

Bringing you Electricity, Caring for the Environment



TEPCO Environment Highlights 2010



TOKYO ELECTRIC POWER COMPANY

We, TEPCO, have always worked to protect the environment as we make electricity.
 We consider it an ongoing and endless mission of ours.
 It is nature that supports the activities of all life on the Earth,
 and we aim to help keep it rich and vital even after a century.
 We carry out activities of environmental preservation that look far into the future.



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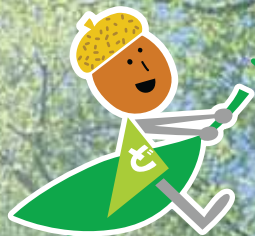
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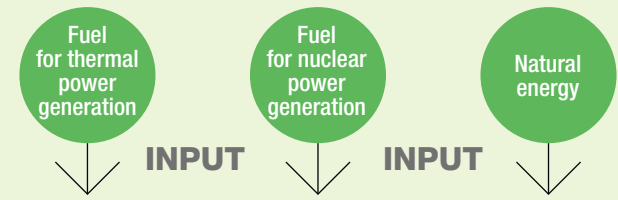
My name is Green Acorn. I was born in a beech tree forest that is home to a lot of wildlife. I'll be showing you around the TEPCO Environment Highlights 2010!



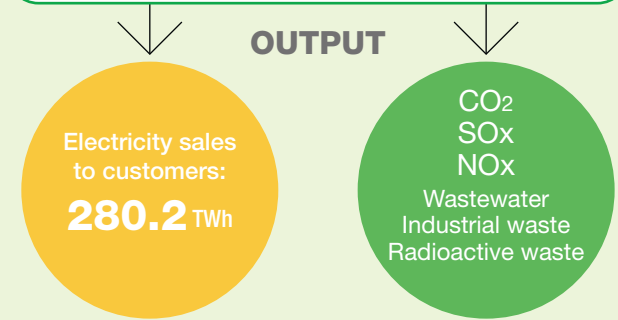
Corporate profile Corporate profile (as of March 31, 2010)

Company name:	Tokyo Electric Power Company, Inc. (TEPCO)
Head office address:	1-1-3 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-8560, Japan
Date of establishment:	May 1, 1951
Capital Stock:	JPY676.4 billion
Sales:	JPY4,804.4 billion (FY2009)
Employees:	38,227
Electricity sales:	280.2 TWh (FY2009)

Input-output table for power operations FY2009



Power generation at TEPCO	
Thermal power generation:	161.2 TWh
Nuclear power generation:	80.9 TWh
Hydroelectric power generation:	10.1 TWh
Natural energy power generation:	0.013 TWh
Power for pumping water:	-1.7 TWh
Plant-use power:	-9.7 TWh
Purchase from other companies:	54.0 TWh
<hr/>	
Transmitted electrical power:	294.8 TWh
(Power transmission and distribution loss:	-14.2 TWh
Substation-use power:	-0.4 TWh



 **Protecting and supporting nature**

23 Approaches to harmonization with nature

 **Sharing the task of saving our Earth**

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 TEPCO website <http://www.tepco.co.jp/en/>

Details of TEPCO approaches related to the environment
 TEPCO website > Challenges of TEPCO > Environment & Community > TEPCO Environment Highlights
Information on various TEPCO approaches (data with figures) to building sustainable societies
 TEPCO website > Challenges of TEPCO > Environment & Community > Sustainability Report



Protecting the Earth from global warming

Low-CO₂ electricity

3

ECO-knowledge

Eco at TEPCO

Terminology

Greenhouse gases (GHG)

A collective term for CO₂ and other gases that absorb heat radiation from the ground (in the form of infrared rays) and so prevent it from escaping outside the atmosphere. The Kyoto Protocol specifies six types: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆).

Kyoto Protocol

An international agreement concluded at the Third Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3) held in Kyoto in 1997.

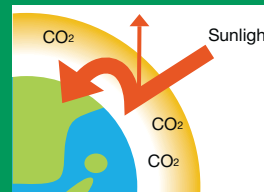
Under the Protocol, the developed countries taken together are to reduce their (average annual) emissions of greenhouse gases over the years 2008–2012 by at least 5% relative to 1990.



