



Picture of a communication booth set up to explain the safety measures at the Kashiwazaki-Kariwa Nuclear Power Station, and listen to the frank opinions and impressions of visitors. (Set up at various locations in Niigata Prefecture)



## Strategies for creating value **Efforts to Respect Human Rights**

## **TEPCO Group efforts to Respect Human Rights**

The Tokyo Electric Power Company Group ("TEPCO Group") has established and announced its TEPCO Group Human Rights Policy in August 2021, aiming to elevate its previous human rights efforts to a global level and contribute to protecting/promoting human rights across society as a whole, including the international community. We aspire to become a corporate group that continues to be trusted and chosen by society and customers, and respect human rights as the basis of our operation.

**TEPCO Group website** efforts to Respect Human Rights page

https://www.tepco.co.jp/en/hd/ about/esg/social/hrights-e.html



## Governance Structure of Respect for Human Rights

With the establishment of the Policy, we reorganized our Human Rights Awareness Committee, the primary goal of which has been to resolve/prevent issues such as discrimination, and accordingly set up the TEPCO Holdings Human Rights Committee ("HD Human Rights Committee") in February 2022. As a general rule, the HD Human Rights Committee meets twice a year to engage in such activities as reviewing efforts from the previous fiscal year, deliberating plans for the current fiscal year, and monitoring the human rights due diligence action plan. The Committee also shares specific cases submitted to human rights grievance mechanisms, and discusses and recommends remedial measures. Items reviewed/decided upon by the HD Human Rights Committee are reported to the executive committee, and other bodies, if necessary. When considering solutions for and remedying specific cases confirmed by the Committee, and when practicing recurrence prevention measures, we coordinate with internal committees as well as core companies responsible for corporate ethics and risk management. We also take action by coordinating with external experts (e.g., attorneys) and labor unions if necessary. Here are the details on recent HD Human Rights Committee sessions.

Example of relief mechanisms · Person seeking advice and counselor (full-time female counselors are also available)



Example of human rights education · Training by well-versed human rights respect promotion officers

Members of the Human Rights Committee: Chief Human Resources Officer, Chief Risk Management Officer, Executive Vice President. Executive Managing Director, General Managers of related departments



respect human rights in different situations that come about as the TEPCO Group engages in its business –

# The TEPCO Group's mechanisms and initiatives for respecting human rights based upon the United Nations' Guiding Principles on Business and Human Rights

United Nations Guiding Principles on Business and Human Rights – Three-part framework – FY2021 achievements and status of FY2022 initiatives



Creation of website page dedicated to human rights (Japanese/English)

Disclosure of information such as the status of Human Rights Committee meetings, human rights due diligence process, human rights impact assessment results, action plan, number of consultations about, or reports of, human rights abuses, and training implementation data

## Information disclosure

\*1 In regards to "directors and employees," human rights impact assessment results have shown that there has been a significant negative impact in the areas of "harassment," "workhours," and "personal information," so during FY2022, we have focused initiatives on preventing human rights abuses in these three categories and/or minimizing the impact of such abuses if they occur.

\*2 In regards to "suppliers," in order to strengthen human rights in the supply chain we have added language on respecting human rights to our Basic Procurement Policy and have newly created "Guidelines for Sustainable Procurement." During FY2022, we have begun to construct mechanisms for thoroughly ensuring that suppliers respect human rights

# Strategies for creating value **Biodiversity**

The TEPCO Group positions SDG 15 "Life on Land" as a goal that is closely linked to the energy industry and engages in business activities while considering biodiversity. In 2022, the Taskforce on Nature-related Financial Disclosures (TNFD) announced the beta framework of its "Nature-Related Risk & Opportunity Management and Disclosure Framework" thereby helping to increase awareness of the necessity to consider the environment when making financial and business decisions.

In anticipation of the TNFD, and based on our Group Environmental Policy, the TEPCO Group has formulated and deliberated guiding principles pertaining to the conservation of biodiversity, performed significance assessments of natural capital, identified risks and opportunities, and disclosed information pertaining to natural capital and biodiversity.



## Example of business activities that consider global biodiversity



## Power generation facilities

Ecosystems on the land and in the sea must be considered when developing areas for power facilities, such as power stations.

#### <Measures>

We shall implement environmental conservation measures developed through environmental assessments and suitably disclose information.

Simultaneously aiming for carbon neutrality and conserving biodiversity through cooperation with Katashina Village and the Ministry of the Environment.

The TEPCO Group has used the Oze National Park Zero Carbon Park Registration of Katashina Village in Gunma Prefecture, the local community of Oze, as an opportunity to work together with the village and the Ministry of the Environment to make Oze mountain cabins and village-owned housing for immigrants more energy-efficient through the introduction of storage batteries, and to engage in sustainable tourism that leverages electric bicycles, etc., as we aim for a model for the decarbonization of national parks that considers ecological conservation.



## Oze

As part of headwater conservation for our hydroelectric power stations, TEPCO has promoted natural conservation activities for over approximately 60 years. This contributes to conserving the flora and fauna, forest functions of carbon fixation and groundwater conservation.

## Precious flora and fauna (red list): 12 species of birds, 11 species of plants, 1 species of insects Amount of carbon fixation by the forest: Approx. 7,400t-CO<sub>2</sub>/year

## Biodiversity conservation initiatives in coordination with Saitama City

Based on our Agreement for Co-Creation and Coordination in Order to Achieve Zero Carbon Emissions with Saitama City, the TEPCO Group aims to maintain and improve the multi-functions that natural environments provide through biodiversity conservation, etc., in addition to decarbonization, resilience strengthening, and the leveraging of digital technology. In particular, we will leverage the knowledge pertaining to biological surveys and environmental education that we have cultivated through environmental conservation activities in Oze to promote natural environmental conservation/utilization in the Minuma rice fields, for example, which are a global natural environmental asset.

# Strategies for creating value Developing technology (intellectual capital)

## Developing technology in order to create a carbon neutral society

We are developing technology required to create resilient power systems that combine conventional electric power systems with locally-produced/ locally-consumed systems. In particular, when reforming our business model, we are focused not on just making and storing electricity, but also developing technology that can give birth to new services for using electricity more flexibly and smarter.



## Examples of the practical application of developed technology and demonstrations

By increasing the social value of storage batteries through multiuse, such as for emergency power sources and supplydemand adjustment, etc., and promoting their use, we are contributing to the construction of a stable power system. To this end we are developing energy services that use stationary storage batteries and reused storage batteries from electric vehicles as key devices. Multifunctional power control systems contribute to the efficient use electricity in households by using power conditioners to control the charging and discharging of storage batteries and EV in accordance with the amount of power being generated by solar power. And, since power to household electrical appliances can be provided from various sources, we can ensure a stable supply of power even during emergencies, such as natural disasters, which have become more frequent in recent years.



## Multifunction power control system mock diagram



## Strategies for creating value TEPCO DX-based business structure reforms

In order to balance the stable supply of power with carbon neutrality, the TEPCO Group is promoting TEPCO DX which aims to achieve business reforms through digital transformation revolving around our business foundation, such as our customers and power facilities, etc., and data-driven creative destruction. The command center for promoting TEPCO DX is the DX Business Reform Committee which is comprised of core company Presidents, CFO and CIO. We are also proactively building a DX ecosystem, such as by constructing a digital foundation, cultivating a corporate culture in which failure is not feared, and cultivating DX human assets that can drive reforms.

## Building a new foundation based on digital technology

Through TEPCO DX, we shall leverage AI voice text conversion, 3-D scanners, and drones, etc., to turn the Group's vast business foundation, which includes 27 million household customers and 6 million utility poles, to create a digital space full of digital data which will in turn be used to implement business and operational reforms.

Through digital transformation and the use of data as a driving force, we aim to improve the experience of our customers when interacting with TEPCO, double productivity through data analysis and AI, and create new businesses with allies through data distribution.



## Leveraging a digital foundation for business reforms

## Leveraging digital technology to implement duty reforms

We are using wearable 3-D scanners to create digital models of our nuclear power stations in the TEPcube cloud environment. These models will be used with general purpose Building Information Modeling (BIM) systems to share information with contractors, and engage in remote design/construction management. Furthermore, this system will also contribute to worker safety and reducing the exposure of workers by reducing the need to actually go to the Fukushima Daiichi Nuclear Power Station.



## Cultivating corporate culture and human assets

During FY2021, approximately 2,500 people participated in system and DX training. In addition to learning about data science and AI/digital technologies, we were able to cultivate a reform mindset and an in-house community that has been carried into each office. We also held the DATAQUEST data skill analysis competition for the acquisition of advanced skills. Approximately 420 teams participated and competed to see who could produce the most accurate analyses. In order to accelerate business structure reforms through "kaizen" × "digital transformation," From FY2022, we will be implementing data and digital technology re-skilling for all company employees as well as mindset training as we aim for the digital transformation of all employees.

# Continually striving to cultivate corporate culture (digital transformation of all employees)

- In addition to improving digital literacy throughout the entire company, we will improve the company's agility by cultivating a work climate in which employees can continue to challenge themselves without fear of failure, thereby enabling each and every employee to reform their awareness and modify their behavior.
- "DX promotion officers" have been assigned to each department in order to promote the digital transformation of all employees. Through coordination with the DX Project Promotion Office, ideas that employees come up with in their own offices will be turned into tangible measures.

## Cultivating/securing DX human assets

- Along with strengthening our conventional employee training curriculum, we will create a running platform that will enable employees to independently learn on their own. Furthermore, by ascertaining the knowledge, skill level, and work experience of each and every employee, we will better balance training with actual work assignments, as we aim to cultivate approximately 6,000 DX human assets by FY2025.
- In order to improve the success rate of extremely difficult DX projects, in addition to cultivating human assets from existing employees, we will hire more experts with advanced knowledge by forming alliances with external parties and hiring experienced personnel.



### <Overall look at TEPCO DX initiatives>

# Business strategies Structure



# Business strategies TEPCO Group summary

Tokyo Elec	<b>TEPCO</b> ctric Power Company Holdings		
Balancing ca	arbon neutrality with the stable supply of power		
	Size		
Employees Assets	12,551 12,853 billion yen		
Strength			
Existing pow Nuclear Pow Comprised c contractors, o	ver assets (Kashiwazaki-Kariwa ver Station) of 51 subsidiaries and 51 our electricity division is strong		
	P73		
	ΤΞΡϹΟ		

**TEPCO** Renewable Power

Promoting the use of renewables as primary power sources as we aim to realize a sustainable future energy society

	Size
Employees	1,403
Assets	580 billion yen
	Strength
A wealth of s	kill and know-how cultivated
through the (	development and operation of
0.0 CW of local static and use she had a second	

9.8 GW of hydroelectric and renewable energy facilities, the largest in Japan.

	billion yen
	FY2021
Sales	5,309
HD	620
FP	5
PG	1,962
EP	4,360
RP	153
Adjustment	∆1,791

 $\diamond$ 

## TEPCO Power Grid

Meeting expectations for carbon neutrality, digital transformation, distributed resources and resilience (preparedness and stronger resiliency)

	Size	
Employees	20,798	
Assets	6,802 billion yen	
Strength		
Experience and success with the operation of existing transmission and distribution assets		
Transmission line: 40.966km		

P68

Transmission line: 40,966km Substation total 1,613 underground 201 Distribution line: 364,926km SAIFI 0.11 SAIDI 7min **TEPCO** Fuel & Power

While appropriately responding to changes in our business environment, we are providing support and supervision to JERA so that we can continually increase the corporate value of JERA and the TEPCO Group.

Size				
Employees	0			
Assets	497 billion yen			
Strength				
We are rallying around JERA, which is Japan's				
largest powe	r generation company, and			

largest power generation company, and optimizing our value chain while supporting the stable supply of power.

P72

**TEPCO** TEPC0 Energy Partner

Delivering new value to customers in the form of energy security, carbon neutrality, energy-savings, and laborsaving innovations

Employees3,187Assets1,347 billion yen

#### Strength

Number 1 in Japan in terms of the ability to develop new business based on sales power and power sales volume

P66

# Renewable Power — TEPCO Renewable Power, Inc.

## We will contribute to the development of industry rooted in the region and a sustainable society through the spread of renewable energies.

We are expanding our initiatives aimed at creating a global carbon neutral society, and our customers are increasingly more interested in  $CO_2$ -free electricity. We perceive this trend as a business opportunity and have for many years engaged in the development/ planning, construction, and operation & maintenance of hydroelectric and wind power plants. By leveraging the experience and know-how that we have cultivated through these endeavors as well as the maintenance of approximately 10 GW worth of hydroelectric, wind power, and solar power facilities, the largest in Japan, we aim to newly develop approximately  $6 \sim 7$  GW of new power facilities in Japan and overseas by FY2030 as we promote the use of renewable energies as primary power sources.

Masashi Magasawa

Masashi Nagasawa President TEPCO Renewable Power, Inc.

## Initiatives going forward

- 1. Improving the value of, and repowering, existing hydroelectric power plants in Japan
- 2. Leveraging energies prowess for full scale renewable energy projects overseas, and increasing the value of overseas power stations

## Short/midterm business plan

## **Business objectives**

Develop approximately  $6 \sim 7$  GW of new renewable energies in Japan and overseas by FY2030, and turn annual profits on the scale of  $\pm 100$  billion

## Develop services that meet the needs of customers



- Early construction of large-scale bottom-fixed offshore wind farms in Japan and increase in the number of these facilities while also constructing floating offshore wind farms
- 4. Promoting detailed surveys of businesses in order to diversify power sources



## Initiatives and ideas for developing offshore wind power business

We will use the technology and knowledge acquired in the domestic offshore wind power business to strengthen price competitiveness, accumulate projects, and expand overseas. We aim to quickly establish the technology for the floating type, which is expected to be the mainstay in the medium to long term, and to lead the world. (Realization of floating wind farms in Japan after the latter half of the 2020s)

## Participation in the TetraSpar Demonstrator project

We aim to acquire technical knowledge and improve the possibility of development of floating offshore wind, which is expected to spread in Japan and overseas in the future. For achievement of these aims, we have been investing and participating in the TetraSpar Demonstrator ApS, a joint demonstration project underway off the coast of Norway since February 2021. And, in November of last year, demonstration operation of the TetraSpar commenced. The TetraSpar design concept is innovative in that it enables simplification of manufacturing, assembly, and installation. During the demonstration, we were able to assemble the unit using a large crane in only 35 hours thereby confirming the competitive advantage of this technology in terms of cost and safety. Through this project we aim to guickly establish technology pertaining to the construction, installation, and operation of such platforms.



TetraSpar (floating offshore wind foundation)

# increasing the value of

66

## Develop our business foundation



## Using green bonds to promote our renewable energies business

In September 2021, and March and September 2022, TEPCO RP issued a total of ¥70 billion in green bonds. The capital procured from these green bonds will be used to refinance existing investment and a newly invest in projects pertaining to the development, construction, operation and repair of renewable energies sources (hydro, wind, solar, geothermal).

Reporting about GB utilization Japanese only WEB

## https://www.tepco.co.jp/rp/about/bond/gb reporting/pdf/220629 01-j.pdf

#### Appropriation status

TEPCO RP green bonds		First issuance 2021/9	Second issuance 2022/3	Total
Procured capital *1		29 .9 billion yen	9.9 billion yen 39.9 billion yer	
Appropriated		29 .9 billion yen	9.0 billion yen	39.0 billion yen
Refinanced		29 .9 billion yen	9.0 billion yen	39.0 billion yen
Unappropriated *2		0 billion yen	0.9 billion yen	0.9 billion yen
Projects subject to appropriation * <sup>3</sup>	Domestic hydroelectric power plant *4	10	3	1 5
	Overseas hydroelectric power plants *5	2	1	. 15

\*1 Procured amount indicates the net amount after subtracting insurance fees from the amount of green bonds issued rounded to the nearest ¥10 million

\*2 Unappropriated amounts shall be managed as cash (deposits) until it has been appropriated during FY2022

\*3 There are projects to which capital procured from the first and second issuances have already been appropriated \*4 Hydroelectric power plant repowering

\*5 Investment in overseas renewable energies companies

Note) Capital procured from the third issuance (issued in September 2022, ¥29.9 billion procured) shall be appropriated and managed in accordance with the Green Bond framework and the results, including environmental improvement impact, shall be announced during FY2023.

### Environmental improvement impact

	First issuance	Second issuance	Total
Туре	Hydroelectric power	-	
Facility capacity	0.17GW	0.02GW	0.20GW
CO <sub>2</sub> emission reduction effect *6	136,505 t-CO <sub>2</sub> /y	40,774 t-CO <sub>2</sub> /y	177,279 t-CO <sub>2</sub> /y

\*6 (Annual generation volume) x (CO<sub>2</sub> emission coefficient)(Period: April 1, 2021~March 31, 2022)

This effect has been calculated to indicate the minimum reduction effect for all projects through appropriation. \*7 Domestic power stations: The Electric Power Council for a Low Carbon Society CO<sub>2</sub> emissions data Overseas power

stations: JICA Climate-FIT CO<sub>2</sub> emissions coefficient by country

### Strengthening the foundation of our domestic hydroelectric business

We are gradually strengthening the foundation of our domestic hydroelectric power business by steadily moving forward with repowering to increase the generation output, and improve the facility reliability, of aging hydroelectric power plants as well as shortening outage periods by using robots to perform inspections, and building systems that leverage IoT to identify facility troubles before they manifest. Going forward, we will continue to implement our repowering plans and reduce power generation loss as we aim to efficiently utilize our river water resources, which are a gift from nature, without waste.

#### Main repowering example



Number of units: 3 Output : 10.6 MW ⇒11 MW Commencement : 2021/7



(Niigata Pref.) Number of unit: 1 Output: 5.7 MW ⇒5.8 MW Commencement : 2021/7

### Full-scale development of overseas renewable energies projects

We are accelerating the speed at which we are investing and participating in overseas renewable energies projects. In November 2018 and April 2020, we invested in the existing hydroelectric power facilities in Vietnam and Georgia, respectively, and then in February 2022, we invested in Kencana Energi Lestari, a listed company in Indonesia that has three hydroelectric power subsidiaries. Going forward, we will continue to leverage the technical prowess and know-how that we have cultivated here in Japan to bring about success in the development of overseas projects as we develop renewable energies in regions and nations that have high potential for development.



Local meeting at Indonesia

#### Contributing to increasing the value of overseas renewable energies assets

By leveraging the technical prowess and know-how pertaining to design, construction, and O&M that we have cultivated over many years in Japan, TEPCO is able to address various issues faced by renewable energies power plants overseas, thereby contributing to increasing the value of these facilities. Going forward, TEPCO shall continue to build partnerships with operators both in Japan and overseas, and promote our renewable energies projects overseas, which are quite competitive because of our technical prowess, as we aim to increase profitability.