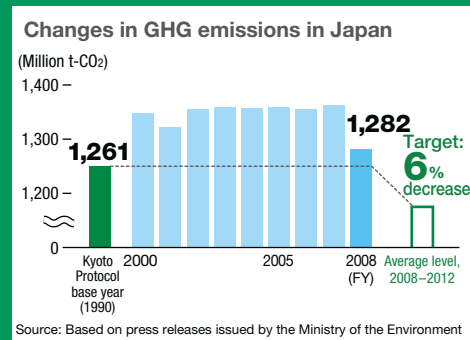
Mechanism of global warming

Why is global warming occurring ?

- 1 Sunlight is absorbed by the surface of the ground and turned into heat. Some of the heat that would otherwise rise from the ground and eventually go outside the atmosphere is absorbed by greenhouse gases (GHG)* in the atmosphere. As a result, ground temperatures are kept within ranges conducive to habitation by wildlife.
- 2 An increase in the GHG emissions means an increase in heat retained in the atmosphere and, by extension, a rise in temperatures on the ground. The type of GHG at the focus of concern today is carbon dioxide (CO₂), which results from combustion of oil, coal, and other fossil fuels.



Current status of global warming



In the Kyoto Protocol[®], which was effected in 2005, Japan pledged to reduce its GHG emissions over the years 2008–2012 by 6 percent relative to 1990. But its emissions are, on the contrary, increasing. A worsening of global warming is anticipated to have various adverse effects, including a rise in the sea level and climate change. As such, its mitigation requires urgent action by society as a whole.

Reduction of CO₂ emissions both when producing and when using power

Even though it is all electricity, the level of CO₂ emissions differs according to different types of power generation. At TEPCO, we are pursuing the production of power with low CO₂ emission levels by means such as nuclear power generation, which emits no CO₂; improving increase in the thermal efficiency of thermal power generation, and introduction of renewable energy.

In order to realize a low carbon society, we are also working to develop high-efficiency products and provide information linked to lower CO₂ emissions when our customers use power, as well as taking part in projects to reduce CO₂ emissions in other countries.

TEPCO is working to reduce CO₂ emissions at the stages of both power generation and energy use.



TEPCO approaches

Protecting the Earth from global warming



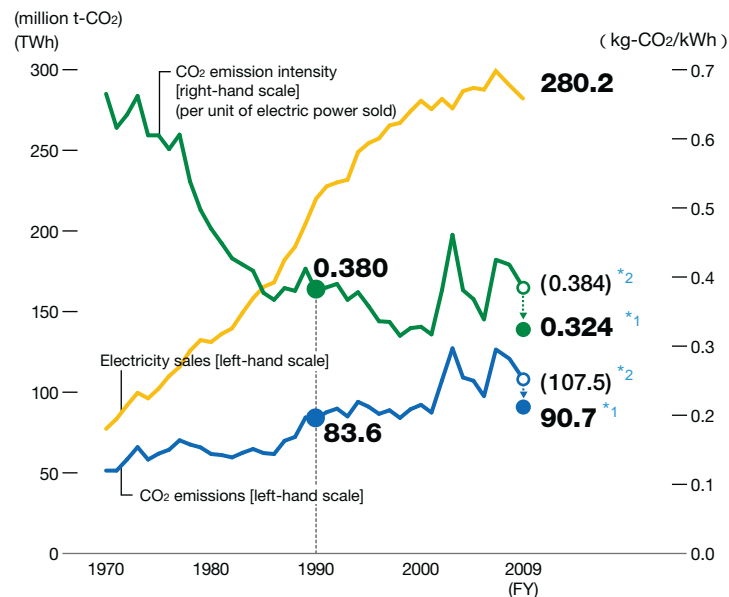
TEPCO's voluntary target

20% reduction in average annual CO₂ emission intensity* over the five-year period (FY2008–2012) relative to FY1990

20%

0.304 (kg-CO₂/kWh)

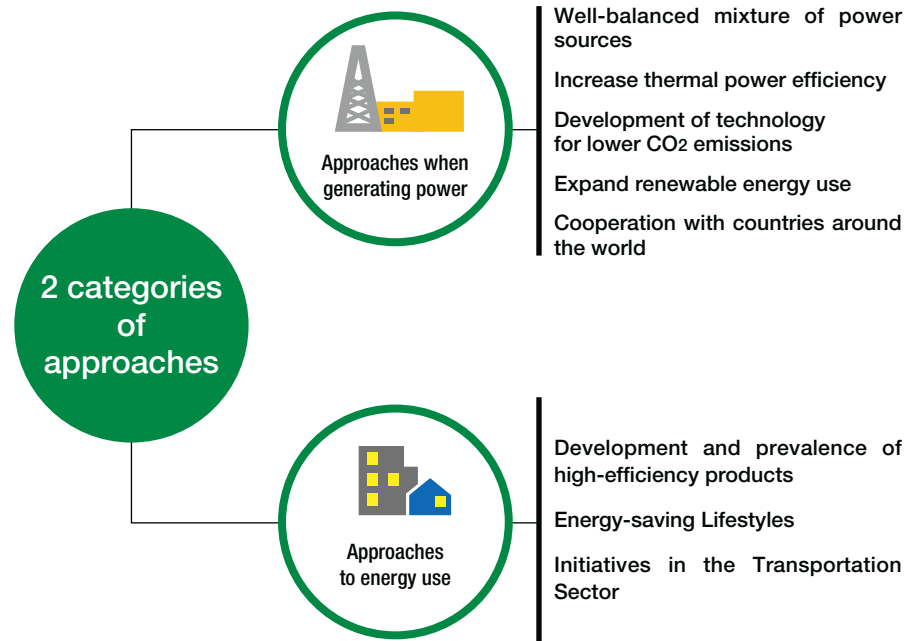
Changes in CO₂ emissions and emission intensity



* TEPCO's CO₂ emission intensity is calculated based on the "greenhouse gas emissions calculation, reporting, and disclosure system" stipulated by the Law Concerning the Promotion of Measures to Cope with Global Warming. Note that the system does not take into account CO₂ reduction values achieved through the Green Power Certification System or other such mechanisms.

^{*1} Values adjusted to reflect carbon credits.
^{*2} Values prior to reflecting carbon credits.

Two categories of approaches to protect the world from warming



Terminology

CO₂ emission intensity

The amount of CO₂ emissions entailed by use of 1 kWh of power

$$\text{CO}_2 \text{ emissions intensity (kg-CO}_2\text{/kWh)} = \frac{\text{Total amount of CO}_2 \text{ emissions (kg-CO}_2\text{)}}{\text{Power sales (kWh)}}$$

CO₂ emissions intensity after adjustment (kg-CO₂/kWh)

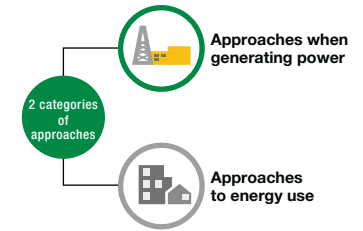
$$= \frac{\text{Total amount of CO}_2 \text{ emissions (kg-CO}_2\text{)} - \text{Carbon credits (kg-CO}_2\text{)}}{\text{Power sales (kWh)}}$$

* Carbon credits are CO₂ reduction amounts obtained from projects designed to reduce greenhouse gases.



Protecting the Earth from global warming

Well-balanced mixture of power sources



Terminology

Liquefied natural gas (LNG)

LNG is produced by liquefying natural gas, which consists mainly of methane (CH₄) and ethane (C₂H₆), by cooling it to minus 162°C.

The level of CO₂ emissions varies with the method of power generation

Nuclear power, hydropower, and natural energy (e.g., solar and wind power) do not emit CO₂ in the power generation process. Thermal power stations fired with fossil fuels such as coal and oil emit CO₂, but can lower these emissions relatively by using liquefied natural gas (LNG)* as fuel.

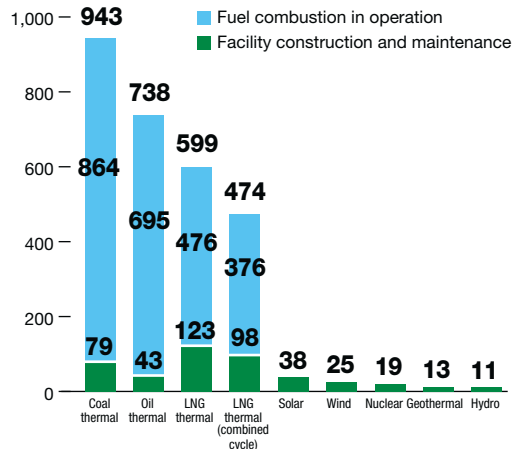
Utilization of nuclear power and LNG helps to curtail CO₂ emissions

TEPCO utilizes the well-balanced combination of energy resources to provide an economical and stable supply of electricity with consideration for the environment. Especially, our longtime efforts to promote use of nuclear power and LNG are helping to curtail CO₂ emissions.