# Transmission and Distribution — **TEPCO Power Grid**, Inc.

## We will construct a resilient next-generation transmission and distribution network

We will construct a resilient next-generation transmission and distribution network. In order to continue to provide a stable supply of power at low-cost, we must continue to efficiently maintain our robust transmission and distribution network and improve resiliency. Furthermore, in addition to strengthening resilience, we shall accurately respond to changes in the world and continue to grow by cooperating/coordinating with other operators, including companies in other industries, to create new value and further enlarge our sphere of business as we aim to achieve carbon neutrality. At the same time, we foresee a harsh supply-demand situation for the remainder of FY2022, and shall strive to ensure a stable supply of power while disseminating information about our supply-demand situation in an even easier to understand manner. Furthermore, we shall diligently engage in initiatives to examine methods for determining the degree of supply-demand tightness, and quickly disclosing information.

(Joshimon Kanakas

Yoshinori Kaneko President and Chief Executive Officer TEPCO Power Grid, Inc.

## Initiatives going forward

### 1.Contributing to carbon neutrality

We shall contribute to achieving carbon neutrality by creating next-generation transmission and distribution networks that leverage renewable energies (offshore wind/solar power, etc.), storage batteries/EV and next-generation power management (VPP/DR), etc.

## Short/midterm business plan

**Business objectives** 

Stable and low-cost power supply

Steadily raise funds for decommissioning, etc., Annual average approx. ¥120 billion

non-consignment sales (FY2023) Sales: ¥90 billion Operating income: ¥15.5 billion

## 2.Strengthening resilience

We shall steadily reinforce facilities in preparation for even fiercer and more widespread natural disasters, and upgrade aging facilities while also constructing a mechanism for contributing to accurate information dissemination and quick repairs during disasters.

## Business foundation development

#### Construction of next-generation transmission/distribution network





3. Running a sustainable business

In order to continue to provide a stable

contributing to carbon neutrality and

rate system (revenue cap system)

and low-cost supply of power while also

build a sustainable business management

foundation based upon a new consignment

strengthening resilience, from FY2023 we shall

# Addressing transmission/distribution networks as we aim for 2050 carbon neutrality

## Scaling-up of trunk CO2 grids

• In order to reduce CO<sub>2</sub> emissions by using low-cost, non-fossil fuel power sources from outside of TEPCO's coverage area, such as large-scale offshore wind power facilities, we are promoting the enhancement of highly cost-beneficial interconnection facilities.

## Decentralized distribution networks

- Transitioning to next-generation decentralized grids
- Promoting regional energy management by maximizing the use of next-generation smart meters, etc.
- Increase the use of renewable energies by leveraging the technical prowess and knowledge cultivated through demonstrations on Nii-jima Island and Hahajima Island

## Optimizing grid use

- Increase the use of renewable energies by promoting connect & manage, introducing the resupply methods and shifting to market-led congestion management.
- Effectively leverage entire grids in which decentralized networks and wide area networks are co-operated.



#### Configuring facilities to expand Transmission system

- ~Participating in technical deliberation projects aimed at using renewable energies as primary power sources and building resilient power networks~
- We are participating as a general transmission/distribution operator in the technical deliberations for Long-term Cross-regional Network Development Policy being formulated by the Organization for Crossregional Coordination of Transmission Operators, a government-authorized entity.
- We are helping to paint a portrait of power grids from a long-term perspective in consideration of using renewable energies as primary power sources and building resilient power networks
- In addition to the steady promotion of interconnection line construction currently underway, we are examining the use of long-distance DC submarine power cable technology as a possible means of further strengthening grids in preparation for the potential use of renewable energies in regions to the east.



#### Acquiring technology for "decentralized distribution grids" ~ Demonstrating technology for supplying 100% of power with renewable energies on Haha-iima Island~

- TEPCO signed an agreement on December 2018 with Tokyo Metropolitan Government and Ogasawara village to engage in the project
- The following research is examined to supply 100% of Renewable Energy
- 1.Development of power inverters with synthetic inertia (VSG\*1)
- 2.Development of integrated EMS\*2 that can supply power with only storage batteries and PV
- 3.Development of short circuit protection technology for grids when mainly diesel generators are used, and also when 100% renewable energies is used
- \*1 VSG: Virtual synchronous generator Integrated
- \*2 Integrated EMS: Energy management system for supplying power with only renewable energies

#### Concept diagram of demonstration on Haha-jima Island



## Technical development aimed at "optimizing grid use"

- ~ Energy trading demonstration for promoting locally-produced/locallyconsumed distributed energy~
- Promote the local-production/local-consumption of distributed energy resources through market trading to optimize grid use and effectively leverage renewable energies
- Engage in research and development required for systems to maximize the use of distributed energy resources, and assess the feasibility of system utilization through field demonstrations

#### Distributed energy trading demonstration concept drawing



## **Business strategies**

# Energy Retail — TEPCO Energy Partner, Inc.

## Painting a portrait of the future that holds new value for our customers

As a result of fiercer natural disasters and the need to address carbon neutrality, the environment surrounding our energy business is changing greatly. In order to continue to enjoy the benefits of stable energy, we must reduce our dependency on fossil fuels and promote the local-production/ local-consumption of energy. In order to do this, we are promoting the installation of solar power facilities and storage batteries in addition to contributing to the creation of a carbon neutral society through the electrification and efficient maintenance/management of facilities. However, recent soaring fuel prices have forced us to revise our fee rates for special high-voltage and high-voltage customers. We apologize for the inconvenience, but we will strive to reduce the burden of these electricity rates on you by providing support for energy-conservation and energy-saving.

Noluchide Shimoto

Nobuhide Akimoto President TEPCO Energy Partner, Inc.

## Initiatives going forward

- We engages in the retail sale of electricity and gas in the Tokyo Metropolitan area, which is the center of Japan's economic and industrial activities, provides solutions for lifestyle problems faced by our customers.
- We shall create a stable revenue base over the long-term that centers on providing value to our customers in the form of safety, carbon neutrality, energy-conservation, and labor-savings.
- We shall reduce CO<sub>2</sub> emissions originating from the sale of power to 50% of FY2013 levels by FY2030 as an advanced initiative to address climate change

### Target/KPI



2023

### **Developing a business foundation**





In recent years, there has been a movement to conserve energy and an increased use of renewable energies, such as solar power, and society has become more conscious of preparedness/safety as a result of fiercer natural disasters. In order to meet the need of customers to reduce heat and lighting expenses. and also address evacuation concerns during a disaster, we have newly released "Enekari Plus" to provide a new solution for "making," "storing," and "using" electricity. Furthermore, by FY2030, we aim to sign more than 820,000 electrification option contract customers, and we will engage in initiatives to promote carbon neutrality hand and hand with customers by developing new services in the future.



2021
Industry

City gas

Gas-fired

steam boiler

Conventional

(centralized heat source system) facility

Steam

Pipe length 7km

# Through our "carbon neutral solutions" for corporate clients, we provide total support from everything from clarifying the objective of carbon neutrality to equipment maintenance and improvement

While detailed and effective action plans are necessary to achieve carbon neutrality, many of our corporate clients have said that, "we have a roadmap for achieving carbon neutrality, but no detailed plans for each office, and we don't know how to go about doing what we need to." In order to address this issue, we are providing total support for clarifying the objectives of carbon neutrality and maintaining/improving equipment by customizing various solutions, such as energy-conservation, energy-creation, and supply-demand linkage, which are areas of expertise that TEPCO has cultivated over many years.



#### Examples of services by business type

Production

Load facility

Heating

equipment

Electric system

(individual steam-less heat source)

Introduction of warm water HP

#### **Business strategies**

# Fuel/thermal power — **TEPCO Fuel & Power, Inc.**

#### We shall support/supervises JERA so as to enable continual increases in corporate value

In cooperation with Chubu Electric, TEPCO gradually transferred its fuel/thermal power business to JERA, and we completed this task in April 2019. JERA is Japan's largest power generation company and a global energy company that owns the entire supply chain for our fuel/thermal power business. By paving the way to ensuring a stable supply of energy and achieving zero CO<sub>2</sub> emissions by 2050 (zero emissions), IERA is providing optimal global energy solutions and increasing corporate value. As a shareholder, TEPCO will provide suitable support and supervision to enable JERA to achieve its business goals and commitments.



Daisuke Sakai President **TEPCO Fuel & Power, Inc.** 



#### Initiatives going forward

Provide suitable governance as a shareholder while supporting JERA's autonomous business operation

- Monitor JERA initiatives in light of business environment changes
- Confirm the progress status of JERA's roadmap for achieving carbon neutrality



Since taking over our fuel and thermal power business in April 2019, JERA has aimed to turn net consolidated profits of ¥200 billion in FY2025.

\*1 Excludes impact from lag inherent to fuel cost adjustment system

\*2 Preconditions for calculation: Exchange rate: FY 2023~2025, Approximately ¥110/US dollar on average

\*3 Excludes temporary profits from FY2021 trading business (¥120 billion)

\*4 Noted as "Undetermined" if performance could not be reasonably calculated



In order to achieve this business objective, JERA aims to maximize corporate value through proactive investment in growth, and shall strive to continue to ensure a stable supply of power by delivering internationally competitive energy to our customers.

JERA environmental commitment 2035/JERA zero-emissions 2050 P41 Detailed information on JERA strategies:https://www.jera.co.jp/english



# Business strategies Nuclear Power — Tokyo Electric Power Company Holdings

## We will never forget the Fukushima nuclear accident and become a nuclear power company that continues to achieve unparalleled levels of safety through day-by-day safety improvements

By reflecting upon the Fukushima Daiichi Nuclear Power Station accident, we continue to engage in nuclear reforms so as to become a nuclear operator with the world's highest level of safety awareness, technical prowess, and the ability to engage in dialogue with society.

The discovery of incomplete safety measures and the inappropriate incidents pertaining to physical protection that occurred at the Kashiwazaki-Kariwa Nuclear Power Station have greatly damaged the TEPCO Group. Currently, regaining the trust of society is our top priority, and to that end, I am staying in Kashiwazaki City and working hand-in-hand with Site Superintendent Inagaki to promote nuclear reforms while paying particular attention to the situation in the field.

While receiving guidance and recommendations from the Nuclear Reform Monitoring Committee and sharing this information with the entire Nuclear Power & Plant Siting Division, including the Fukushima Daini Nuclear Power Station and the Higashidori Nuclear Power Station, we are aiming to become a nuclear operator that is trusted by society through the safe operation of our power stations.

Toshiko Fukuda

Toshihiko Fukuda Managing Executive Officer Chief Nuclear Officer, Secretary-General of Nuclear Reform Special Task Force



The Nuclear Reform Monitoring Committee has strengthened its foundation through the addition of new members in order to perform better external assessments of nuclear safety

The Nuclear Reform Monitoring Committee (NRMC) is an advisory board to the TEPCO HD Board of Directors that was established on September 11, 2012 and is comprised of experts from Japan and overseas. On April 1, 2021, two new members were added to the committee, US nuclear industry expert Mr. Amir Shahkarami, and communications expert, Dr. Mariko Nishizawa, in an effort to bolster the Committee's foundation. The NRMC monitors and supervises TEPCO's nuclear reform initiatives from an external perspective.

#### Information disclosure rules

In principle, all information pertaining to the Nuclear Reform Monitoring Committee is disclosed via the following website.

http://www.nrmc.jp/en



#### 20th Nuclear Reform Monitoring Committee Meeting (September 15, 2022)

#### Nuclear safety reform initiatives ~Reform progress and improvements with key issues~

- Risk management strengthening
- The state of department structures, governance and monitoring functions
- Coordination with contractors
- Improving motivation in the workplace
- Communicating with society

#### FDEC initiatives

• Progress with various issues: Treated water countermeasures, spent fuel pool fuel removal, fuel debris retrieval, waste countermeasures



#### [Attendees]

Nuclear Reform Monitoring Committee

Dr. Dale Klein, Chairman (Former Chairman of the US Nuclear Regulatory Commission)

Mr. Masafumi Sakurai, Member (Former Member of the Diet Accident Investigation Committee)

Mr. Amir Shahkarami, Member (Former Exelon Nuclear VP) Dr. Mariko Nishizawa, Member (Representative Director/Founder, Litera Japan Corporation)

Dr. Yoshimitsu Kobayashi, Member (Chairman, TEPCO HD)

Mr. Shoichiro Onishi, Member (Director, TEPCO HD)

• Tokyo Electric Power Company Holdings, Inc.

Tomoaki Kobayakawa, Chief, Nuclear Reform Special Task Force (President, TEPCO HD)

Toshihiko Fukuda, Secretary-General, Nuclear Reform Special Task Force (Managing Executive Officer)

Takeyuki Inagaki, Managing Executive Officer

Akira Ono, Managing Executive Officer

Ryutaro Yamamoto, Managing Executive Officer

## Nuclear reforms will be implemented based on the five basic measures put forth in the 4th Comprehensive Special Business Plan to become a "trusted company"

It was announced on September 22, 2021 that we will be implementing new nuclear reforms in light of the discovery of incomplete safety measure renovations and the improprieties pertaining to physical protection.

Based on the "five basic measures put forth in the 4th Comprehensive Special Business Plan," we will formulate recurrence prevention measures based on the awareness that we harbor weaknesses with risk awareness, the ability to ascertain actual conditions in the field, the ability to make corrections as an organization, and coordination between departments and between TEPCO and other companies, as we aim to become a power station that is trusted by the regional residents and society.



Takeyuki Inagaki Managing Executive Officer, Superintendent of Takeyuki Inagaki Kashiwazaki-Kariwa Nuclear Power Station, Niigata Headquarter



#### <Integrated operation of head office and power plant> ~Relocation of head office functions to Niigata~

• By locating the headquarters functions necessary for the Kashiwazaki-Kariwa Nuclear Power Station near the power station, we will increase opportunities to directly hear the voices of local residents and reflect them in the operation of the power station. For the time being, strengthen integrated management of headquarters and power plants to address weaknesses identified in a series of inappropriate cases

#### Achievements to date

- A total of 64 TEPCO employees in charge of quality/safety and equipment diagnostics, schedule management, and human resource cultivation, etc., have been assigned to the Kashiwazaki-Kariwa Nuclear Power Station and offices in Kashiwazaki City.
- Required Headquarter functions will continue to be transferred in accordance with changes to the conditions at the Kashiwazaki-Kariwa Nuclear Power Station in the future (Onsite living facilities should be completed by FY2026 after which approximately 300 employees shall be relocated)

## <Personnel assignments/rotation revisions and employment of external experts>

#### ~Inviting external experts from different fields~

 In order to strengthen physical protection functions and improve the safety of the power station, experts, such as veterans of the Japan Self-Defense Force, police, TEPCO, and fire departments, etc. have been hired since April 2021, and former Chubu Electric executive Ryosuke Mizutani was invited to provide support to the site Superintendent an effort to further promote nuclear reforms (since April)



#### Ryousuke Mizutani

#### Role

Awareness reforms, work methods/system reforms, support for the Site Superintendent in regards to technical matters

#### Brief Personal Record

Former Chubu Electric executive (Former Director of the Hamaoka Nuclear General Office)

#### <Strengthening physical protection and developing resources> ~Addressing physical protection issues~

- On September 22, 2021, a report on cause analysis and improvement measure plans pertaining to the unauthorized use of an ID card and the temporary loss of function of physical protection equipment was submitted to the Nuclear Regulation Authority.
- During the cause analysis, underlying causes to both incidents were analyzed and three common root causes were identified. The "improvement measure plan" is gradually being carried out.

\*The "improvement measure plan" can be found on our website https://www.tepco.co.jp/en/hd/newsroom/press/archives/2021/20210922\_03.html

- The 36 measures of the "improvement measure plan" intended to address physical protection issues are being gradually implemented and we have transitioned to the "effectiveness assessment" phase. (Excluding restricted areas on revisions)
- On September 14, 2022, we started constructing mechanisms to "make continuous improvements to equipment reliability," "ensure that management plays a leading role in [equipment] operation," and "prevent improvement measures from becoming temporary."

#### [Achieving robust physical protection] Review plan 1

- In order to prevent unauthorized access and authorization mistakes, a combination of multiple biometric authentication devices will be utilized in addition to equipment for assisting with the check of vehicle numbers as an added measure to assist with security duties.
- Sensors will be replaced with improved sensors that are better suited to the natural environment as a measure for improving detection functions (false alarm prevention measures) (underway)
- By revising restricted area zones, we will build a protection system with improved security functions, such as the ability to systemize access management (planned)



#### [Rooting mechanisms for independent improvement]



- Construct a mechanism for promoting improvements through which physical protection duties are managed/run under the leadership of upper executives by newly establishing a Nuclear Security Committee and a Security Management Department, etc.
- Formulate a "Basic Plan for the Cultivation of Nuclear Security Culture" for upper management/power station executives, people engaged in nuclear physical protection duties, and power station personnel. Clearly state plans and engage in activities to continually cultivate nuclear security culture.
- Have upper management frequently go into the field to check actual conditions and actual equipment and provide direct assistance







Field check by President Kobayakawa Ir

Improving the intruder detection environment by cleaning site areas the (Nuclear Power & Plant Siting (String) Division General Manager Fukuda)

Greeting people at the main gate as they come to work (Site Superintendent Inagaki)

#### [Construct mechanisms to prevent improvement measures from becoming temporary]



- Upper management shall quickly ascertain the signs of aging and problems, quickly and appropriately address these issues, and be involved in rooting and promoting these improvements in order to continually make improvements, and this basic behavior shall be reflected in the nuclear physical protection regulations.
- Continually improved by incorporating opinions from external parties. Address recommendations pertaining to security made by the Nuclear Security Expert Assessment Committee.
- Address recommendations pertaining to management made by the Nuclear Reform Monitoring Committee



Meeting of the Nuclear Security Expert Assessment Committee at the Kashiwazaki-Kariwa Nuclear Power Station



Nuclear Reform Monitoring Committee meeting

#### <Improve motivation in the workplace and work environments>

#### ~The Purpose of the Kashiwazaki-Kariwa Nuclear Power Station~

- In order to cultivate a sense of unity between people working at the power station, upper management shall engage in dialogue with personnel and focus will be put on getting mainly younger employees to engage in activities to make the site a "good power station."
- Through these activities, the Site Superintendent will hear the opinions of personnel, and formulate the "Purpose of the Kashiwazaki-Kariwa Nuclear Power Station" based on opinions from contractors as well.
- This "purpose of the power station" shall be easily understood by all people working at the power station, including contractors, and shall serve as a basic code of behavior and main belief that incorporates the feelings of all personnel.
- As we aim to be a "power station that everyone is proud of and works at with energy and a smile," as noted in the power stations "purpose," we have started "morning greeting activities." Furthermore, we are proactively participating in regional events as part of the community as we aim to be a "power station that loves the region and is loved by the region."

#### Upper management engaging in dialogue



Activities to make a "good power station"



Putting the "Purpose of the Kashiwazaki-Kariwa Nuclear Power Station" into practice



Greeting workers at the main gate



Participating in cleaning activities in conjunction with regional event

#### The "Purpose of the Kashiwazaki-Kariwa Nuclear Power Station"

Our (everyone that works at the power station) purpose = "become a good power station"							
The state we aim to achieve	Our resolution/pledge						
Be a power station that	<our basic="" stance=""> <ul> <li>Abide by the Kashiwazaki-Kariwa Code of Conduct</li> <li>Learn from accidents, fires and human error</li> <li>Continue to grow by implementing kaizen based on the actual conditions in the field, the conditions of actual equipment, and reality</li> </ul></our>						
loves the region and is loved by the region	<ul> <li><our in="" people="" region="" relationship="" the="" with=""></our></li> <li>Strive to sincerely convey information and leverage the opinions we receive</li> <li>Proactively participate in regional activities and contribute in times of regional disaster</li> <li>Work hand-in-hand with regional residents to become a power station that leverages regional technologies</li> </ul>						
Become a power station that everyone is proud of and works at with energy and a smile	<ul> <li>Take care of each other and care for equipment</li> <li>Have everyone feel that they are main players and take responsibility for their work</li> <li>Build relationships with all colleagues through honest communication (Keep conveying your real feelings until they are accepted in order to solve problems)</li> <li>Trust each other and interact with gratitude</li> </ul>						
Becoming a power station that is chosen by customers	<ul> <li>A properly manage the power station and provide power stably and efficiently</li> <li>Leverage new technology and knowledge to continually update equipment and improve operations</li> <li>Minimize waste and reduce the burden on the environment</li> </ul>						

#### <Construct/introduce project management systems>

- The failure to complete safety measure renovations was caused by insufficient coordination between departments in regards to project management, so countermeasures for ensuring that projects are completed are required
- Basic rules have been created and General Managers/Group Manager are being subject to education via e-learning in order to carry out projects through a robust project management system.
- Building Information Modeling (BIM) is being built as a system for assisting with penetration management





# Business strategies Developing Overseas Projects

The TEPCO Group is engaging in projects overseas using the technological prowess and know-how it has cultivated over almost 70 years in Japan's electric industry. Going forward, the Group will work as one to expand its overseas businesses.



\*3 UAE, Azerbaijan, Angola, Iraq, Iran, India, Indonesia, Uganda, Uzbekistan, UK, Ecuador, Egypt, Estonia, Cambodia, Kuwait, Kenya, Democratic Republic of the Congo, Saudi Arabia, Zambia, Georgia, Singapore, Sri Lanka, Slovenia, Serbia, Solomon Islands, Thailand, Taiwan, Tanzania, China, Tunisia, Chile, Nepal, Vanuatu, Bangladesh, Philippines, Bhutan, Brazil, Brunei, United States, Vietnam, Malawi, Denmark, Mozambique, Maldives, Morocco, Mongolia, Jordan, Latvia, Laos, Romania, Russia

Countries/regions in which projects were engaged (FY2016~2019)

## Fukushima (Compensation/Recovery, Decommissioning)



A street lined with cherry trees crowded for the first time in 12 years now that access restrictions have been lifted and the entire street can be used (Yonomori District, Tomioka Town, April 2022)

While prioritizing our efforts to regain the trust of the regional community and society, the TEPCO Group aims to fulfill our responsibilities to Fukushima by quickly providing adequate compensation, engaging in recovery efforts, and safely and steadily moving forward with decommissioning.

#### **Compensation and Recovery Initiatives based on our** "Three Pledges"

In conjunction with the lifting of evacuation orders, the situations of evacuees are changing in various ways. In light of this, we continue to listen carefully to each individual to understand their situation, and guickly provide suitable compensation based upon our three pledges<sup>\*1</sup>. Furthermore, we are providing both manpower and technical cooperation to ensure that the environment to which evacuees return is livable by contributing to national and local government projects to help businesses rebuild, and restoring/revitalizing town/city functions.

#### Completing decommissioning while coexisting with the region

## Recovery

- Initiatives aimed at rebuilding businesses/
- occupations and lives, and enabling self-reliance
   Cooperation with building industrial infrastructure
   Initiatives for helping evacuees to return home after
- evacuation orders are lifted
- Initiatives aimed at recovery in regions where people have yet to be able to return home

#### Compensation

- Quickly provide adequate compénsation in accordance with our "three pledges"
- Mid/Long-Term
   Decommissioning Action Plan Treated water, etc. initiatives

Decommissioning

 Increasing participation of local companies

In order to move safely and steadily forward with the decommissioning of the Fukushima Daiichi and the Fukushima Daini nuclear power stations, which includes initiatives to handle ALPS treated water<sup>\*2</sup>, and promote the "balancing of recovery with decommissioning" by vitalizing decommissioning-related industries, we shall engage in two-way communication with regional residents as we aim to complete decommissioning while coexisting with the region.

\*1 1. Provide compensation to everyone who needs it; 2. Provide compensation quickly and meticulously; 3. Respect settlement proposals \*2 Water that has been purified and treated with multi-nuclide removal equipment (ALPS), etc. so that the concentrations of radioactive substances, with the exception of tritium, fall well below safety regulations is referred to as "ALPS treated water."



## **Compensation/Recovery**

#### We will continue to engage in activities rooted in the local community in order to fulfill our responsibilities to Fukushima

Even though it's been a little over 11 years since the Fukushima Daiichi Nuclear Power Station accident, there are still great inconveniences and causes for concern amongst residents of the siting community, the people of Fukushima Prefecture, and society as a whole; and for this I would like to deeply apologize.

In 2022, the evacuation orders for specific recovery and revitalization areas in Katsurao Village, Okuma Town and Futaba Town were lifted, and similar restrictions will be lifted next year in Namie Town, Tomioka Town and litate Village thereby opening a new chapter in recovery as we move forward with preparations to the environment.

However, there are many evacuees who are still not able to return home, and much concern over the impact that harmful rumors will have as we move forward with initiatives to dispose of water treated with multi-nuclide removal equipment (ALPS treated water). In this respect, I am keenly aware of the depth and breadth of the impact that the accident has had.

Amidst this situation, TEPCO has been innovative as it fulfills its responsibilities to recovery in Fukushima by providing compensation, monitoring areas in preparation for the return of evacuees, cleanup/patrol activities, and activities to promote the distribution of products from Fukushima Prefecture, etc.

I will stand on the forefront of the Group's concerted and continuing efforts to listen carefully to the opinions of regional residents and engage in regionally-rooted activities that further promote recovery whilst never forgetting the suffering that those affected by the disaster are still experiencing.



Kazuyoshi Takahara Fukushima Revitalization Headquarters Representative

Kazuyoshi lakahara

#### Compensation/recovery achievements as of FY2021

	Compensation/ decontamination expenses	Total payout amount: Approximately ¥10.4 trillion <compensation <br="" amount:="" approximately="" decontamination="" trillion;="" ¥7.1="">interim storage expenses: Approximately ¥3.3 trillion&gt;</compensation>
	Promotion of environmental revitalization/recovery	Total number of employees that engaged in related activities: Approximately 1.04 million (January 2013~) <environmental 490,000="" activities:="" approximately="" people;<br="" revitalization="">Recovery promotion activities: Approximately 550,000 people&gt;</environmental>
Dispelling harmful rumors/ promoting distribution		Total number of days that events have been held: Approximately 16,000 (February 2018~)

#### Progress with lifting of evacuation orders in specified recovery/revitalization areas

2022		Katsurao Village (June 12), Okuma Town (June 30), Futaba Town (August 30)
2023 (Tenta	tive)	Namie Town, Tomioka Town, litate Village

The Fukushima Revitalization Headquarters shall make quick and centralized decisions in regards to compensation, decontamination, and recovery promotion efforts, etc., as it meticulously addresses the needs of regional residents.

#### **Compensation status**

In order to meticulously provide compensation to all those affected by the disaster in accordance with our "three pledges," we are continuously making improvements to how we handle this issue, such as by giving briefings/consultations pertaining to compensation, and providing assistance with the creation of invoices. As of June 2022, the seven lawsuits concerning the Fukushima Daiichi Nuclear Power Station accident that had been brought before the Supreme Court have ended. TEPCO

deeply regrets having allowed this accident occur and is keenly aware of its responsibilities as the party responsible for the accident. TEPCO will continue to initiatives to "complete compensation" as we fill all of our responsibilities to Fukushima.



Assistance with creating invoices

#### The status of environmental revitalization/recovery promotion activities

In conjunction with the lifting of evacuation orders in specified recovery/revitalization areas we have been providing both human and technical support to meet various demands pertaining to environmental revitalization, such as taking air dose rate measurements.

We engage in patrols of the towns to check in on people that have returned home and also people that are living in temporary accommodations, as well as help with house cleanups.



Post-decontamination walk-down monitoring



Helping to clean up homes in preparation for the return of evacuees

# Cooperation with agricultural revitalization

In order to promote cooperation/coexistence with the region, we are engaged in efforts aimed at revitalizing agriculture, such as helping with the cultivation of sweet potato in Naraha Town.



Sweet potato harvesting

#### Activities to promote distribution in order to prevent/eliminate damage by harmful rumors

In addition to sponsoring events in cooperation with retailers and restaurants, and disseminating information via social networking platforms, etc., as part of activities to promote the distribution of products from Fukushima Prefecture we are also running Internet-based sales campaigns and holding delivery/take-out events in light of the spread of Covid-19.

Furthermore, in order to convey the appeal of products from Fukushima Prefecture to parties overseas, TEPCO acted as an intermediary with the embassies of the Dominican Republic and Australia when we presented peaches grown in Fukushima Prefecture to both embassies as a present from the Fukushima Headquarters of the National Federation of Agriculture Cooperative Association (hereinafter referred to as, "JA Fukushima").



Events held



Food truck providing delivery and take-out services



Presentation ceremony of peaches to the Dominican Republic From left: Ambassador Robert TAKATA, JA Fukushima Prefectural Representative Toshio WATANABE

# Decommissioning

小野間

# We will aim to complete decommissioning in accordance with the Mid/Long-Term Decommissioning Action Plan

This March marked 11 years since the Fukushima Daiichi Nuclear Power Station accident. Under the guidance of the government and other officials, we have moved forward with the decommissioning of Fukushima Daiichi with the assistance and cooperation of a great many people. Since it has been 11 years since the accident, we must consider the aging of various facilities, so we have started to implement preventive maintenance that considers the impact of equipment function loss and malfunctions as we aim to implement maintenance at suitable times based on operation records, and manage our facilities while ascertaining risk.

As we aim for recovery in Fukushima, in April 2022, we signed basic agreements with partner companies as we move forward with preparations to establish new companies, such as the Fuel Debris Retrieval Engineering Company, and a decommissioning-related product manufacturing facility, both scheduled to be created during the 2020s. Going forward, we will continue to build various decommissioning-related facilities and contribute to the economy, employment, human asset cultivation, and prosperity in Hamadori. We will continue to move safely and steadily forward with decommissioning in accordance with the Mid/Long-Term Decommissioning Action Plan in order to enable TEPCO to fulfill its responsibility of "recovery and decommissioning."

During FY2021 we made much progress. We completed paving surfaces on the seaside of the inside of the land-side impermeable wall, reduced the amount of contaminated water being generated to approximately 130m<sup>3</sup>/day, began internal investigations of the Unit 1 primary containment vessel, began performance confirmation tests in Naraha Village of equipment that will be used for the trial removal of fuel debris from Unit 2, built an additional miscellaneous solid waste incineration facility, and completed waterproofing all building openings, which is part of our tsunami countermeasures. At the same time, we are also making preparations for the ocean discharge of water treated with multi-nuclide removal equipment (ALPS treated water), which is a pressing matter that shall be addressed while prioritizing safety, and in accordance with the government's basic policy.

#### Mid/Long-Term Decommissioning Action Plan 2022

In March 2020, we created and announced our Mid/Long-Term Decommissioning Action Plan in order to put forth primary work processes for the entire decommissioning process that are needed to achieve the goals put forth in the Mid/Long-Term Roadmap and the Nuclear Regulation Authority's Risk Map. This action plan was revised in March 2022.



Akira Ono Chief Decommissioning Officer (CDO), President of Fukushima Daiichi Decontamination & Decommissioning Engineering Company

akina Ono

#### **Creating a local industry**

Approximately 70% of the 3,890 employees that work at the Fukushima Daiichi Nuclear Power Station are from the area. In addition to employing people from the region, we continue our initiatives aimed at creating a decommissioning industry and to that end have begun creating new industries in the area. TEPCO has taken the lead in enticing companies from outside of the prefecture with advanced technical prowess to come to the region and are closely coordinating with local companies to create employment, cultivate human assets, and build a foundation for industry and the economy.

		Basic approach	Current initiatives			
To date	STEP 1 Increase participation of local companies	Create an environment that enables local companies to participate in the decommissioning process and expand procurement from local companies as we aim to, "locally procure, as much as possible, work that can be done locally."	<ul> <li>Briefings to explain procurement forecasts</li> <li>Negotiations</li> <li>Continued operation of consultation desk</li> </ul>			
	STEP 2 Support for starting up local companies	Coordinate with related agencies to provide support to help motivated local companies improve their managerial/technical prowess so that they can engage in more advanced decommissioning tasks	<ul> <li>Provide training in consideration of needs</li> <li>Closely follow-up with procurement orders</li> <li>Support for coordinating with companies outside the prefecture</li> </ul>			
Going forward	STEP 3 Create a new local industry	Establish new facilities and companies to enable the development and manufacturing of core technologies/products, which have until now been procured from Tokyo and overseas, in the Hamadori region.	<ul> <li>Build a decommissioning-related product manufacturing facility in cooperation with partner companies</li> <li>Leverage the aforementioned factory to employ people from the region, cooperate with companies in the region, and procure from companies in the region</li> </ul>			

#### Contributing to recovery by creating a decommissioning industry



#### Work environment at the Fukushima Daiichi Nuclear Power Station

Average worker exposure dose for June 2022 was well below the monthly average (1.67 mSv) based on maximum dose limits (100 mSv/5 years).

Based on continuous dust monitor measurement results, we have enlarged the areas at the Fukushima Daiichi Nuclear Power Station in which standard work uniforms can be worn, commonly referred to as the "G Zone," and currently, approximately 96% of the site has been designated a G Zone. Enabling workers to wear standard uniforms instead of protective clothing has resulted in a dramatic improvement of the labor environment by reducing the risk of heatstroke and improving work efficiency.

#### Exposure dose (monthly average dose)





<sup>\*4</sup> Suppression chamber: Part of the primary containment vessel that holds water

#### **Contaminated Water Countermeasures**

At the Fukushima Daiichi Nuclear Power Station (Fukushima Daiichi), we have received the cooperation of a great many people in order to implement countermeasures for contaminated water containing highly concentrated radioactive substances that was generated during the accident. Since our measures for removing radioactive substances contained in this contaminated water, the storage status of treated water, and our plans for disposing of this water in the future are issues of great concern to shareholders and investors, we've created this Q&A page to provide information that is accurate as of the current point in time based upon questions that we have received.

# Approximately how much contaminated water is being generated daily at Fukushima Daiichi, and how are radioactive substances being removed from the contaminated water?

- At current time approximately 130m<sup>3</sup> of contaminated water is being generated daily. The contaminated water is subjected to continuous treatment using multinuclide removal equipment called the Advanced Liquid Processing System (ALPS)
- ALPS has the ability to remove radioactive substances (excluding tritium) to the point where concentrations fall below "legally required concentration limits (standards for discharge into the environment)" stipulated by government regulations.

#### How much contaminated water is currently being stored on-site at Fukushima Daiichi?

• Currently, approximately 1,310,000m<sup>3</sup> of treated water, from which radioactive substances in contaminated water have been removed to reduce risks, is being stored on site. (As of June 30, 2022)

#### What are the characteristics of treated water being stored?

- ALPS treated water currently being stored has had most of the radioactive nuclides, with the exception of tritium, removed from it.
- However, due to equipment malfunctions when the system was first put into operation and operating policies when treatment began, the sum of the ratios of legally required concentrations equals or exceeds 1 for approximately 70% of the water being stored.
- Before discharging treated water into the environment, treated water for which the sum of the ratios of legally required concentrations equals or exceeds 1 will be subject to secondary treatment to reduce the amount of radioactive substances as much as possible and ensure that the sum of the ratios of legally required concentrations is less than 1.

# You will need to obtain the understanding of regional residents in regards to the discharge of treated water that contains tritium into the ocean environment. What are the current initiatives underway?

In August 2021, we made an announcement pertaining to the status of deliberations regarding the handling water treated with multi-nuclide removal equipment (ALPS treated water). Then, in December, we submitted an "Application for Permission to Modify the Implementation Plan Pertaining to the Fukushima Daiichi Nuclear Power Station Specified Nuclear Facility," which compiles the details of these deliberations, to the Nuclear Regulation Authority (NRA). The NRA discussed the design and operation of ocean discharge-related facilities, and the radiological impact assessment of said ocean discharge, at meetings to review the implementation plan which concluded in April 2022. Based on the results of those meetings, we submitted a revised application and received permission on July 22, 2022. In preparation for the commencement of discharge in the spring of 2023, as stipulated in the government's basic policy, we shall continue to listen carefully to the opinions of regional residents and stakeholders, and suitably reflect those opinions in the design and operation of facilities.

#### Plan going forward

#### About two years



\*1 Including radiation impact assessment on human beings and the environment

\*2 Discharges into the sea will be conducted gradually during the initial phase

#### Initiatives to deepen understanding amongst people in Japan and overseas about treated water

We are handling water treated with multi-nuclide removal equipment (ALPS treated water) while prioritizing safety and thoroughly abiding by the government's basic policy.

Along with continuing to disseminate easy-to-understand and scientifically-based information to stakeholders, society, and parties both in Japan and overseas, we are putting all of our effort into deepening understanding about the handling of ALPS treated water, which is part of the decommissioning process, by seizing various opportunities to listen to the concerns and opinions of the people, and giving detailed explanations about TEPCO's approach to this issue and how we are handling it.

Additionally, we are strengthening and developing countermeasures to protect industries from the effect of harmful rumors, and shall suitably provide compensation to parties damaged by harmful rumors that may occur even after these countermeasures have been implemented.

#### Seizing various opportunities to communicate with stakeholders

The entire company is involved in initiatives to explain our approach, safety measures, and reputational damage countermeasures, etc., concerning the handling of ALPS treated water to people in the Tokyo metropolitan region, regional residents, and stakeholders, and listen to their opinions. We have given tours of, and held informal discussions at, the Fukushima Daiichi Nuclear Power Station for the 13 cities, towns, and villages in Hamadori since FY2019, and we are currently enlarging the scope of these initiatives to include all of Fukushima Prefecture. In light of the Covid-19 pandemic, we've also enabled people that cannot physically come to the Fukushima Daiichi to take a virtual tour of it via TEPCO's website (Fukushima Daiichi Virtual Tour), which has been used by universities, high schools, corporations, and also the nuclear regulation bodies of other countries.