TEPCO therefore has power stations of the nuclear, LNG-fired thermal, other thermal, hydro, and other types. If we had only oil-fired thermal power stations, our CO₂ emissions would be over 1.9 times as high.

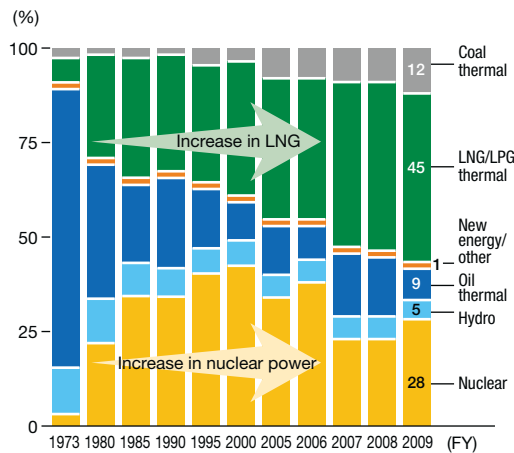
Life cycle CO₂ emissions by type of power generation

g-CO₂/kWh (transmitting end)

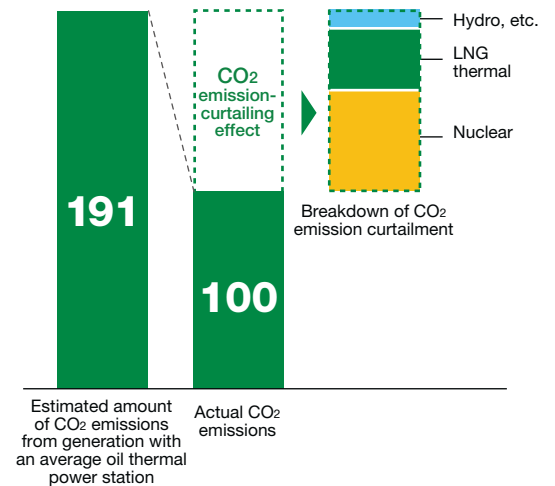


* Due to rounding, total figures may not equal sums from additions.
 * The above figures show CO₂ emissions from energy consumed during all stages: extraction of raw materials, construction of power generation facilities and the like, fuel transportation and refining, plant operation and maintenance and burning of fuel to generate power. CO₂ from nuclear power includes emissions from domestic reprocessing of spent fuels and the utilization of MOX fuels in light water reactors as per current plans and also includes disposal of high-level radioactive wastes.
 Source: Central Research Institute of Electric Power Industry report, "Evaluation of Life Cycle CO₂ Emissions of Power Generation Technologies"

Trends in the composition of power generation



CO₂ emission-curtailing effect



* Test calculation of CO₂ emission reduction potential if actual CO₂ emissions = 100 (FY2009 performance)

TEPCO is working to reduce CO₂ emissions with a well-balanced combination of generation methods.



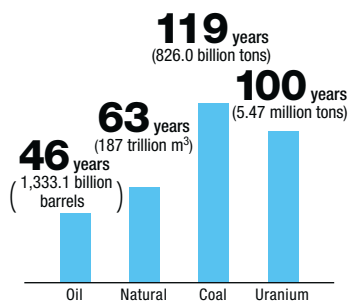
Column Japan — aiming for well-balanced energy utilization

The situation in Japan, which has to import finite energy resources

The supply of energy resources such as oil and natural gas is limited. Moreover, the future is projected to bring an increase in energy consumption, especially in China and other Asian countries, and this is causing apprehensions about a tighter supply of energy worldwide. Under these circumstances, assurance of energy supply stability is a vital issue for Japan, which has few resources of its own and depends on import for almost of all of its energy.

Ratio of reserves to production (remaining years)*

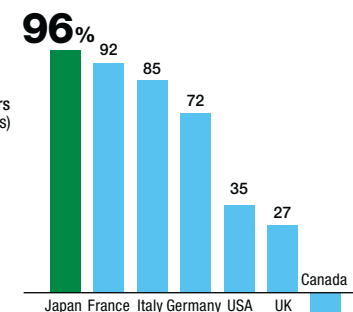
Figures in parentheses indicate proven recoverable reserves*



Source: BP Statistics 2010 (oil, natural gas, coal), Uranium 2007 (uranium)

Degree of dependence on import for energy (FY2008)

(%)



*Nuclear power is counted as imported energy. The minus figure indicates net export.