- On-site tours/informal discussions: 17 times in total (FY2022 plan)
- Online tours: 59 organizations, 2,250 people: Includes overseas organizations (August 2020 ~August 2022 data)

#### Initiatives to ensure objectivity and transparency

- In February 2022, the International Atomic Energy Agency (IAEA) conducted a safety review of ALPS treated water at the Fukushima Daiichi Nuclear Power Station. During the review, the application for permission to modify the implementation plan that was submitted to the Nuclear Regulation Authority and the radiological impact assessment on people and the environment from the ocean discharge of ALPS treated water were reviewed. In light of these details and in accordance with international standards, the IAEA examined ALPS treated water/discharge water attributes, discharge process safety, and performed a technical review of facility design plans and simulation results to examine the radiological impact on humans and the environment. As a result, the IAEA review report released in April of the same year stated in regards to the safety of facilities pertaining to the ocean discharge of ALPS treated water that, "precise preventative measures have been implemented for facility design and operation procedures," and also stated in regards to the radiological impact assessment that, "the radiological impact on people will be much smaller than limits stipulated by Japan's regulatory authorities." Going forward, TEPCO will continue to undergo reviews conducted based on IAEA international safety standards in accordance with the progress of initiatives, do our utmost to ensure safety, and convey the details of scientifically-based reviews to people both in Japan and all over the world in a highly transparent manner.
- In March 2022, TEPCO formulated a radioactive substance monitoring plan that enhances the measuring of tritium in the ocean area off the coast of Fukushima Prefecture that encompasses the power station, and this plan was put into use in April. In order to ensure transparency and objectivity, TEPCO quickly releases measurement results and has ocean monitoring results analyzed by third parties.

#### ALPS treated water diluting, discharge, and ancillary facilities

Facility configurations and safety measures are as follows:

#### <Secondary treatment facilities>

Water stored in tanks for which the concentrations of radioactive substances, with the exception of tritium, exceed government regulations is repeatedly re-purified and treated until those concentrations fall well below safety regulations prior to discharge.

#### <Measurement/inspection facilities>

At measurement/inspection facilities, ALPS treated water is homogenized and then measured/assessed, not only by TEPCO, but by external agencies to confirm that the concentration of radioactive substances falls below regulations.

#### <Intake/discharge facilities>

Intake facilities will be built so that the water is taken in from outside the harbor in order to avoid any impact of radioactive substances on the harbor.

Discharge facilities shall be built so that the water is discharged via an undersea tunnel at a point approximately 1km offshore to avoid the discharge water from being recirculated with seawater intake.

#### <Transfer facilities>

Transfer facilities will be comprised of a pump for transferring ALPS treated water, pipes, and emergency shut off valves. The emergency shut off valves will be used to cut off the pipes if an abnormality is detected during the dilution of ALPS treated water.

#### <Dilution facilities>

Water to be discharged will be diluted with a quantity of seawater more than 100 times the amount of treated water, and three pumps with a daily capacity of approximately 170,000m<sup>3</sup> will be used to further reduce the concentration of tritium to far below 1,500Bq per liter.

#### <ALPS treated water discharge volume>

We will ensure that the concentration of tritium in ALPS treated water is below 1500Bq/liter, and that the annual amount discharged is less than 22 trillion Bq.

#### Overview of facilities for securing safety



### **Fukushima Information**

(from TEPCO Committee under the government)

Change in the Number of Evacuees

Funds required for Fukushima initiatives as put forth in the TEPCO Reform Proposal



Total: ¥2 trillion (Donations from energy special accounting)

#### Specified Reconstruction and Revitalization Base



Quoted from the Ministry of the Environment's website http://josen.env.go.jp/en/decontamination/#special



(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 and other documents)

## **Corporate 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.

#### **Board of Directors**



The Board of Directors of Tokyo Electric Power Company Holdings, Inc., which is a company with a nominations committee, etc., is made up of people with different genders and diverse expert knowledge and backgrounds. In addition to making important management decisions, the Board receives reports from executives on important management issues and performance, and supervises the execution of duties.

#### Primary Topics Discussed (FY2021)

- 4th Comprehensive Special Business Plan
- Important management issues addressed by the Board of Directors
- Board member duty execution status report
- Status of abiding by the corporate governance code
- Approval of financial statements
- Objectives of the general shareholder's meeting
- Executive appointments
- Board of Director effectiveness assessment
- JERA Inc. monitoring report
- Status of implementation of countermeasures for various natural disasters
- Status of initiatives pertaining to the Tokyo 2020 Olympic/Paralympic games
- Assessment and future handling of initiatives to strengthen cyber security in preparation for the Tokyo 2020 Olympic games

- Status of rate revisions such as, "Denka Jozu"
- Urban development project in the Hibiya area (Uchisaiwaicho District)
- Signing of basic agreement for the establishment of decommissioning-related product manufacturing facility in Hamadori and announcement of the direction taken to create a decommissioning industry in Hamadori
- Status of progress with the decommissioning of the Fukushima Daiichi Nuclear Power Station
- TEPCO's actions in light of the government's basic policy on the disposal of water treated with multi-nuclide removal equipment (ALPS treated water)
- Physical protection incidents at the Kashiwazaki-Kariwa Nuclear Power Station

#### **Primary Resolutions**

#### Abiding by the corporate governance code (December 21, 2021, June 22, 2022)

- A plan for abiding by the corporate governance code that was revised in June 2021 was decided on
- The status of TEPCO's governance system, efforts to secure diverse human assets, and initiatives pertaining to sustainability, etc. (formulation of basic plan, status of initiatives to address each issue, and disclosure of that status) were reviewed, and it was confirmed that TEPCO will continue initiatives aimed at constructing a stronger governance system.

#### Urban development project in the Hibiya area (February 22, 2021, February 25, 2022)

- It was decided that the TEPCO Group shall participate in the next-generation smart city project in the 1-chome block of Uchisaiwaicho District (hereinafter referred to as, "the block").
- It was confirmed that the TEPCO Group shall am to leverage all of its resources to maximize the value of the block by making proposals that take advantage of the knowledge and technical prowess that the TEPCO Group has as an energy operator and its ability to create new value based on carbon neutrality and preparedness.



**Corporate Governance Report** https://www.tepco.co.jp/en/hd/about/ir/management/governance/report-e.html



In order to enable the TEPCO Group to continue to implement innovative business reforms and fulfill its responsibilities to Fukushima while also improving corporate value, the Nominating Committee selects Board member candidates and executives with the character, knowledge, and skills suitable for leading corporate reforms and balancing responsibility with competitiveness. And, as head of the executive branch, the President is expected to lead the company with bold management decisions.

At the first FY2022 meeting of the Nominating Committee, it was decided that Kobayashi, Shinkawa and Yoshino be presented to the general shareholders' meeting as board member candidates, and approval was received at the general shareholders' meeting.

#### Primary Topics Discussed (FY2021)

• Executive personnel changes

The Audit Committee is comprised of outside members with knowledge of accounting, law, and corporate management, and internal numbers intimately familiar with corporate operations. The Committee examines the legality and suitability of the actions of Board members and executives based upon auditing plans while mutually coordinating with internal auditing departments, accounting auditors, and TEPCO Group auditors.

By participating in important meetings of the Board of Directors and executive committee, etc., receiving reports from, and regularly meeting with, Board members and executives, and examining the performance and financial status of Headquarters and other major offices, the Audit Committee examines the status of initiatives aimed at improving profitability and corporate value.

#### Primary Topics Discussed (FY2021)

- Auditing plan/auditing result reports
- Report to the Board of Directors on recommendations pertaining physical protection, and the status of physical protection audits
- Meetings with executive directors

The Compensation Committee is comprised of four outside directors. The basic policy for deciding on remuneration focuses on three issues. 1. Hiring talented human resources that can lead corporate reforms and balance "responsibility with competitiveness" so that our responsibilities for the Fukushima Daiichi Nuclear Power Station can be fulfilled while also safely providing a stable supply of power amidst tough competition; 2. Clarifying responsibilities and achievements; and 3. Increasing incentives to improve performance and stock value. The duties of Board members and executives differ, so remuneration systems also differ. Board members receive only a base salary, while executives (including executives that also serve as board members) receive a base salary in addition to performance-based remuneration.

#### Primary Topics Discussed (FY2021)

- Performance-related remuneration for each executive for FY2021
- Executive remuneration design for FY2022

#### Corporate Governance Structure (as of July, 2022)



TEPCO Group Charter of Corporate Conduct, Corporate Ethics Code of Conduct

\*1 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

## **Remuneration System**

#### Total Amount of Remunerations, etc.

Classification of officers	Total amount of	Total amount by type (Millions	Number of officers			
classification of onicers	(Millions of yen)	Basic remuneration	Productivity-linked remuneration	(Persons)		
Directors (excluding Outside Directors)	23	23	—	1		
Executive Officers	384	275	108	17		
Outside Directors	74	74	_	8		

• The Company does not pay to Directors who concurrently serve as Executive Officer the remuneration paid to Directors. Therefore, "Number of officers eligible" for "Directors" stated above does not include the number of Directors who concurrently serve as Executive Officer.

- The amount of productivity-linked remuneration paid to Executive Officers includes the ¥0.1 million, which is the difference between the productivity-linked remuneration paid for fiscal 2020, to the 14 Executive Officers in office in fiscal 2020 and paid in fiscal 2021, and the productivity-linked remuneration included in the amount of remuneration, etc. disclosed in the fiscal 2020 business report.
- In determining the productivity-linked remuneration, based on the policy for the determination of the contents of remuneration, etc. for each Director and Executive Officer, which was set forth by the Compensation Committee, aiming to achieve the targets of the Fourth Comprehensive Special Business Plan, to ensure that Executive Officers are willing and responsible and the results of these efforts are appropriately reflected, results of the Company (consolidated ordinary income before deducting the amount of special contribution paid under the Nuclear Damage Compensation and Decommissioning Facilitation Corporation Act) and individual performance (cost reduction indicators and other KPIs for each division in charge) in the management plan are set out as indicators in the productivity-linked remuneration. The amount to be paid varies from 0 to 150%, assuming a 100% payment rate at the time of achievement of the target, and is determined by the Compensation Committee after calculation as follows.

Results of the Company: Calculated by multiplying the base amount by the achievement level Individual performance: Calculated by multiplying the base amount by the achievement level or evaluation by the Compensation Committee For indicators in the productivity-linked remuneration, the actual results of the Company amounted to ¥84.9 billion whereas the targets of individual performance were largely achieved according to the evaluation performed based on indicators and KPIs set for each Executive Officer.

#### Policy for the Determination of Remuneration, etc. for Directors and Executive Officers

#### ①Method of determining the policy

In accordance with the provisions of the Companies Act concerning a Company with a Nominating Committee, etc., the Company sets forth policies concerning the determination of the contents of remuneration, etc. for each Director and Executive Officer at the Compensation Committee, which consists only of Outside Directors.

#### ②Policy for the determination of the contents of remuneration, etc. for each Director and Executive Officer

The main duty of each Director and Executive Officer of the Company 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 of safety ensurance and under competitive conditions, while fulfilling the Company's responsibility for the Fukushima Daiichi 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 roles of Directors, who are in charge of supervising corporate management, and Executive Officers, who are in charge of executing business operations. Directors who concurrently serve as Executive Officer receive only the remuneration paid to Executive Officers.

#### a. Remuneration paid to Directors

The remuneration paid to Directors comprises only basic remuneration.

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

#### b. Remuneration paid to Executive Officers

The remuneration paid to Executive Officers comprises basic remuneration and productivitylinked remuneration. The proportion of 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 power to represent the Company and his/her job description. Productivity-linked remuneration: The proportion of productivity-linked remuneration: The proportion of productivity-linked remuneration. The amount of productivity-linked remuneration is set based on his/her specific rank, whether he/she holds the power to represent the Company and his/her job description. The amount of productivity-linked remuneration is determined according to results of the Company and personal performance. c . Level of remuneration to be paid

When determining the level of remuneration to be paid to Directors and Executive Officers, the Company takes into consideration its management environment, the remuneration levels of other companies, etc. 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.

## ③Reasons why the Compensation Committee judged that the contents of remuneration, etc. for Directors and Executive Officers were consistent with the above policy

The contents of remuneration, etc. for Directors and Executive Officers for fiscal 2021 were deliberated and determined by the Compensation Committee, which consists only of Outside Directors, based on the above policy. Specifically, the Compensation Committee deliberated six times on the remuneration levels and remuneration composition for Directors and Executive Officers as well as the amount of productivity-linked remuneration paid to Executive Officers, the Compensation Committee took into account the

achievement level of results of the Company and the achievement level of individual performance targets such as ensuring safety and compliance with laws and regulations and corporate ethics for fiscal 2021, as well as other management conditions. As such, the Compensation Committee judged that the contents of remuneration, etc. for Directors and Executive Officers for fiscal 2021, which had been determined through such procedures, were consistent with the above policy.

## **Risks and opportunities**

TEPCO has established three committees for which the President serves as Chairman in order to increase corporate value and create social value. In each committee, risks and opportunities pertaining to business management are assessed/analyzed, and the results are used when making important management decisions which are then discussed by, and/or reported to, the Board of Directors.

#### **Committee Configuration**

#### **Risk Management Committee**

Chair	President
Vice Chair	Vice President (CRO), Vice President (CHRO), Executive manager in charge of business restructuring and alliances
Members	Vice President (CFO), Vice President (CINO), CIO, Disaster Prevention and Safety Managing Executive Officer, ESG Managing Executive Officer, CDO, Fukushima Revitalization Headquarters Representative, Niigata Headquarters Representative, Nuclear Power and Plant Siting Division General Manager, Nuclear reform manager, core company presidents

#### **Future Management Committee**

Chair	President
Members	Chairman, Vice President (CFO), Vice President (CRO), Vice President (CINO), CIO, ESG Managing Executive Officer, Nuclear Power and Plant Siting Division General Manager, Business Planning Executive Officer/Director, Auditors, core company presidents
Secretariat	Executive manager in charge of business restructuring and alliances

#### ESG Committee

Chair	President
Vice Chair	Vice President (CFO),ESG Managing Executive Officer
Members	Vice President (CHRO), Vice President(CINO), CIO, Disaster Prevention and Safety Managing Executive Officer, Executive manager in charge of business restructuring and alliances, Business Planning Executive Officer, core company presidents

### **Risk Management Committee**

TEPCO has built a risk management system for which the President serves as General Manager and the Chief Risk Management Officer serves as Risk Manager thereby enabling centralized management of TEPCO Group risks during times of normalcy and when risks manifest. In times of normalcy, events that may hinder the achievement of action plan objectives or the business plan-based duty plans of each company are looked at as risks, and risks scenario assessments are revised based on changes to the internal/external environments. These results are used not only to avoid risks, but also for damage control by implementing initial responses to manifested risks, and as important response plans when the company goes into crisis management mode. Six dedicated subcommittees have also been established under this committee for which managing executive directors have been put in charge in order to concentrate discussions on issues and risks in each particular field.

#### Six Subcommittees



#### **Example of FY2021 Achievements**

Key Risks	Response
Providing a stable supply of power during the Tokyo Olympic/ Paralympic Games	Each subcommittee reviewed various training plans to address mechanisms for ensuring the stable supply of power during the Tokyo Olympic/Paralympic games held from July through September 2021, in addition to potential disasters, accidents, cyber-attacks and terrorism, etc. This contributed to our ability to maintain a stable supply of power during the Olympic Games.

### Future Management Committee

As the environment surrounding the energy industry dramatically changes, we are examining the state of our energy business as it pertains to creating new value and increasing the corporate value of the TEPCO Group. During FY2021, we established a Carbon Neutrality Challenge Task Force as a dedicated subcommittee under the supervision of the Future Management Committee in order to shift to a business model that provides new value that revolves around carbon neutrality, and the subcommittee met a total of 29 times.

#### Example of FY2020 Achievements(Carbon Neutral Challenge Task Force)

Theme	<ul> <li>We quantitatively devised multiple scenarios for achieving carbon neutrality throughout Japan by 2050, and discussed a worldview of energy usage in a carbon neutral society as well as the path to such a society, and the differences between each scenario.</li> <li>Detailed case studies were used to examine the potential for renewable energy development and hydrogen business in Japan and overseas, as well as the future state of grids, including distributed power grids.</li> </ul>
Achievements	On April 28, 2022, we announced our "business structure reforms for balancing long-term stable supply of power with carbon neutrality" in which we laid out our plans for focusing on a new business model that centers on locally-produced/locally- consumed facility services, and also how we are going to form alliances and implement business structure reforms in order to make this transition.
Going Forward	In addition to our existing electricity business, we foresee locally- produced/locally-consumed businesses + facility services, such as solar power/storage batteries, etc., and aggregation as the future pillars of our business, and shall deliberate functions required to expand these businesses as well as required department reorganization throughout the entire TEPCO Group.

### **ESG Committee** -

The ESG Committee discusses overall plans for addressing ESG issues, selects ESG issues important to business strategies, and discusses policies for disclosing ESG-related information. Most recently, the committee discussed ESG business strategies and measures for addressing climate change based on the latest ESG trends.

#### Achievements to date

ESG business strategies	(Theme) <ul> <li>Providing information pertaining to the latest ESG trends such as biodiversity, circular economies, human capital, and the formulation of standards for the disclosure of sustainability-related information.</li></ul>
	〈Main Comments〉 <ul> <li>Promoting the deliberation of business plans and business development scenarios focused on carbon neutrality, which is a mid/long-term objective, that will lead to corporate growth. In regards to other topics, we are striving to ascertain and share information pertaining to ESG trends, and take action upon ascertaining the situation. </li> </ul>
Climate change	〈Theme〉 · Building internal mechanisms in preparation for carbon neutrality (addressing Scope 3 emissions, internal carbon pricing)
	<ul> <li>〈Main Comments〉</li> <li>· Firstly, coordinate with Group companies to attempt the visualizations/reduction of Scope 3 CO<sub>2</sub> emissions, including emissions from our supply chain.</li> <li>· Examine the impact of carbon pricing on each business in anticipation of the use of internal carbon pricing when making investment decisions in the future.</li> </ul>

## Data Section Financial Highlights

#### 13-Year Financial Summary \*1

							(1	Millions of yen	)					(Million)	ns of US dollars)
	2022/3	2021/3	2020/3	2019/3	2018/3	2017/3	2016/3	2015/3	2014/3	2013/3	2012/3	2011/3	2010/3	2	2022/3
FYs ended March 31:															
Operating revenues	¥ 5,309,924	¥ 5,866,824	6,241,422	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	\$	43,378
Operating income (loss)	46,230	143,460	211,841	312,257	288,470	258,680	372,231	316,534	191,379	(221,988)	(272,513)	399,624	284,443		378
Income (loss) before income taxes and non-controlling interests	14,075	190,393	69,259	258,625	327,817	146,471	186,607	479,022	462,555	(653,022)	(753,761)	(766,134)	223,482		115
Net income (loss) attributable to owners of the parent	5,640	180,896	50,703	232,414	318,077	132,810	140,783	451,552	438,647	(685,292)	(781,641)	(1,247,348)	133,775		46
Depreciation and amortization	419,203	412,039	422,495	541,805	561,257	564,276	621,953	624,248	647,397	621,080	686,555	702,185	759,391		3,425
Capital expenditures	566,056	608,857	524,462	639,725	602,710	568,626	665,735	585,958	575,948	675,011	750,011	676,746	640,885		4,624
Per share data (Yen):															
Net (loss) income (basic)	¥ 3.52	¥ 112.90	31.65	145.06	198.52	82.89	87.86	281.80	273.74	(427.64)	(487.76)	(846.64)	99.18	\$	0.03
Net income (diluted) (Note 2)	1.13	36.39	10.12	46.96	64.32	26.79	28.52	91.49	88.87	-	-	-	99.18		0.01
Cash dividends	-	-	-	-	-	-	-	-	-	-	-	30.00	60.00		-
Net assets	1,371.15	1,326.49	1,185.98	1,179.25	1,030.67	838.45	746.59	669.60	343.31	72.83	491.22	972.28	1,828.08		11.20
FYs ended March 31 (as of March 3	31):														
Total net assets	¥ 3,222,165	¥ 3,142,801	2,916,886	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	\$	26,323
Equity (Note 3)	3,196,823	3,125,299	2,900,184	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		26,116
Total assets	12,853,505	12,093,155	11,957,846	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		105,004
Interest-bearing debt	5,440,245	4,889,099	4,914,931	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		44,443
Number of employees	37,939	37,891	37,892	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 (%) (Note 4)	0.4	1.2	1.7	2.5	2.3	2.0	2.7	2.2	1.3	(1.5)	(1.8)	2.9	2.1		-
ROE (%) (Note 5)	0.2	6.0	1.8	8.4	12.7	5.9	6.6	24.9	32.9	(72.0)	(66.7)	(62.0)	5.5		-
Equity ratio (%)	24.9	25.8	24.3	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	¥ 406,493	¥ 239,825	323,493	503,709	752,183	783,038	1,077,508	872,930	638,122	260,895	(2,891)	988,710	988,271	\$	3,321
Net cash used in investing activities	(559,791)	(577,215)	(508,253)	(570,837)	(520,593)	(478,471)	(620,900)	(523,935)	(293,216)	(636,698)	(335,101)	(791,957)	(599,263)		(4,573)
Net cash provided (used in) by financing activities	560,596	(20,340)	13,591	(117,698)	12,538	(603,955)	(394,300)	(626,023)	(301,732)	632,583	(614,734)	1,859,579	(495,091)		4,579

1. Amounts of less than one million yen have been omitted. All percentages have been rounded to the nearest unit. Accounting standards pertaining to revenue

awareness (corporate accounting standard #29, March 31, 2020) will be applied from the beginning of the March 2022 term

2. Net income per share after dilution by potential shares for the years ended March 31, 2011 and March 31, 2013 have been omitted. Numbers for the year ending

March 2013 have been omitted as there were no potential shares and the Company recognized a Net income per share after dilution

3. Equity = Total net assets – Stock acquisition rights – Minority interests

4. ROA = Operating income/((Total assets at the end of last term + total assets as of the end of the current term)/2)

5. ROE = Net income/((Total equity at the end of last term + Total equity as of the end of the current term)/2)



**Presentations Back Number** 

#### Operating revenues (billion yen)



From the term beginning March 2022 new accounting standards will be utilized so revenue will decrease because renewable energy charges and renewable energy subsidies conventionally posted as profit, will no longer be posted as profit.

#### Equity ratio (%)



Although capital-to-asset ratio decreased to 5.1% during the term ending March 2012 in conjunction with declining revenues, it had recovered to 24.9% (of as of the end of March 2022) due to a decrease in interest-bearing debts and initiatives to secure profits through continuous cost-cutting measures implemented throughout the entire 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)

Ordinary income (loss) Are income (loss) attributable to owners of the parent



We have remained in the black for the nine consecutive year since March 2014 as a result of the rate revisions made during the term ending March 2013 and various cost reductions. Ordinary income for the March 2022 term decreased YoY by 76.3% to ¥44.9 billion. Furthermore, while ¥116.6 billion of capital subsidies from the NDF were posted as special income, current term net income attributable to owners of the parent company was ¥5.6 billion due to the posting of ¥117.7 billion in nuclear damage compensation, ¥15.8 billion of imbalance charge revenue return loss, and ¥12.8 billion of disaster special loss needed to cover expenses required to repair assets damaged by the earthquake that occurred off the coast of Fukushima Prefecture on March 16, 2022, as special loss.

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



Although interest-bearing debts had increased to ¥9 trillion as of the end of March 2011 as a result of a worsening of our financial standing, this has gradually decreased to ¥5.4 trillion as of the end of March 2022 due to repayment of public bonds.

At the end of March 2012 immediately following the disaster, our D/E ratio was 10.6, but this has dropped to 1.7, the level it was prior to the disaster, as a result of the decrease in interest-bearing debts.

Interest-bearing debts increased compared to the March 2021 term due to primarily corporate bonds and short-term loans payable.

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

Capital expenditures - Depreciation and amortization



- Capital investment (term ending March 2022) decreased approximately 7% YoY to ¥566billion due to an increase in investment in nuclear power equipment, such as for safety measure renovations made at the Kashiwazaki-Kariwa Nuclear Power Station. - Depreciation (term ending March 2022) increased ¥7.1 billion YoY due to fixed-rate depreciation.

#### ROA & ROE (%)

🔶 ROA 🔶 ROE



Although ROA fell to -1.8% at the end of March 2012 as a result of worsening revenue, it has continued to increase since the rate revisions made during the term ending March 2013 and efforts to secure profits through various cost reductions. During the term ending March 2022, ROA dropped to 0.4% as a result of a decrease in operating revenue. Although ROE dropped in conjunction with decreased revenues during the term ending March 2011, it had recovered by the term ending March 2014 due to the rate revisions made during the term ending March 2013 and various cost-cutting measures. During the term ending March 2022, ROE had decreased to 0.2% as a result of the decrease in net income attributable to owners of parent.

ROA = Operating income/((Total assets at the end of last term + total assets as of the end of the current term)/2) ROE = Net income/((Total equity at the end of last term + Total equity as of the end of the current term)/2)

#### Consolidated Balance Sheet

	(Millions	s of yen)	(Millions of US dollars)		
FYs ended March 31:	2022/3	2021/3	20212/3		
ASSETS					
Property, plant and equipmen:	¥ 25,311,430	¥ 25,103,205	\$ 206,776		
Facilities in progress:					
Construction in progress and retirement in progress	1,135,883	1,012,464	9,280		
Suspense account for decommissioning related nuclear					
power facilities	115,224	124,692	941		
Special account related to reprocessing of spent	241 522	107 107	1 072		
	1 497 640	1 334 263	17 194		
	26 804 071	26 437 469	218 970		
	20,004,071	20,437,407	210,770		
Less:					
Contributions in aid of construction	416,231	405,064	3,400		
Accumulated depreciation	19,158,347	18,882,824	156,510		
	19,574,579	19,287,888	159,910		
Property, plant and equipment, net	7,229,492	7,149,580	59,060		
Nuclear fuel:					
Loaded nuclear fuel	81,122	81,151	663		
Nuclear fuel in processing	504,945	503,600	4,125		
	586,067	584,751	4,788		
Investments and other acceter					
long term investments	122 207	110 /0/	1 002		
Long term investments in subsidiaries and associates	1 / 20 700	1 200 460	1,082		
Grants-in-aid receivable from Nuclear Damage	1,400,799	1,309,409	12,097		
Compensation and Decommissioning Facilitation					
Corporation	484,344	490,125	3,957		
Reserve fund for nuclear reactor decommissioning	585,513	485,000	4,783		
Net defined benefit asset	158,277	163,566	1,293		
Other	165,768	137,041	1,354		
	3,007,101	2,783,696	24,566		
Current assets:	962 276	454.000	7.045		
Lash and deposits	862,376	454,886	7,045		
Notes and accounts receivable trade and contract accets	611 267	0/4,112	_		
Investories	011,507	06 775	4,994		
Other	97,100	00,200 כרר כסכ	794		
other	2 0/8 506	1 502 /50	3,902		
PC2.	2,040,390	1,590,459	10,755		
Allowance for doubtful accounts	(17 753)	(73 333)	(145)		
Anomalice for doubtrar accounts	2.030.843	1.575.126	16,590		
Total assets	¥ 12,853,505	¥12,093,155	\$ 105,004		

	(Millions	s of yen)	(Millions of US dollars)
FYs ended March 31:	2022/3	2021/3	2022/3
LIABILITIES AND NET ASSETS			
Long-term liabilities and reserves			
Long-term debt	¥ 2,772,245	¥ 2,528,003	\$ 22,647
Other long-term liabilities	337,142	335,665	2,754
Provision for removal of reactor cores in the			
specified nuclear power facilities	163,968	1/0,369	1,340
Reserve for loss on disaster	496,293	502,384	4,054
Net defined hereft lisbility	487,381	491,147	3,982
Asset retirement obligations	1 036 579	1 016 710	2,045
Assertement obligations	5 617 126	5 376 491	45 888
Current liabilities:	5,017,120	5,570,471	45,000
Current portion of long-term debt	529,256	436.364	4,324
Short-term loans	2,170,398	1,967,761	17,731
Notes and accounts payable-trade	467,654	307,293	3,820
Accrued taxes	57,714	81,885	471
Other	779,702	772,113	6,370
	4,004,727	3,565,418	32,716
Reserve under special laws:			
Reserve for preparation of the depreciation of	9 / 85	8 1 1 3	77
nacical power construction	9 485	8 443	77
Total liabilities	9.631.339	8.950.354	78.681
	.,		
Net assets:			
Shareholders' equity:			
Common stock, without par value:			
Authorized – 35,000,000,000 shares in 2021 and 2020		000.075	
Issued — 1,607,017,531 shares in 2021 and 2020	900,975	900,975	7,360
PIEIEIIEU SLOCK.			
Authorized — 5,500,000,000 shales in 2021 and 2020 Issued — 1,940,000,000 shares in 2021 and 2020	500.000	500.000	4 085
Canital surplus	756 222	756 196	4,005
Retained earnings	980 607	972 790	8 011
Treasury stock, at cost:	200,007	572,750	0,011
4,825,496 shares in 2021 and 4,806,523 shares in 2020	(8,483)	(8,477)	(70)
Total shareholders' equity	3,129,322	3,121,484	25,564
Accumulated other comprehensive income:	10.051	0.047	
Valuation difference on available-for-sale securities	10,051	9,267	82
Deterred galits of losses on nedges	27,326	4,015	223
Lanu revaluation 1055	(2,497)	(2,483)	(20)
Remeasurements of defined henefit plans	6 571	16 092	5/
Total accumulated other comprehensive income	67,501	3.814	552
	07,501	5,614	552
Stock acquisition rights	10	18	0
Noncontrolling interests	25,330	17,483	207
Total net assets	3,222,165	3,142,801	26,323
Total liabilities and net assets	¥ 12,853,505	¥ 12,093,155	\$ 105,004

### Consolidated Statement of Operations

	(Millions	s of yen)	(Millions of US dollars)
FYs ended March 31:	2022/3	2021/3	2022/3
Operating revenues: Electricity Other	¥ 4,841,579 468,344 5 309 924	¥ 5,514,185 352,639	\$ 39,552 3,826
Operating expenses: Electricity Other	4,836,691 427,002	5,409,287 314,076	39,512 3,488
Operating income	46,230	143,460	378
Other income (expenses): Interest and dividend income Interest expense Ioss on disaster Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation Compensation for nuclear damages Share of profit of entities accounted for using the equity method Loss on return of imbalance income and expenditures Gain on settlement	1,137 (44,622) (12,824) 116,607 (117,793) 39,273 (15,841) 7,200	882 (42,681)  142,180 (140,796) 100,635  -	9 (365) (105) 953 (962) 321 (129) 59
Other, net	(4,251)	(12,415)	(35)
Income before special items and income taxes	15,116	191,264	124
Special items: Reversal of (provision for) reserve for preparation of the depreciation of nuclear power construction	(1,041)	(870)	(9)
Income before income taxes Income taxes: Current Deferred	14,075 8,041 (467) 7,574	190,393 8,912 (303) 8,609	115 66 (4) 62
Net income	6,501	181,784	53
Net income attributable to non-controlling interests Net income attributable to owners of the parent	860 ¥ 5,640	888 ¥ 1 80,896	7 \$ 46
Per share information: Net assets (basic) Net income (basic) Net income (diluted) Cash dividends	¥ 1,371.15 3.52 1.13	¥ 1,326.49 112.90 36.39 —	U.S. dollars \$ 11.20 0.03 0.01

#### Consolidated Statement of Comprehensive Income

	(Millions	s of yen)	(Millions of US dollars)
FYs ended March 31:	2022/3	2021/3	2022/3
Net income	¥ 6,501	¥ 181,784	\$ 53
Other comprehensive income (loss):			
Valuation difference on available-for-sale securities	(680)	3,646	(6)
Foreign currency translation adjustments	2,813	(482)	23
Remeasurements of defined benefit plans	(9,080)	29,962	(74)
Share of other comprehensive income (loss) of entities accounted for using equity method	70,647	10,997	577
Total other comprehensive income (loss)	63,700	44,123	520
Comprehensive income	¥ 70,201	¥ 225,907	\$ 573
Total comprehensive income attributable to:			
Owners of the parent	¥ 69,341	¥ 225,019	\$ 566
Non-controlling interests	860	888	7

#### Consolidated Statement of Changes in Net Assets

		Year ended March 31, 2022													
							Millions o	fyen							
			Shareholde	ers' equity				Accumul	ated other co	mprehensiv	ve 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	Non- controlling interests	Total net assets
Balance at April 1, 2021	¥900,975	¥500,000	¥756,196	¥972,790	¥(8,477)	¥3,121,484	¥9,267	¥4,015	¥(2,483)	¥(23,083)	¥16,098	¥3,814	¥18	¥17,483	¥3,142,801
Cumulative effect from accounting chnages	_	-	-	2,161	-	2,161	-	-	-	_	-	-	—	_	2,161
Balance at April 1, 2021 (as restated)	¥900,975	¥500,000	¥756,196	¥974,952	¥(8,477)	¥3,123,646	¥9,267	¥4,015	¥(2,483)	¥(23,083)	¥16,098	¥3,814	¥18	¥17,483	¥3,144,963
Net income attributable to owners of the parent	_	_	_	5,640	_	5,640	_	_	_	_	_	_	_	_	5,640
Purchases of treasury stock	_	_	_	_	(7)	(7)	_	-	_	_	-	_	_	_	(7)
Sales of treasury stock	_	_	(1)	_	1	0	_	_	_	_	_	_	_	_	0
Change in ownership interest of parent due to															
transactions with non-controlling shareholders	_	-	28	-	-	28	-	-	-	-	-	-	-	-	28
Reversal of land revaluation loss	_	-	-	13	-	13	-	-	-	-	-	-	-	-	13
Other	_	_	_	_	0	0	_	_	_	_	_	_	_	_	0
Net changes in items other than															
shareholders' equity	-	-	-	-	-	-	784	23,310	(13)	49,131	(9,527)	63,686	(7)	7,846	71,525
Total changes	_		26	5,654	(5)	5,676	784	23,310	(13)	49,131	(9,527)	63,686	(7)	7,846	77,201
Balance at March 31, 2022	¥900,975	¥500,000	¥756,222	¥980,607	¥(8,483)	¥3,129,322	¥10,051	¥27,326	¥(2,497)	¥26,048	¥6,571	¥67,501	¥10	¥25,330	¥3,222,165

		Tear ended March 51, 2021													
							Millions c	of yen							
			Shareholde	ers' equity				Accumula	ated other co	mprehensiv	e 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	Non- controlling interests	Total net assets
Balance at April 1, 2020	¥900,975	¥500,000	¥756,097	¥791,881	¥(8,474)	¥2,940,480	¥2,167	¥(14,067)	¥(2,471)	¥(9,914)	¥(16,010)	¥(40,295)	¥3	¥16,699	¥2,916,886
Net income attributable to owners of the parent	_	-	-	180,896	-	180,896	-	-	-	_	-	-	_	-	180,896
Purchases of treasury stock	_	_	_	_	(7)	(7)	_	_	_	_	_	_	_	_	(7)
Sales of treasury stock	_	_	(2)	_	3	0	_	_	_	_	-	_	_	_	0
Change in ownership interest of parent due to transactions with non-controlling shareholders	_	_	101	_	_	101	_	_	_	_	_	_	_	_	101
Reversal of land revaluation loss	-	-	-	12	-	12	-	-	-	-	-	-	-	-	12
Other	_	_	_	_	1	1	_	_	_	_	-	_	_	_	1
Net changes in items other than shareholders' equity	_	_	_	_	_	_	7,099	18,082	(12)	(13,168)	32,109	44,110	15	784	44,910
Total changes	-	-	98	180,908	(2)	181,004	7,099	18,082	(12)	(13,168)	32,109	44,110	15	784	225,914
Balance at March 31, 2021	¥900,975	¥500,000	¥756,097	¥972,790	¥(8,477)	¥3,121,484	¥9,267	¥4,015	¥(2,483)	¥(23,083)	¥16,098	¥(3,814	¥18	¥17,483	¥3,142,801

						٢	Year ended Mar	ch 31, 2022							
							Millions of U.	S. dollars							
			Shareholde	ers' equity				Accumul	ated other co	mprehensiv	e 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	Non- controlling interests	Total net assets
Balance at April 1, 2021	\$7,360	\$4,085	\$6,178	\$7,947	\$(70)	\$25,500	\$76	\$33	\$(20)	(\$189)	\$131	\$31	\$0	\$143	\$25,674
Cumulative effect from accounting chnages	—	-	-	18	-	18	—	—	_	—	-	—	-	-	18
Balance at April 1, 2021 (as restated)	\$7,360	\$4,085	\$6,178	\$7,965	\$(70)	\$25,518	\$76	\$33	\$(20)	(\$189)	\$131	\$31	\$0	\$143	\$25,692
Net income attributable to owners of the parent	_	-	-	46	-	46	_	_	-	-	-	_	_	-	46
Purchases of treasury stock	_	_	_	_	(0)	(0)	_	_	_	_	_	_	_	_	(0)
Sales of treasury stock	_	_	(0)	_	0	0	_	_	_	_	_	_	_	_	0
Change in ownership interest of parent due to															
transactions with non-controlling shareholders	-	-	0	-	-	0	-	-	-	-	-	-	-	-	0
Reversal of land revaluation loss	-	-	-	0	-	0	-	-	-	-	-	-	-	-	0
Other	-	_	-	_	0	0	_	_	_	-	-	_	_	_	0
Net changes in items other than															
shareholders' equity	_	-	_	-	_	-	6	190	(0)	402	(77)	521	(0)	64	585
Total changes	-	-	(0)	46	(0)	46	6	190	(0)	402	(77)	521	(0)	64	631
Balance at March 31, 2022	\$7,360	\$4,085	\$6,178	\$8,011	\$(70)	\$25,564	\$82	\$223	\$(20)	\$213	\$54	\$552	\$0	\$207	\$26,323