Source: Energy Balances of OECD Countries 2010 Edition

Well-balanced energy utilization

Energy resources each have their own distinctive features in a variety of other aspects as well as the environmental one. The important point is to find the well-balanced combination of energy resources based on these features while also taking account of not only effect for lowering environmental impact but also economic merit and supply stability.

Characteristics of types of energy

CO ₂ Emissions	Energy Type	Characteristics
Emits CO ₂ in power generation process	Coal	<ul style="list-style-type: none"> Comparatively high CO₂ emissions Abundant reserves in broad distribution around the world; available at stable prices
	Oil	<ul style="list-style-type: none"> Wide range of applications other than power generation Reserves mainly in the politically unstable Mideast; large price fluctuation
	LNG	<ul style="list-style-type: none"> Comparatively low CO₂ emissions Can be imported from politically stable countries, but prices are linked to oil
Zero emissions of CO ₂ in power generation process	Solar Wind	<ul style="list-style-type: none"> Limitless domestic supply of energy Unstable output, low energy density High cost of generation facility installation
	Uranium (nuclear power)	<ul style="list-style-type: none"> Wide distribution mainly in politically stable countries; stable prices Need for rigorous management of radiation and radioactive waste
	Geothermal	<ul style="list-style-type: none"> Domestic energy, but limited to volcanic zones
	Hydro	<ul style="list-style-type: none"> Low prospects for future large-scale development

Terminology

Proven recoverable reserves

The amount of buried resources whose extraction is estimated to be economically viable at the current level of technology.

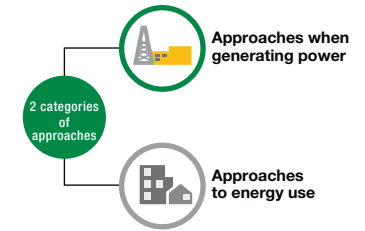
Ratio of reserves to production (remaining years)

The quotient of division of the proven recoverable reserves (the yearly demand in the case of uranium) by the yearly production volume



Protecting the Earth from global warming

Increase thermal power efficiency



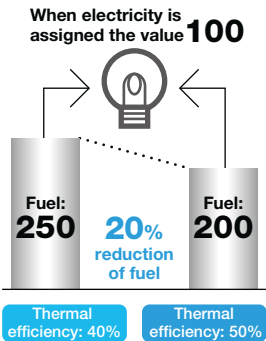
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TEPCO approaches

Terminology

Thermal efficiency

The share of the total thermal energy in the fuel consumed occupied by that effectively converted into electrical energy, expressed as percentage.

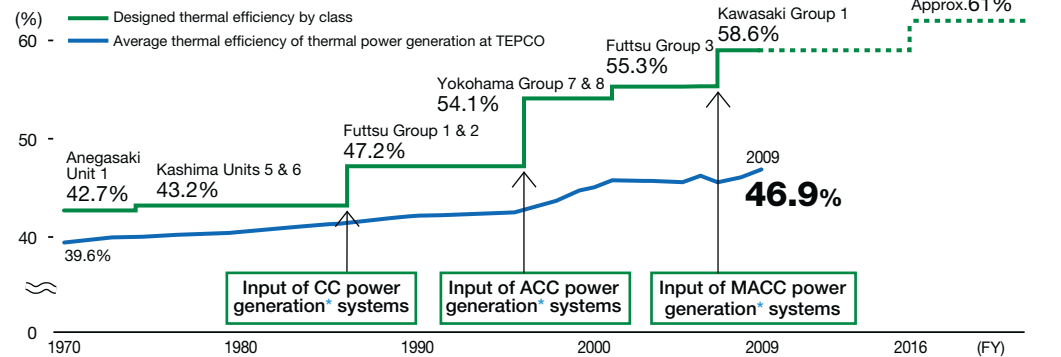


We are working to reduce CO₂ emissions by improving thermal efficiency*

In thermal power stations fired with fossil fuels, a higher thermal efficiency is linked to lower levels of fuel input and CO₂ emissions.

At TEPCO, we are striving to improve thermal efficiency by introducing high-efficiency facilities. A 1% improvement in the average thermal efficiency of all TEPCO thermal power stations would reduce CO₂ emission levels by 1.9 million tons per year. TEPCO also plans to introduce a 1,600°C combined-cycle power generation system (MACC II system) to the Kawasaki Thermal Power Station in FY2016. The system would deliver a thermal efficiency of around 61%.