#### Consolidated Statement of Cash Flows

	(Millions	s of yen)	(Millions of US dollars)		
FYs ended March 31:	2022/3	2021/3	2022/3		
Cash flows from operating activities					
Income before income taxes	¥ 14,075	¥ 190,393	\$ 115		
Depreciation and amortization	419,203	412,039	3,425		
Decommissioning costs of nuclear power units	39,195	37,459	320		
Loss on disposal of property, plant and equipment	28,281	24,347	231		
Increase in reserve for loss on disaster	7,100	2,545	58		
Decrease in net defined benefit liability	(8,686)	(10,434)	(71)		
Increase in reserve fund for nuclear reactor decommissioning	(100,513)	(94,849)	(821)		
Interest and dividend income	(1,137)	(882)	(9)		
Interest expense	44,622	42,681	365		
Share of loss (profit) of entities accounted for using equity method	(39,273)	(100,635)	(321)		
Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation	(116,607)	(142,180)	(953)		
Compensation for nuclear damages	117,793	140,796	962		
Loss on return of imbalanc income and expenditures	15,841	_	129		
Increase in trade receivables	(69,030)	(114,202)	(564)		
Increase (decrease) in trade payables	163,053	(5,766)	1,332		
Other	(43,013)	(81,147)	(351)		
	470,906	300,164	3,847		
Interest and cash dividends received	18,952	16,490	155		
Interest paid	(43,942)	(42,157)	(359)		
Payments for loss on disaster due to the Tohoku-Chihou-Taiheiyou-Oki Earthquake	(16,281)	(28,465)	(133)		
Receipts of Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation	410,100	521,400	3,350		
Payments for nuclear damage compensation	(406,553)	(521,273)	(3,321)		
Income taxes paid	(26,686)	(6,333)	(218)		
Net cash provided by operating activities	406,493	239,825	3,321		

	(Millions	s of yen)	(Millions of US dollars)		
FYs ended March 31:	2022/3	2021/3	2022/3		
Cash flows from investing activities					
Purchases of property, plant and equipment	(551,904)	(599,859)	(4,509)		
Contributions in aid of construction received	22,739	19,017	186		
Increase in long-term investments	(33,821)	(11,287)	(276)		
Proceeds from long-term investments	1,401	1,081	11		
Other	1,793	13,833	15		
Net cash used in investing activities	(559,791)	(577,215)	(4,573)		
Cash flows from financing activities					
Proceeds from issuance of bonds	745,001	957,489	6,086		
Redemptions of bonds	(351,467)	(468,635)	(2,871)		
Repayments of long-term loans	(46,497)	(511,664)	(380)		
Proceeds from short-term loans	4,402,840	4,021,210	35,968		
Repayments of short-term loans	(4,200,387)	(4,026,090)	(34,314)		
Other	11,107	7,348	90		
Net cash (used in) provided by financing activities	560,596	(20,340)	4,579		
Effect of exchange rate changes on cash and cash equivalents	218	(104)	2		
Net (decrease) increase in cash and cash equivalents	407,517	(357,835)	3,329		
Cash and cash equivalents at beginning of the year	454,307	812,143	3,711		
Cash and cash equivalents at end of the year	¥861,825	¥454,307	\$7,040		

# Data Section

# **ESG** Data

## Environment

#### **Environmental Data**

1. TEPCO Holdings and coreoperating companies

 WEB
 Initiatives for the Environment

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

(TEPCO Holdings, TEPCO Fuel & Power, TEPCO Power Grid, TEPCO Energy Partner, and TEPCO Renewable Power)

#### Key figures

	UM	FY2019	FY2020	FY2021	GRI
Installed capacity by energy source *1					
Total net electrical capacity	MW	18,194	18,199	18,200	
Thermal net capacity	MW	57	58	58	
Coal	MW	0	0	0	
LNG	MW	0	0	0	
Oil	MW	57	58	58	
Nuclear net capacity	MW	8,212	8,212	8,212	
Renewable net capacity	MW	9,925	9,929	9,930	
Hydroelectric *2	MW	9,874	9,878	9,879	
Solar	MW	30	30	30	
Wind	MW	21	21	21	
Geothermal	MW	0	0	0	
Biomass and cogeneration	MW	0	0	0	
Net energy production by energy source *1					
Total net electrical production (energy comsumption)	GWh	10,966	11,937	13,106	
Thermal net production (energy comsumption)	GWh	160	159	157	
Coal	GWh	0	0	0	
LNG	GWh	0	0	0	
Oil	GWh	160	159	157	
Nuclear net production (energy comsumption)	GWh	0	0	0	
Renewable net production (energy comsumption)	GWh	10,806	11,778	12,948	
Hydroelectric *2	GWh	10,743	11,722	12,882	
Solar	GWh	31	29	29	
Wind	GWh	32	26	37	
Geothermal	GWh	0	0	0	
Biomass and cogeneration *3	GWh	0	0	0	
Efficiency					
Thermal power plant	%	-	-	-	
Development					
Development of renewable power generation facilities	MW	30	138	192	
Availability					
Nuclear power plant	%	0	0	0	
Network					
Electricity network					
Total transmission network	km	40,804	41,059	40,966	
- of which aerial line	km	28,391	28,585	28,453	
- of which underground cable	km	12,413	12,474	12,513	
Total distribution network	km	381,028	382,290	383,415	
- of which aerial line	km	342,222	343,257	344,208	
- of which underground cable	km	38,806	39,033	39,207	

	UM	FY2019	FY2020	FY2021	GRI
Transmission and distribution loss					
Extra high voltage *4	%	1.3	1.3	-	
High voltage *4	%	3.9	3.7	-	
Low voltage *4	%	6.6	6.9	-	
Average	%	4.3	4.0	4.8	
System Average Interruption Duration Index (SAIDI)	min.	200	7	7	
Smart meter					
Number of installations *5	10k units	2,533	2,840	2,840	
Instalation rate *5	%	87.2	100	100	
Sales					
Electricity volumes	GWh	209,707	192,866	177,118	
CO2 related electricty sales					
Adjusted emissions intensity *6	kg-CO <sub>2</sub> /kWh	0.441	0.441	0.452	
Basic emissions intensity	kg-CO <sub>2</sub> /kWh	0.457	0.447	0.457	
Adjusted emissions *7	ktCO2	92,400	85,100	80,000	
Basic emissions	ktCO2	95,800	86,300	81,000	
Gas volumes	kt	2,170	2,100	2,710	
Environmental compliance					307-1
Total number of non-monetary sanctions	no.	0	0	0	507-1
Significant spill					
Total number of significant spill	no.	0	0	0	

#### Emissions

	UM	FY2019	FY2020	FY2021	GRI
Direct greenhouse gas emissions (Scope 1) *8					
Total direct emissions (Scope 1) *9	ktCO2eq	191	★190	192	
CO2 emissions from electricity production and other activities	ktCO2	120	120	118	
CO2 emissions from vehicles (gasoline and diesel)	ktCO2	8	7	7	
Total other CO <sup>2</sup> eq emissions	ktCO2eq	63	63	67	
N <sub>2</sub> O	ktCO2eq	1	1	1	
HFCs *10	ktCO2eq	3	3	3	
SF6 *10	ktCO2eq	59	59	63	
Other emissions volume					305-1
N <sub>2</sub> O	t	3	3	3	
SF6 *10	t	2.6	2.6	2.8	
SF6 recovery rate					
In equipment inspections	%	>99.5	>99.5	99	
In equipment removal	%	>99.5	>99.5	99	
Fluorocarbon emissions					
Leaked volumes based on the act on rational use and proper management of fluorocarbon	ktCO2eq	9	5	6	
Indirect greenhouse gas emissions (Scope 2) *11					
Total of Scope2, market based *12		5,886	5,205	6,108	
Total of Scope2, location based *13		5,892	5,207	6,098	
Civil uses, hydroelectric and thermal					
electric plants		492	★469	467	
Related to energy purchased from the grid (Scope 2, market based) *12	ktCO2eq	492	★469	467	305-2
Related to energy purchased from the grid (Scope 2, location based) *13	ktCO2eq	497	★471	457	
Related to technical losses from distribution and transmission network	ktCO2eq	5,395	★4,736	5,641	

	UM	FY2019	FY2020	FY2021	GRI
Other indirect greenhouse gas emissions (Scope 3, per GHG protcol) *14					
Total of Scope 3	ktCO2eq	121,446	110,119	102,137	
Category 1 Purchased goods and services	ktCO2eq	1,342	1,236	1,670	
Category 2 Capital goods	ktCO2eq	1,664	1,906	1,779	
Category 3 Fuel- and energy-related activities					
(not included in Scope 1 or Scope 2)	ktCO2eq	112,535	★101,402	91,342	
Category 4 Upstream transportation and distribution	ktCO2eq	0	0	0	
Category 5 Waste generated in operations	ktCO2eq	2	2	3	
Category 6 Business travel	ktCO2eq	4	4	4	
Category 7 Employee commuting	ktCO2eq	11	11	10	
Category 8 Upstream leased assets	ktCO2eq	0	0	0	20E 2
Other (upstream)	ktCO2eq	0	0	0	202-2
Category 9 Downstream transportation and distribution	ktCO2eq	0	0	0	
Category 10 Processing of sold products	ktCO2eq	0	0	0	
Category 11 Use of sold products	ktCO2eq	5,888	★5,559	7,329	
Category 12 End-of-life treatment of sold products	ktCO2eq	0	0	0	
Category 13 Downstream leased assets	ktCO2eq	0	0	0	
Category 14 Franchises	ktCO2eq	0	0	0	
Category 15 Investments	ktCO2eq	0	0	0	
Other (downstream)	ktCO2eq	0	0	0	
Scope 1 and 2					
Market based	ktCO2eq	6,078	5,395	6,300	
Location based	ktCO2eq	6,083	5,397	6,290	
Scope 1, 2 and 3					
Market based	ktCO2eq	127,468	115,304	108,436	
Location based	ktCO2eq	127,474	115,306	108,426	
Other atmospheric emission					
NO <sub>x</sub> emissions	kt	2	2	2	
SO <sub>x</sub> emissions	kt	<1	<1	<1	305-7
Dust emissions	kt	< 0.1	< 0.1	< 0.1	
Direct mercury emissions		0	0	0	

#### Energy

	UM	FY2019	FY2020	FY2021	GRI
Energy comsumption					
Total	GJ	12,574,384	12,376,989	12,322,673	
Electricity production and other activities	GJ	1,733,333	1,738,099	1,705,628	202.1
Vehicles (gasoline and diesel)	GJ	121,574	106,536	96,981	502-1
Electricity, heat and steam (civil uses, hydroelectric and thermal electric plants)	GJ	10,719,477	10,532,354	10,520,063	
Energy consumption intensity in buildings Per total floor space of office (headquarters, branch offices, etc.)	MJ/m <sup>2</sup>	1,407	1,397	1,336	302-3
Renewable energy (in - house power generation)					
Installed buildings	kW	17	17	15	
Installed capacity	kW	229	229	303	
Net energy production	MWh	237	227	225	

#### Raw materials

	UM	FY2019	FY2020	FY2021	GRI
Fuel comsumption					
Coal	kt	<1	<1	<1	
Heavy oil, crude oil, etc.	ML	44	44	43	
Gas (LNG, LPG)	kt	<1	<1	<1	301-1
City Gas	mil m <sup>3</sup>	<1	<1	<1	
Fuel for nuclear power plants	t	0	0	0	
Biomass	kt	0	0	0	

#### Water

	UM	FY2019	FY2020	FY2021	GRI
Water withdrawal in "water stressed" areas					
Total	kilo m <sup>3</sup>	0	0	0	
Water withdrawal					
Total	kilo m <sup>3</sup>	46,015,293	47,420,172	49,463,282	202.2
River water for hydroelectric plants	kilo m <sup>3</sup>	46,014,244	47,419,231	49,462,389	505-5
Industrial water	kilo m <sup>3</sup>	138	67	73	
Municipal water	kilo m <sup>3</sup>	869	849	794	
Groundwater	kilo m <sup>3</sup>	42	25	27	
Water discharge by destination					202.4
Total	kilo m <sup>3</sup>	46,015,326	47,420,242	49,463,282	505-4
Freshwater consumption					202 5
Total	kilo m <sup>3</sup>	3	2	<1	202-2
Water treatment					
Volume of waste water treatment in power plants	kilo m <sup>3</sup>	-	-	-	
COD emissions from power plants	t	-	-	-	

#### Waste

	UM	FY2019	FY2020	FY2021	GRI
Industrial waste by disposal method					206.2
Total generated	kt	146	144	148	200-2
Recycled volume	kt	146	144	148	306-4
Landfill treatment volume	kt	<1	<1	<1	306-5
Recycling rate	%	>99.9	99.9	99.6	
Hazardous waste					
Waste volume containing PCB	kt	25	26	27	
Insulating oil (inadvertently contaminated)	ML	4	4	4	306-4
Pole-mounted transformers	10k units	9	7	5	
High-voltage transformers and capacitors (high contaminated)	units	121	3	24	
Management of remaining PCB equipments					
Pole-mounted transformers	10k units	16	12	8	
High-voltage transformers and capacitors (high contaminated)*17	units	63	23	0	
Ash management					
Total generated	kt	0	0	0	
Recycled volume	kt	0	0	0	
Landfill treatment volume	kt	0	0	0	
Recycling rate	%	-	-	-	

#### Other

	UM	FY2019	FY2020	FY2021	GRI
Electric vehicle					
Number of EV or PHEV	no.	427	569	656	
Rate of EV or PHEV fleets	%	10	15	18	
Green procurement					
Green procurement rate in office supplies (monetary value based)	%	>99.9	99.8	99.9	
Paper bought for printers/ photocopiers					
Number of sheets (equivalent A4 sheets)	mil A4eq	258	205	170	
Weight	t	1,028	818	678	

#### 2. TEPCO Holdings and all of consolidated subsidiary companies

#### **Key figures**

	UM	FY2019	FY2020	FY2021	GRI
Installed capacity by energy source					
Total net electrical capacity	MW	18,345	18,350	18,214	
Thermal net capacity	MW	57	58	58	
Coal	MW	0	0	0	
LNG	MW	0	0	0	
Oil	MW	57	58	58	
Nuclear net capacity	MW	8,212	8,212	8,212	
Renewable net capacity	MW	10,076	10,080	9,944	
Hydroelectric *2	MW	10,021	10,025	9,881	
Solar	MW	31	31	39	
Wind	MW	21	21	21	
Geothermal	MW	0	0	0	
Biomass and cogeneration	MW	3	3	3	
Net energy production by energy source					
Total net electrical production	GWh	11,638	12,561	13,135	
Thermal net production	GWh	160	159	157	
Coal	GWh	0	0	0	
LNG	GWh	0	0	0	
Oil	GWh	160	159	157	
Nuclear net production	GWh	0	0	0	
Renewable net production	GWh	11,478	12,402	12,978	
Hydroelectric *2	GWh	11,396	12,332	12,894	
Solar	GWh	32	31	31	
Wind	GWh	32	26	37	
Geothermal	GWh	0	0	0	
Biomass and cogeneration *18	GWh	19	13	16	
Sales					
Electricity volumes *19	GWh	222,277	204,484	233,812	
Environmental compliance					207.1
Total number of non-monetary sanctions	no.	0	0	0	201-1
Significant spill					
Total number of significant spill	件	10	0	0	
ISO 14001					
Certificated offices *20	no.	24	24	19	

#### Emissions

	UM	FY2019	FY2020	FY2021	GRI
Direct greenhouse gas emissions (Scope 1)					205 1
Total direct emissions (Scope 1)	ktCO2eq	200	203	203	505-1
Indirect greenhouse gas emissions (Scope 2)					
Related to energy purchased from the grid (Scope 2, market based)					
Civil uses, hydroelectric and thermal electric plants	ktCO2eq	520	493	491	205.2
Related to energy purchased from the grid (Scope 2, location based)					505-2
Civil uses, hydroelectric and thermal electric plants	ktCO2eq	525	495	486	
Related to technical losses from distribution and transmission network	ktCO2eq	5,395	4,736	5,641	
Scope 1 and 2					
Market based	ktCO2eq	6,114	5,432	6,335	
Location based	ktCO2eq	6,120	5,433	6,331	

#### Energy

	UM	FY2019	FY2020	FY2021	GRI
Energy comsumption		12 222 052	12 00 1 75 (	12 1 ( 1 0 2 5	302-1
lotal 13	G)	13,223,953	13,084,756	13,161,835	

#### Water

	UM	FY2019	FY2020	FY2021	GRI
Water withdrawal by uses					
Total	kilo m <sup>3</sup>	50,038,077	51,300,384	52,787,101	
River water for hydroelectric plants	kilo m <sup>3</sup>	50,036,857	51,299,291	52,786,057	202.2
Industrial water for thermal electric plants	kilo m <sup>3</sup>	138	67	73	202-2
Municipal water	kilo m <sup>3</sup>	1,040	1,000	944	
Groundwater	kilo m <sup>3</sup>	42	25	27	

#### Waste

	UM	FY2019	FY2020	FY2021	GRI
Industrial waste by disposal method					
Total generated	kt	158	179	212	306-3
Recycled volume	kt	158	179	212	306-4
Landfill treatment volume	kt	<1	<1	<1	306-5
Recycling rate	%	100	100	100	

#### Other

	UM	FY2019	FY2020	FY2021	GRI
Electric vehicle					
Number of EV or PHEV	no.	430	592	690	
Green procurement					
Green procurement rate in office supplies (monetary value based)	%	98.9	97.6	95.3	
Paper bought for printers/ photocopiers					
Number of sheets (equivalent A4 sheets)	mil A4eq	348	323	247	
Weight	t	1,390	1,289	985	

Figures which are marked with ★ have been externally assured by KPMG AZSA Sustainability Co.,Ltd.

Totals may not be exact due to significant digits or rounding. Due to integrating the existing thermal power generation businesses of TEPCO Fuel & Power, Inc. into JERA Co., Inc. as of 1 April 2019, since FY2019 there is a difference in the datas related to thermal electric plants compared to before FY2018.

The values of TEPCO HD and all of consolidated subsidiary companies are the sum of the value multiplying each company data by the voting rights ratio. The values are for the fiscal year (from 1 April to 31 March) or as of the end of the fiscal year (31 March) unless otherwise specified.

\*1 Source: "Surveys and Statistics of Electricity (the Agency for Natural Resources and Energy)"

- \*2 Including pumped-storage power generation

consignment supply, etc. FY2021 data is under calculation. s difficult, the values for FY2020 are listed after FY2021.

e Act on Promotion of Global Warming Countermeasures.

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Adjusted entission is the value and adjustment of recent and scheme to relevance entisevance entisevance entisevance metasized on the Act on Honorotom of validate value and adjustment of recent and scheme to recent adjustment of recent adjustment o

- \*11 Emissions due to the use of electricity, heat and steam supplied by others.
- \*12 "Market based" emissions are emissions which are calculated based on the emissions factor of each electricity retail company. Calculated by using the adjusted emissions factor for each electricity retail company and the emissions factor of heat and steam specified in the Act on Promotion of Global Warming Countermeasures.
- \*13 "Location based" emissions reflect the average emissions factor of grids.
- \*14 Indirect greenhouse gas emissions from business activities in the supply chain, other than direct emissions (Scope 1 emissions) and indirect emissions (Scope 2 emissions). We follow major guidelines have been published: "Corporate Value Chain (Scope 3) Accounting and Reporting Standard(GHG protocol)" "Green Value Chain
- Emissions) we consider mayor galaxies have been plannated compositive scale chain (Sobje 2) relations galaxies (and plannated in protocol) scient value chain Platform (Japanese Ministry of the Environment vebsile, which provide Scope 3 emissions calculation methods and models)' 15 Emissions due to the extraction, production and transportation of fuel resources for power generation: Calculated by multiplying the electricity sold with the emissions coefficient specified in the emissions coefficients database for the calculation of fuel emissions throughout the supply chain available from Japan's Ministry of the Environment.

Emissions associated with the electricity purchased from outside the TEPCO Group: Calculated by multiplying the electricity purchased from outside the TEPCO Group by the emissions factor of the TEPCO Group company that sells electricity and that for power transmission and distribution operators. 16 Emissions associated with the use of city gas we sell: Calculated by multiplying the city gas sold (in calorific value) by the emissions factor specified in the GHG emissions

accounting, reporting, and disclosure system administered by Japan's Ministry of the Environment 17 Reflects exclusions from high contaminated PCBs

Regarding the value related to TEPCO Fuel & Power, Inc. of the value in [] the re-posted value of biomass power generation in thermal power production.
 Figures for FY2020 and earlier show retail electricity. And the total of retail electricity and wholesale electricity is shown in FY2021.

\*20 Added up without multiplying by voting rights ratio

*3	The value in [ ] is the re-posted value of biomass power generation in thermal power production.
*4	The average value of the loss rate results for the past three years from FY2018 due to changes in the contracts for
*5	Since the installation has been completed in all households except for some places where replacement work is
*6	Adjusted emissions intensity is the value after adjustment of feed-in tariff scheme for renewable energy based on th
•7	Adjusted emissions is the value after adjustment of feed-in tariff scheme for renewable energy based on the Ac

## Social

#### **Social Data**

#### TEPCO Group (\*1)

#### (1) Employee-Related Indicators

	Category				GRI		
	Categor	У	UN	FY2019	FY2020	FY2021	GRI
		Total		30,999	30,574	27,898	102.7
1	Number of employees (*2)	Males	People	27,134	26,749	24,244	102-7 405-1
		Females		3,865	3,825	3,654	105 1
		Total		45.1	45.4	45.5	
2	Average age	Males	Age	45.4	45.6	45.8	405-1
		Females		43.1	43.4	43.5	
		Total		24.4	24.6	24.6	
3	Average number of vears on the job	Males	Years	24.7	24.9	24.9	-
	,,	Females		22.3	22.5	22.6	
		Total		4.5	4.8	6.1	
4	Separation rate	Males	%	4.6	4.8	6.3	401-1
		Females		3.5	4.4	4.4	
		Age of youngest employee that management position is offered	Age	35	36	35	
5	Management	Number of women in management positions	People	255	286	273	405-1
		Ratio of women in management positions	%	4.90	5.50	5.80	
6	Employment of physically challenged individuals	Employment rate	%	2.49	2.59	2.20	405-1
	Number of newly hired employees	Total	People	280	462	568	401-1
7		Males		217	392	459	
		Females		63	70	109	
	Number of career	Total		113	135	155	
8	hired employees (highly skilled human	Males	People	93	120	139	401-1
	resources)	Females		20	15	16	
	Mid-career	Total		28.8	22.6	21.4	
9	recruitment ratio of	Males	%	30.0	23.4	23.2	-
	hired employees	Females		24.1	17.6	12.8	
	Number of employees	Total		14	4	8	
10	that have used the system for taking leaves of	Males	People	8	2	4	-
	absence for nursing care	Females		6	2	4	
	Percentage of employees	Total		20.5	21.7	23.9	
11	that have used the system for taking leaves of	Males	%	4.9	4.8	8.2	401-3
	absence for child rearing	Females		100	100	93.6	
12	Male childcare leave		%	82	80.1	83.8	401-3

	Category		1.15.4		CDI			
			UN	FY2019	FY2020	FY2021	GRI	
	13 Rate of returning from childcare leave	Total	%	100	98.6	99.0		
13		Males		100	100	100	401-3	
		Females		100	98.4	98.7		
14	4 Average age of executives (*3)		Age	57	55.6	56.4	-	
15	5 Ratio of employees in unions		%	100	100	100	102-7	

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

	Category		1114		CDI		
			UNI	FY2019	FY2020	FY2021	GRI
1	Lost time incident frequency	rate (LTIR)(employees)	-	0.06	★0.18	0.08	403-2
2	Lost time incident sev	erity rate (LTISR)	-	0.01	0.01	0.01	403-2
		Total		4	10	5	
3	Number of injured	Males	People	4	9	5	403-2
	employees	Females		0	1	0	
4	4 Number of injured contractor/consignors		People	66	38	42	403-2
		Total		0	0	0	
5	Number of fatalities (employees)	Males	People	0	0	0	403-2
	(0.0.0.0.0.0.0.0)	Females		0	0	0	
	Number of fatalities	Total		2	0	2	
6	(contractor/	Males	People	2	0	2	403-2
consignors)	consignors)	Females		0	0	0	

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

Catagony		1154		CDI			
	Category	0101	FY2019	FY2020	FY2021	GRI	
1	Employee training expenses (common training for all companies etc.	Million yen	269	218	360	404-1	
2	Number of employee training hours (common training for all companies etc.)	Cumulative hours	81,356	50,392	107,879	404-1	

 Figures which are marked with ★ have been externally assured by KPMG AZSA Sustainability Co.,Ltd.
 The TEPCO Group in this list refers to four companies: Tokyo Electric Power Company Holdings, TEPCO Fuel & Power, TEPCO Power Grid, TEPCO Renewable and TEPCO Energy Partner
 Including secondment / dispatch
 Seculate outside directors and part-time workers
 Mumber of persons dead or seriously injured in occupational accidents per million hours worked (including incidents involving at least one lost work day, 
 archiver in prodects for subject on the other ride is at for the company. excluding incidents for which only the other side is at fault) Number of persons dead or seriously injured in occupational incidents / total working hours  $\times$  1,000,000 Boundary: Employees of the TEPCO Group including secondment / dispatch

TEPCO	Group and	Consolidated	Subsidiaries,	Employee-	Related	Indicators
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	Catagony		1.15.4		CDI		
	Categor	У	UN	FY2019	FY2020	FY2021	GRI
		Total	People	40,433	40,305	37,939	
1	Number of employees (*2)	Males		34,853	34,644	32,320	102-7
		Females		5,580	5,661	5,619	1051
		Total		45.3	45.6	45.7	
2	Average age	Males	Age	45.7	46.0	46.1	405-1
		Females		42.7	43.0	43.0	
		Total		22.3	22.5	22.3	
3	Average number of vears on the job	Males	Years	22.7	23.0	22.8	-
	years on the job	Females		19.6	19.5	19.2	
		Total		4.6	5.0	6.0	
4	Separation rate	Males	%	4.7	4.9	6.3	401-1
		Females		4.6	4.3	4.8	
		Age of youngest employee that management position is offered	Age	33	33	35	
5	Management	Number of women in management positions	People	315	356	349	405-1
	promotions	Ratio of women in management positions	%	4.38	4.79	5.50	
6	Employment of physically challenged individuals	Employment rate	%	2.48	2.56	2.58	405-1
	Number of newly hired employees	Total	People	505	731	853	
7		Males		370	583	654	401-1
		Females		135	148	199	
	Number of career	Total		464	468	527	
8	hired employees (highly skilled human	Males	People	375	385	386	401-1
	resources)	Females		89	83	141	
	Number of employees	Total		17	8	10	
9	that have used the system	Males	People	10	3	6	-
	absence for nursing care	Females		7	5	4	
		Total		22.3	23.7	27.7	
10	Male childcare leave	Males	%	5.2	5.4	9.3	401-3
		Females		98	100	99	
		Total		99	97.2	99.2	
11	Rate of returning from	Males	%	100	100	100	401-3
		Females		99	96.8	98.9	
12	Average age of execut	ives (*3)	Age	54.1	56.1	56	-
13	Ratio of employees in	unions	%	99.8	99.7	99.8	102-7

## Governance

#### **Governance Data**

	UM	FY2019	FY2020	FY2021
Structure of the Board of Directors				
Number of directors	people	13	13	13
Number of employee representatives on the Board of Directors	people	0	0	0
Classified Board system	—	one-tier system	one-tier system	one-tier system
Number of auditors	people	0	0	0
Corporate officer system	-	Applicable	Applicable	Applicable
Number of directors also corporate officers	people	0	0	0
Ratio of directors also corporate officers	%	0	0	0
Independency of the Board of Directors				
Number of outside directors	people	7	6	6
Ratio of outside directors	%	53.85	46.15	46.15
Number of independent directors	people	7	5	5
Ratio of independent directors	%	53.85	38.46	38.46
CEO duality	-	N/A	N/A	N/A
Independent chairperson	-	N/A	Applicable	Applicable
Independent lead director	_	Applicable	Applicable	Applicable
Presiding director	_	N/A	N/A	N/A
Former CEO or director with the same qualifications	—	N/A	N/A	N/A
Diversity of the Board of Directors				
Number of female directors	people	1	2	2
Ratio of female directors	%	7.69	15.38	15.38
Female CEO (or person with equal qualifications)	_	N/A	N/A	N/A
Female chairpersons (or person with equal qualifications)	-	N/A	N/A	N/A
Number of executives, management executives, corporate officers	people	51	48	58
Internally promoted CEOs (or person with equal qualifications)	—	Applicable	Applicable	Applicable
Number of outside executives	people	7	6	6
Number of female executives	people	4	4	4
Ratio of female executives	%	7.84	8.33	6.9
Age of youngest director	age	50	51	53
Age of oldest director	age	77	74	75
Range of ages of directors	age	27	23	22
Average age of directors	age	61.31	61.23	63.15
Upper age limit for directors		N/A	N/A	N/A
Term of office of directors (years)	years	1	1	1
Term of office of executive directors	vears	1	1	1

	UM	FY2019	FY2020	FY2021
Board of Directors				
Number of meetings	times	21	14	18
Attendance ratio of meetings	%	98.9	98.9	100
Attendance ratio of independent directors	%	98.41	97.92	100
Directors with a Board of Directors attendance rate of less than 75%	people	0	0	0
Nominating Committee				
Number of members	people	6	5	6
Number of independent directors	people	5	3	3
Ratio of independent directors	%	83.33	60	50
Independent chairperson	_	Applicable	Applicable	Applicable
Number of outside directors	people	5	3	4
Number of meetings	times	8	8	9
Attendance ratio of meetings	%	100	97.92	100
Audit Committee				
Number of members	people	5	6	5
Number of independent directors	people	4	4	4
Ratio of independent directors	%	80	66.67	80
Independent chairperson	—	Applicable	Applicable	Applicable
Number of outside directors	people	4	5	4
Number of meeting	times	16	16	21
Attendance ratio of meetings	%	100	97.37	100
Compensation Committee				
Number of members	people	3	4	4
Number of independent directors	people	3	4	4
Ratio of independent directors	%	100	100	100
Independent chairperson	-	Applicable	Applicable	Applicable
Number of outside directors	people	3	4	4
Number of meeting	times	6	5	10
Attendance ratio of meetings	%	100	100	100
Outside compensation advisor nominations	_	N/A	N/A	N/A
Board of Directors/Executive Board Activities				
CSR/Sustainability Committee		Applicable	Applicable	Applicable
CSR Outside Directors		N/A	N/A	N/A
Executive Director (in charge of CSR)		Applicable	Applicable	Applicable
ESG-related executive compensation		Applicable	Applicable	Applicable
ESG-related director compensation	-	I N/A	N/A	N/A



Corporate Governance Report 
 WEB
 Corporate Governance Report

 https://www.tepco.co.jp/en/hd/about/ir/management/governance/report-e.html

	UM	FY2019	FY2020	FY2021
Stockholder's Rights				
Poison pill provision	-	N/A	N/A	N/A
Poison pill plan stockholder approval	- 1	N/A	N/A	N/A
Poison pill TIDE provision	-	N/A	N/A	N/A
Poison pill sunset provision	-	N/A	N/A	N/A
Blank check preferred stock authorization	-	N/A	N/A	N/A
Dual class unequal voting rights	-	N/A	N/A	N/A
Compensation				
Directors				
Number of people paid	people	9	9	9
Total amount of compensation	mil. yen	98	94	98
Executive officers				
Number of people paid	people	16	14	17
Total amount of compensation	mil. yen	336	395	384

- \* When disclosing corporate ESG information, items for which there have been many requests for disclosure from assessment institutions are selected
- \* The number of executives includes Board members, executive officers, executive directors, special auditing directors, fellows, and directors.
- \* Information on the number and age of directors is valid as of June 25, 2020, June 29, 2021, and July 1, 2022
- \* TEPCO's Board of Directors is comprised of six members, Director Kobayakawa, Director Kunii, director Takaura, Director Ohyagi, Director Onishi, and Director Shinkawa. With the exception of Director Shinkawa, all members have registered as independent officers with the Tokyo Stock Exchange.
- Director Shinkawa has not registered as an independent officer but fulfills the independency criteria stipulated by the Tokyo Stock Exchange and also TEPCO's Independency Criteria for Outside Directors.

## Status of use by retailers of power composition

Status of use of electricity power composition and non-fossil fuel certificates delivered to customers by TEPCO Energy Partner<sup>\*1</sup>



# \*1 TEPCO sells 100% renewable energy options and essentially 100% renewable energy options to some customers. This refers to the status of use of power composition and non-fossil fuel certificates other than these options.

- \*2 Hydroelectricity in excess of 30,000kW for which non-fossil fuel certificates are not used, has no value as renewable energy or CO<sub>2</sub> zero-emission power sources, and therefore is treated as electricity that produces some of the national average of CO<sub>2</sub> emissions from electricity, including electricity from thermal power stations.
- \*3 Less than 0.5% and has therefore been rounded to 0%.
- \*4 Some of the expenses incurred by TEPCO through the procurement of FIT electricity are covered by renewable energy power generation promotion charges collected from all users of electricity, including non-TEPCO customers. The portion of this electricity for which non-fossil fuel certificates are not used, has no value as renewable energy or CO<sub>2</sub> zero-emission power sources, and therefore is treated as electricity that produces some of the national average of CO<sub>2</sub> emissions from electricity, including electricity from thermal power stations.
- \*5 Solar/wind/hydro (less than 30,000 kW)/biomass power for which renewable energy non-fossil fuel certificates have been used.
- \*6 Includes electricity procured by from companies for which the power station cannot be identified. Electricity from JPEX is less than 0.5%, so it has been included as "miscellaneous." Electricity procured from JPEX includes hydro, thermal, nuclear, FIT electricity, and renewable energies.
- \*7 The usage status of non-fossil fuel certificates (FY2021) applies to non-fossil fuel certificates for energy generated between January 2021 and December 2021.
- \* Power ratio totals may not add up to 100% due to rounding, and breakdown totals may differ.

TEPCO Energy Partner's CO<sub>2</sub> emissions coefficient (FY2O21 performance) CO<sub>2</sub> emissions coefficient (post-adjustment emissions coefficient) was 0.452kg-CO<sub>2</sub>/kWh\* \* Value reported to the government in accordance with the Law Concerning the Promotion of the Measures to Cope with Global Warming

Refer to page 64 for information on the power composition of our power generation
## ESG rating by external parties

In April 2019, the TEPCO Group established an ESG Office that engages with financial stakeholders and strengthens information disclosure in addition to proactively cooperating with external rating of ESG investment. As a result, external agencies have highly commended the TEPCO Group as a corporate group that proactively promotes ESG initiatives aimed at the development of a sustainable society.

In particular, we have been rated as one of Japan's top power operators by global ESG rating agencies such as S&P Global CSA and FTSE Russell.

Furthermore, we have been chosen by the S&P/JPX Carbon Efficient Index and FTSE Blossom Japan Sector Relative Index, which are ESG indexes used by the GPIF.

Going forward, we shall strive to engage in dialogue and disclose information so as to meet the needs of our financial stakeholders in accordance with these assessments by external parties as we increase corporate value.

#### **External Assessment Indicators**



#### FY2022 External Ratings

Rating agencies	Rating
CDP*	(Climate change) B (Water management) A-
S&P Global (CSA)	66
FTSE Russell	3.4
Bloomberg (ESG disclosure scores)	68.59 (As of September, 2022)

\*Only CDP FY2021 assessment

# Data Section SASB INDEX

The TEPCO Group's performance has been outlined based on the industry-based standard "Electric Utilities & Power Generators" provided by the US Sustainability Accounting Standards Board (SASB).

Since the SASB standards were created for primarily US companies and the US market, there are accounting metrics that do not apply to business activities in Japan, however in light of the main objective of these standards, we have strived to disclose as much information as possible in accordance with them.

The TEPCO Group will continue to make engagement with financial stakeholders as fruitful as possible by incorporating effective information disclosure frameworks, such as IIRC framework and the SASB standards, etc., into our integrated report.