Trend of change in thermal efficiency of thermal power generation



* Lower Heating Value (LHV) equivalents: estimated based on the performance of Higher Heating Value (HHV) using conversion factor shown in General Energy Statistics (FY2004).

CC power generation

Combined Cycle power generation

ACC power generation

Advanced Combined Cycle power generation, an improvement upon CC power generation.

MACC power generation

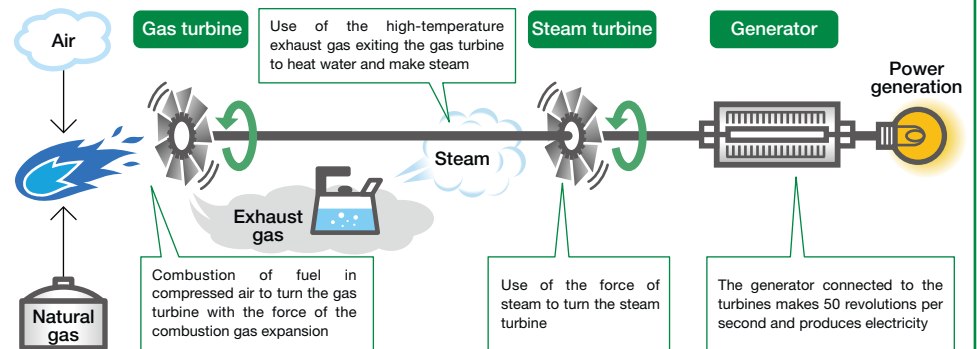
More Advanced Combined Cycle power generation (CC power generation in the 1,500°C class)

Higher efficiency through generation system evolution

Coupling gas turbines with steam turbines, Combined Cycle (CC) power generation systems enable more efficient use of thermal energy. Additional refinements of these systems are steadily raising their thermal efficiency even higher. The latest MACC combined-cycle system in the 1,500°C class has a thermal efficiency of about 59%, the highest in the world. Such systems were introduced to thermal power stations in Kawasaki in June 2007 and in Futtsu in July 2008.



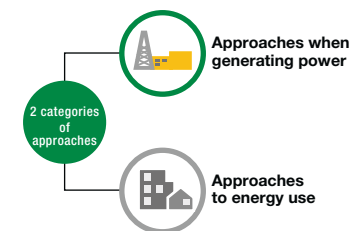
Diagram of Combined Cycle power generation





Protecting the Earth from global warming

Development of technology for lower CO₂ emissions



TEPCO approaches

We are developing technologies to gasify and burn coal to achieve efficient power generation.

To maximize the advantages of coal in providing stable and energy-efficient supply of electric power, and yet significantly reduce CO₂ emissions at the same time, TEPCO is advancing the development of the IGCC* (integrated coal gasification combined cycle) system. The system would realize highly efficient power generation by using a combined cycle that gasifies and burns coal, while emitting only the same amount of CO₂ as oil-fired thermal power generation. Toward commercialization of the technology, we are presently conducting demonstration tests to confirm the performance, endurance, and economic efficiency of the system.

IGCC demonstration plant

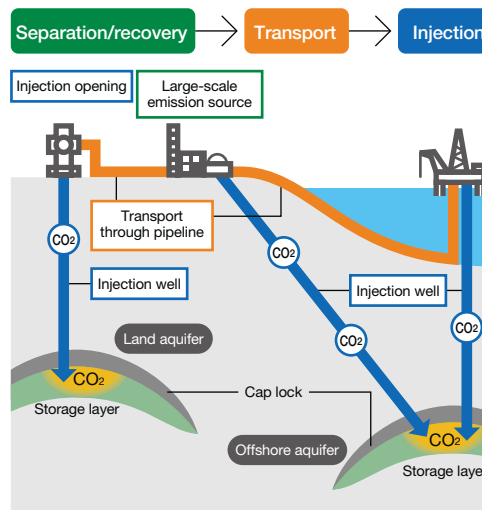


Photo by: Clean Coal Power R&D Co., Ltd.

We are developing technology to capture and store CO₂

The technology for CCS* (CO₂ capture and storage) which is capturing CO₂ from power stations and facilities and storing it underground or in the sea to isolate it from the atmosphere, is being developed around the world. For its part, TEPCO is promoting the research of CO₂ recovery technologies and studies on the assessment of CCS feasibility.