Topic	Code	Accounting Metric		Category	UM	FY2019	FY2020	FY2021	Remark
	Env	/ironmen	t						
		(1) Gross global Scope 1 emissions		Quantitative	t-CO <sub>2</sub>	200,000	203,000	203,000	
	IE-ELI-110-1	(2) Percentage covered under emissions-limiting regulations		Quantitative	%	0	0	0	There is no "regulated market" in Japan.
	11-EO-1108.1	(3) Percentage covered under emissions-rep	orting regulations	Quantitative	%	94	95	95	
		Greenhouse das (GHG) emissions associated	Adjusted emissions	Quantitative	t-CO <sub>2</sub>	102,000,000	90,300,000	86,100,000	CO <sup>2</sup> emissions from TEPCO Energy Partner. Figures in parentheses indicate the amount of CO <sup>2</sup> emissions after
	IF-EU-TTUd.2	with power deliveries	Basic emissions	Quantitative	t-CO <sub>2</sub>	99,200,000	89,300,000	84,900,000	in tariff system based on the Act on Promotion of Global Warming Countermeasures.
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.3	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	_	Since the TEPCO Group transferred its fuel and thermal power operations to JERA in April 2019, scope 1 emissions are extremely low, at 23,000 t-CO <sub>2</sub> . On the other hand, electric power retailers are required to calculate and report greenhouse gas emissions at the retail stage, which are major part of Scope 3 emissions, in accordance with the "Act on Promotion of Global Warming Countermeasures". For this reas the TEPCO Group has set a target of reducing CO <sub>2</sub> emissions from retail electricity sales by 50% by fiscal 2 (compared to fiscal 2013). CO <sub>2</sub> emissions, which were 139.2 million tons in FY2013, were reduced by ab 43% to about 80 million tons in FY2021 through the spread of renewable energy and the procurement c electricity from high-efficiency thermal power plants. The progress rate is approximately 85%. In the future will work to expand renewable energy further and to restart nuclear power in order to contribute to achieving the target.			
	IF-EU-110a.4	<ul> <li>(1) Number of customers served in markets subject to renewable portfolio standards (RPS)</li> <li>(2) Percentage fulfillment of RPS target by market</li> </ul>		Quantitative	Number		Not applicable		The RPS law established RPS regulations in Japan was abolished in 2012 and has shifted to a feed-in tariff system.
				Quantitative	%		Not applicable		We purchase electricity generated by renewable energy at a fixed price.
		(1) Air emissions of $NOr (such diag NO)$		Quantitative	t	2,000	2,000	2,000	
			-	Quantitative	%	100	100	100	
		(2) Air emissions of SOx		Quantitative	t	<1,000	<1,000	<1,000	
Air Quality	IF-EU-120a.4		-	Quantitative	%	100	100	100	
		(3) Air emissions of particulate matter (PM10)		Quantitative	t		Not disclosed		Not disclosed because the measurement method recommended by SASB Standards is not followed.
		(4) Air emissions of lead (Pb)	-	Quantitative	t		Not applicable		
		(5) Air emissions of mercury (Hg)		Quantitative	t		Not applicable		

Торіс	Code	Accounting Metric	Category	UM	FY2019	FY2020	FY2021	Remark		
Environment										
		(1) Total water withdrawn	Quantitative	1000m³	50,038,077	51,300,384	52,787,101			
	IE-ELI-140-1	Percentage of total water withdrawn in regions with High or Extremely High Baseline Water Stress	Quantitative	%	0	0	0			
	IF-EU-140a.1	(2) Total water consumed	Quantitative	1000m <sup>3</sup>	6	2	<1			
		Percentage of total water consumed in regions with High or Extremely High Baseline Water Stress	Quantitative	%	0	0	0			
	IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	0	0	0			
Water Management	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	_	The TEPCO Group operates hydroelectric power plants in more than 200 locations in Honshu, Japan, and the amoun power generation accounts for about 98% of the total. The use of water resources is essential for a clean hydroelectrir power generation business that does not emit CO2 during power generation, and the following risk management is carried out. At dams and downstream of embankments at hydroelectric power plants, the water necessary to maintain the environment of the river is discharged, and the amount of water withdrawn from the river for power generation complies with the amount of water intake permitted by law. In addition, when river flooding due to heavy rain is expected, water will be discharged in advance from the dam based on the flood control agreement with the nationar government, and it plays an important role in reducing heavy rain damage in regional disaster prevention. The results of verifying water stress in the area where our facility is located by using "WRI Aqueduct Water Risk Atlas" tr to identify water risk are as follows. According to the "Baseline Water Stress", water stress is "Medium-high" at the maximum in the business area of the TEPCO Group. So there are no facilities such as drought is low. In "Future Water Stress", there is a suggestion that water sr may be higher. With reference to this result, we will carry out risk assessment based on the actual water usage condit at specific rivers and basins, as well as at power plants locations, and will continue to strive for risk management. In the future, we will consider long-term strategies regarding the impact of physical risks on our facilities such as flood due to climate change.					
		Amount of coal combustion residuals (CCR) generated	Quantitative	t	0	0	0			
Coal Ash	IF-EU-150a.1	Percentage of coal combustion residuals (CCR) recycled	Quantitative	%	_	_	_			
Management	IF-EU-150a.2	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	Quantitative	Number	_	_	_	Not disclosed		
			Soc	ial Capita	I					
		(1) Average retail electric rate for residential customers (per 1kWh)	Quantitative	JPY	27.05	25.13	27.44			
	IF-EU-240a.1	(2) Average retail electric rate for commercial customers (per 1kWh)	Quantitative	JPY	20.57	10.62	20.45	We calculate (2) and (3) from contract types with a large number		
		(3) Average retail electric rate for industrial customers (per 1kWh)	Quantitative	JPY	20.57	10.05	20.45	of contracts.		
		(1) Typical monthly electric bill for residential customers for 500 kWh of electricity delivered per month	Quantitative	JPY	13,180	12,614	13,371			
	IF-EU-240a.2	(2) Typical monthly electric bill for residential customers for 1,000 kWh of electricity delivered per month	Quantitative	JPY	28,494	39,133	41,651	There will be a period of suspension in FY2020 due to the Covid-19.		
Energy Affordability		(1) Number of residential customer electric disconnections for non-payment	Quantitative	Number	75,143	340,048	478,471	We do not disclose the number of disconnections but cancellations. Except rate plan before liberalization of electricities.		
	IF-EU-240a.3	(2) Percentage reconnected within 30 days	Quantitative	%	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.		
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	Discussion and Analysis	_	According to Electricity Business Act,"A General Electricity Utility shall not refuse to supply electricit demand in its service area (excluding, however, demand at the Point of Business Commencemen Scale Demand) without justifiable grounds." Thus, we do not recognize there are any areas withou all the service areas of the TEPCO group. We also recognize that external factors which impact elec fluctuations in the price of thermal power fuels and levies from the Feed-in-tariff law for renewabl based regulations: requires electricity companies to purchase renewable energy at a certain price			Electricity Utility shall not refuse to supply electricity to meet general demand at the Point of Business Commencement and Specified- us, we do not recognize there are any areas without electricity in recognize that external factors which impact electricity rates are and levies from the Feed-in-tariff law for renewable energies.(price to purchase renewable energy at a certain price)		

Торіс	Code	Accounting Metric	Category	UM	FY2019	FY2020	FY2021	Remark		
Human Capital										
		(1)Total recordable incident rate (TRIR) <employees></employees>	Quantitative	%	0.012	0.037	0.017			
Workforce Health & Safety		Total recordable incident rate (TRIR) <contractor consignors=""></contractor>	Quantitative	%	0.125	0.068	0.088	N		
		(2) Fatality rate < Employees >	Quantitative	Person	0	0	0	Since calculation method for fatality rate is not indicated in		
	IF-EU-520a. I	Fatality rate <contractor consignors=""></contractor>	Quantitative	Person	2	0	2	SASB Standard, we report the number.		
		(3) Near miss frequency rate (NMFR) < Employees >	Quantitative	%	0.076	0.09	0.029			
		Near miss frequency rate (NMFR) <contractor consignors=""></contractor>	Quantitative	%	0.21	0.11	0.14			
Business-Model & Innovation										
		(1) Percentage of electric utility revenues from rate structures that are decoupled	Quantitative	%				There are no decoupled or LRAM system customers in Japan. With regard to sales that have declined due to progress in		
	IF-EU-120a.4	(2) Percentage of electric utility revenues from rate structures that contain a lost revenue adjustment mechanism (LRAM)	Quantitative	%		ποι αρριτασίε		energy conservation, we will increase sales by providing gas sales and various services that meet customer needs.		
End-Use Efficiency & Demand	IF-EU-420a.2	Percentage of electric load served by smart grid technology	Quantitative	%	(1) 87[%] (2) 25.33 mil.	(1) 100[%] (2) 28.40 mil.	(1) 100[%] (2) 28.40 mil.	<ul> <li>(1) The rate of smart meters installed in all service areas of the TEPCO Power Grid</li> <li>(2) The number of smart meters installed in all service areas of the TEPCO Power Grid</li> <li>* Target goals in FY2020: approx.29 million smart meters installed</li> <li>* Since the installation has been completed in all households except for some places where replacement work is difficult, the values for FY2020 are listed after FY2021.</li> </ul>		
	IF-EU-420a.3	Customer electricity savings from efficiency measures, by market	Quantitative	MWh	The number c TEPCO Group solutions: App over 39,000 h Energy saving online service website regist	The number of customers to whom the TEPCO Group offers electricity saving solutions: Approx. 750 companies, and over 39,000 households Energy saving services introduced through online services: 9,401,869 (number of website registered members )		We disclose the following quantitative data instead of customer electricity savings. TEPCO Energy Partner provides various solutions electrification and energy saving solutions to customers.(cf. http://www. tepco.co.jp/ep/solution/) 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.		
			Leadersh	ip & Gove	rnance					
Nuclear Safety & Emergency Management	IF-EU-540a.1	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	Quantitative	Number	17 Units (Fukushima Daiichi: 6 Units, Fukusima Daini: 4 Units, Kashiwazaki- Kariwa: 7 Units)			<ul> <li>* 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.</li> <li>* 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.</li> </ul>		
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	Discussion and Analysis	_	TEPCO has been moving ahead with nucle Fukushima Nuclear Accident and Nuclear S progress is checked and reported on quarte (cf. http://www.tepco.co.jp/challenge/nuc			r safety reforms in accordance with the "Reassessment of the afety Reform Plan" formulated on March 29, 2013. Reform Prly. ear_safety/)		
	IF-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	Quantitative	Number		Not disclosed		We do not disclose the results in light of the risks of cyber attackes that may be caused by dislclosing the results.		
Grid Resiliency	IF-EU-550a.2	(1) System Average Interruption Duration Index (SAIDI), inclusive of major event days	Quantitative	Minutes	200	7	7	-		
	IF-EU-550a.2	(2) System Average Interruption Frequency Index (SAIFI), inclusive of major event days	Quantitative	Times	0.33	0.11	0.11	The number has been increased due to the power outages caused by typhoon Faxai in 2019.		
	IF-EU-550a.2	(3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	Quantitative	Minutes/Times	606.06	63.64	63.64			

Code	Accounting Metric	Category	UM	FY2019	FY2020	FY2021	Remark
	(1) Number of residential customers served	Quantitative	Number	16,996,000	15,764,000	14,879,000	
	(2) Number of commercial customers served	Quantitative	Number	210 000	105 000	105.000	Total of (2) and (3)
IF-EU-000.A	(3) Number of industrial customers served	Quantitative	Number	218,000	195,000	165,000	
	Reference : Number of contracts for low-pressure supply contracts excluding household use	Quantitative	Number	7,297,000	7,217,000	7,300,000	
	(1) Total electricity delivered to residential customers	Quantitative	MWh	60,200,000	69,900,000	65,267,000	
	(2) Total electricity delivered to commercial customers	Quantitative	MWh	145 400 000	120 200 000	116 102 000	Total of (2) and (2)
IE-ELI-000 B	(3) Total electricity delivered to industrial customers	Quantitative	MWh	145,400,000	129,200,000	110,105,000	
1 20 000.0	(4) Total electricity delivered to all other retail customers	Quantitative	MWh	16,700,000	5,400,000	4,904,000	low-pressure supply contracts excluding household use
	(5) Total electricity delivered to wholesale customers	Quantitative	MWh	Not disclosed			(5) is not disclosed due to competition through electricity market liberalization.
IF-EU-000.C	Length of transmission lines <overhead></overhead>	Quantitative	km	28,391	28,585	28,453	
IF-EU-000.C	Length of transmission lines <underground></underground>	Quantitative	km	12,413	12,474	12,513	
IF-EU-000.C	Length of distribution lines <overhead></overhead>	Quantitative	km	342,222	343,257	344,208	
IF-EU-000.C	Length of distribution lines <underground></underground>	Quantitative	km	38,806	39,033	39,207	
	Total electricity generated	Quantitative	MWh	11,638,000	12,561,000	13,135,000	
	Percentage by major energy source <coal></coal>	Quantitative	%	0	0	0	
	Percentage by major energy source <natural gas=""></natural>	Quantitative	%	0	0	0	
	Percentage by major energy source <nuclear></nuclear>	Quantitative	%	0	0	0	
	Percentage by major energy source <petroleum></petroleum>	Quantitative	%	1	1	1	
IF-EU-000.D	Percentage by major energy source <hydropower></hydropower>	Quantitative	%	98	98	98	
	Percentage by major energy source <solar></solar>	Quantitative	%	0.3	0.3	0.2	
	Percentage by major energy source <wind></wind>	Quantitative	%	0.3	0.2	0.3	
	Percentage by major energy source <other renewables=""></other>	Quantitative	%	0.2	0.1	0.1	
	Percentage by major energy source <other gases=""></other>	Quantitative	%	0	0	0	
	Percentage in regulated markets	Quantitative	MWh,%	Not applicable			There is no "regulated market" in Japan.
IF-EU-000.E	Total wholesale electricity purchased	Quantitative	MWh	Not disclosed			Due to competition through electricity market liberalization

### Data Section **Consolidated Subsidiaries** (as of March 31, 2022)

#### **TEPCO Holdings**

**TEPCO Fuel & Power, Inc. TEPCO** Power Grid, Inc. **TEPCO Energy Partner, Inc.** TEPCO Renewable Power, 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. TEPCO FinTech, Inc TEPCO GLOBAL ENERGY PTE. LTD. Tokyo Electric Power Timeless Capital, Inc. Recyclable-Fuel Storage Company ATEMA KOGEN RESORT INC. e-Mobility Power Co., Inc. litate Bio Partners Company Limited TOSETSU CIVIL ENGINEERING CONSULTANT INC. TEPCO Innovation & Investments US, Inc. TEPCO Life Service, inc. **TEPSCO** Vietnam Japan Charge Network Co., Ltd. Tokyo Electric Power Timeless Capital 1, ILP Tokyo Electric Power Timeless Capital 2, ILP TOKYO RECORDS MANAGEMENT CO., INC. TRENDE

#### **TEPCO** Power Grid

Tokyo Densetsu Service Co., Ltd. Tepco Town Planning Co., Ltd. Tokyo Land Management Corporation Tepco Solution Advance Co., Ltd. **TEPCO Power Grid UK Limited** TEPCO LOGISTICS CO., LTD. Energy Gateway, Inc. TEPCO OPTICAL NETWORK ENGINEERING INC.

#### **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. TEPCO Energy Partner International (Thailand) Co., Ltd. NF Power Service HFP Laboratory, LLC社

#### **TEPCO** Renewable Power

**TEPCO** Renewable Power Singapore The Tokyo Electric Generation Company, Incorporated

#### **Basic Stock Information**

Securities identification code	9501			
Stock listings	Tokyo Stock Exchange, Prime Market *as of April 4, 2022			
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 shares100Class A preferred shares100Class B preferred shares10			
Fiscal year	April 1 to March 31 of the following year			
General meeting of shareholders	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			

\* 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]

Number of government organizat	ions: 28	
433,796		lumber of financial institutions: 66
Number of individuals and others: 421,118	Total number of common shares	4,052,622
6,396,636	- 16,012,578	business operators: 59
	shareholders:	179,788
Number of foreign investors, etc.: 1,037	424,533)	Number of domestic corporations: 2,225
4,358,123		591,613

#### Major Shareholders (Top 10 Shareholders)

Name of Shareholder	Number of voting rights	Ratio (%)
Nuclear Damage Compensation and Decommissioning Facilitation Corporation	16,000,000	50.09
The Master Trust Bank of Japan, Ltd. (Trust Account)	2,224,782	6.97
Custody Bank of Japan, Ltd.(Trust Account)	626,248	1.96
TEPCO Employees Shareholding Association	532,597	1.67
Tokyo Metropolitan Government	426,767	1.34
Sumitomo Mitsui Banking Corporation	359,275	1.12
STATE STREET BANK WEST CLIENT - TREATY 505234	264,978	0.83
Nippon Life Insurance Company	264,005	0.83
JP MORGAN CHASE BANK 385781	199,180	0.62
JP JPMSE LUX RE BARCLAYS CAPITAL SEC LTD EQ CO	196,515	0.62

**Data Section** 

# Links

Corporate Ethics and Compliance Policies https://www.tepco.co.jp/en/hd/about/corporate/policy-e.html

Corporate Governance https://www.tepco.co.jp/en/hd/about/ir/management/governance/index-e.html

4th Comprehensive Special Business Plan https://www.tepco.co.jp/en/hd/newsroom/press/archives/2021/20210721\_02.html

Responsibility for the Revitalization of Fukushima https://www.tepco.co.jp/en/hd/responsibility/revitalization/

Treated Water Portal Site https://www.tepco.co.jp/en/decommission/progress/watertreatment/

Nuclear Power Generation https://www.tepco.co.jp/en/hd/ourbusiness/nuclear/

Environmental Management https://www.tepco.co.jp/en/hd/about/esg/environment/management-e.html

ESG (Initiatives Pertaining to TCFD, SASB, GRI and Human Resources) https://www.tepco.co.jp/en/hd/about/esg/

Human Resource Education/Training (Japanese only) https://www.tepco.co.jp/about/esg/hractivate/training.html

Management's Commitment to Diversity (Japanese only) https://www.tepco.co.jp/about/esg/hractivate/diversity.html

Efforts to Respect Human Rights https://www.tepco.co.jp/en/hd/about/esg/social/hrights-e.html

Basic Policy on Procurement https://www.tepco.co.jp/en/hd/about/procurement/policy-e.html Green Procurement https://www.tepco.co.jp/en/hd/about/procurement/green-e.html

Safety Activities (Japanese only) https://www.tepco.co.jp/about/esg/hractivate/safety.html

Privacy Policy https://www.tepco.co.jp/en/hd/privacypolicy/index-e.html

DX at the TEPCO Group (Japanese only) https://www.tepco.co.jp/about/about-dx/index-j.html

IR Library https://www.tepco.co.jp/en/hd/about/ir/library/

TEPCO Illustrated https://www.tepco.co.jp/en/hd/about/illustrated/

Corporate Information https://www.tepco.co.jp/en/hd/about/corporate/

TEPCO Renewable Power https://www.tepco.co.jp/en/rp/

TEPCO Power Grid https://www.tepco.co.jp/en/pg/

TEPCO Energy Partner https://www.tepco.co.jp/en/ep/

TEPCO Fuel & Power https://www.tepco.co.jp/en/fp/

JERA https://www.jera.co.jp/english/



#### Facebook www.facebook.com/OfficialTEPCO



twitter www.tepco.co.jp/twitter/index-j.html



Instagram www.instagram.com/tepco.official/



youtube www.youtube.com/user/TEPCOofficial

## Editor's Note

# TEPCO Integrated Report 2022 Team ESG Office

We have created the TEPCO Integrated Report for the purpose of using it as a communication tool to promote two-way dialogue with our readers, namely financial stakeholders both within and outside of Japan.

In addition to reporting on how the company has dealt with various social circumstances during the reporting period and changes to TEPCO Group operations, we also did our best to include, as much as possible, the information that our readers would like disclosed.

We have heard many opinions and proposals, not only about issues pertaining to information disclosure, but also about management itself. Opinions that can lead to solving management issues have been relayed to upper management through the ESG Committee and are being discussed internally. When this results in improved operation or the creation of new value, it is included in this report so we can engage with stakeholders in a more beneficial manner.

Engagement with our readers is not only necessary to further develop this report, but also for the sustainable growth and value creation of the TEPCO Group.

We would be delighted to receive your frank views and feedback on this report.

Yasuhiko Katsube General Manager, ESG Office, Corporate Management & Planning Unit

Yuki Tomita ESG Communication Group Manager



The amount of electricity used in the printing process of this integrated report is all covered by wind power.







#### Inquiries

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