The CCS concept

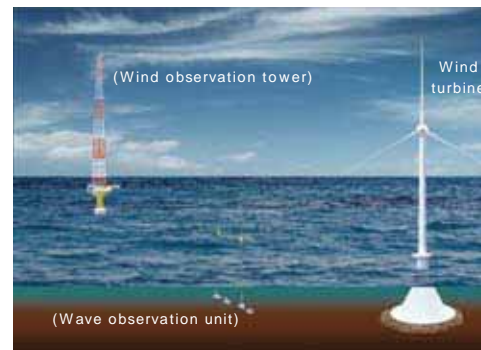


Source: Based on Ministry of Economy, Trade and Industry, "CCS2020"

We are conducting demonstration studies of offshore wind power generation

TEPCO is conducting a demonstration study of offshore wind power generation in cooperation with the New Energy and Industrial Technology Development Organization (NEDO). Under the project, a stationary wind turbine located about 3 km off the southern coastline of Choshi City, Chiba Prefecture will be used to establish operation and maintenance methods and prepare design guidelines for a wind power generation system. TEPCO is also implementing a demonstration test of offshore wind monitoring in the same location, in cooperation with the University of Tokyo.

Rendering of the demonstration facility



* Facilities in parentheses are observation facilities that have already been installed or are slated to be installed under the demonstration study of offshore wind monitoring.

Terminology

IGCC

Abbreviation for "Integrated coal Gasification Combined Cycle"

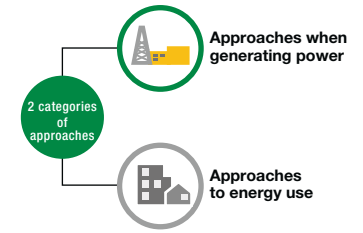
CCS

Abbreviation for "Carbon dioxide Capture and Storage"



Protecting the Earth from global warming

Expand renewable energy use



TEPCO approaches

Terminology

Renewable energy

A general term for forms of energy that are obtained from constantly recurring natural phenomena and therefore will never be depleted. The main types are solar, wind power, hydropower, geothermal energy, and biomass.



Hachijojima geothermal power plant (3,300kW)

Mega solar

Solar power generation with an output of more than 1,000 kW.

We are promoting the expansion of renewable energy* use

Renewable energy is clean energy that can be produced with minimum CO₂ emission and other burdens on the environment. TEPCO will not only utilize renewable energy, but will also develop and introduce new forms of renewable energy.

Promoting hydropower generation

Hydropower generation produces renewable energy using domestically procurable water, and is an eco-friendly and stable power generation system. We are aiming to make full use of our hydropower facilities, which have a combined capacity of 8,990 MW, by renovating aging facilities, developing water turbine technologies, and otherwise increasing hydropower generation efficiency.

We are also pushing forward plans for the construction of new hydropower power plants. The Tochikawa Hydropower Station (Sakae Town, Shimominochi County, Nagano Prefecture) and the Togawa Hydropower Station (Nikko City, Tochigi Prefecture) are slated to commence operations in FY2010. The Tochikawa Hydropower Station is a conduit type power station that effectively utilizes the water resource of the Tochi River of the Shinanogawa River

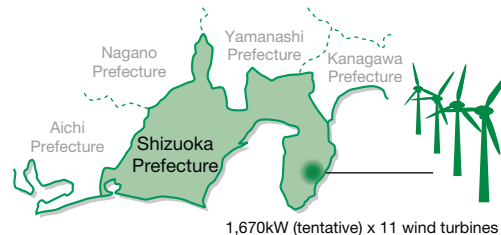
system to produce a maximum output of 1,000 kW. It has the potential to reduce approximately 2,100 t/year of CO₂.



Imaichi Dam (construction site of the Togawa Hydropower Station)

Construction of the Higashi-Izu Wind Power Plant

TEPCO is building a wind farm with an output capacity of 18,370 kW in the towns of Higashi-Izu and Kawazu in Shizuoka Prefecture. The plant is slated to commence operations in March 2012.



Mega solar* power generation project

TEPCO is planning to construct large-scale solar power plants in Kawasaki City in Kanagawa Prefecture, and in Yamanashi Prefecture. When completed, the three plants will produce a total output of 30,000 kW.

Overview of TEPCO's mega solar project

- Ohgishima Solar Power Plant (Kawasaki City, Kanagawa Prefecture)**
 - Output: 13,000 kW
 - Scheduled commencement: FY2011
- Ukishima Solar Power Plant (Kawasaki City, Kanagawa Prefecture)**
 - Output: 7,000 kW
 - Scheduled commencement: FY2011
- Komekurayama Solar Power Plant (Kofu City, Yamanashi Prefecture)**
 - Output: 10,000 kW
 - Scheduled commencement: FY2011



Rendering of the Ukishima Solar Power Plant

Approaches by TEPCO subsidiaries

Green Power Certification System

Japan Natural Energy Company Limited (JNEC)

To promote environmental activities among enterprises and local governments, the company issues "green power certificates" for use of wind power and other natural energy.

<http://www.natural-e.co.jp/english/index.html>

Global spread of wind power generation

Eurus Energy Holdings Corporation

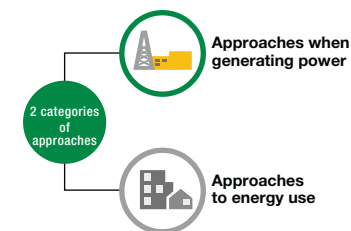
The company is dedicated to expanded diffusion of wind power generation systems. As of March 2010, it was operating such systems in a total of 6 countries in the 3 regions of Europe, USA, and Asia. Taken together, these systems had a capacity of about 1,902 MW.

<http://www.eurus-energy.com/english/index.html>



Protecting the Earth from global warming

Cooperation with countries around the world



TEPCO approaches

We cooperate with countries around the world to prevent global warming

To complement its domestic measures to prevent global warming, TEPCO is making extensive use of the Kyoto mechanisms* to reduce GHG emissions in other countries.

China

- Hydropower CDM* project in Xinjiang Uygur Autonomous Region
- Wind power CDM project in Xinjiang Uygur Autonomous Region
- Hydropower CDM project in Guizhou Province
- Hydropower CDM project in Gansu Province
- Wind power CDM project in Guangdong Province

GHG emissions are lowered by generation of power with Renewable energy (wind and hydropower).

Thailand

Biogas CDM project using tapioca starch

GHG emissions are reduced by recovering methane derived from the wastewater of a tapioca starch plant and using it as fuel.

Cassava root from which the tapioca starch is made

Participation in carbon funds*

- World Bank Prototype Carbon Fund
- World Bank BioCarbon Fund
- Japan GHG Reduction Fund

Vietnam

Hydropower CDM project in TaThang

GHG emissions are lowered by generation of power with Renewable energy (hydropower).

Honduras

Bagasse CDM project

GHG emissions are reduced by power generation fueled with bagasse, which is what remains after sugar-cane pressing.

Chile

CDM project for recovery of methane at swine farms

GHG emissions are reduced by recovery and combustion of methane derived from excrement at swine farms.

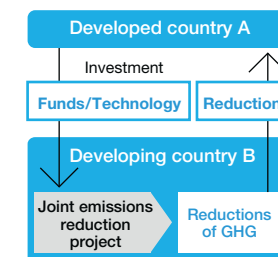
Terminology

The Kyoto mechanisms

These are tools developed nations can use to reduce GHG more economically and on a global scale, through cooperation with other nations for attainment of their emission reduction targets under the Kyoto Protocol (see the terminology note on P.3). These tools include Joint Implementation (JI), the Clean Development Mechanism (CDM), and International Emissions Trading.

Clean Development Mechanism (CDM)

A system in which a developed nation invests in projects for GHG emissions reduction in developing countries and the investing nation (the developed nation) uses the resulting emissions reduction to meet its own target.



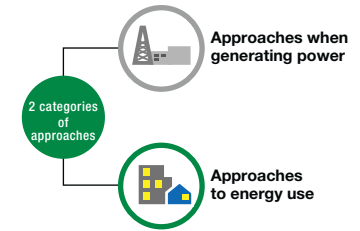
Carbon fund

Mechanisms providing for investment of funds from developed country governments and firms in projects for reduction of GHG emissions in developing countries, and return of the amount of reduction to the investors.



Protecting the Earth from global warming

Development and prevalence of high-efficiency products



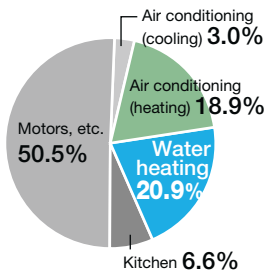
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TEPCO approaches

Related information

Breakdown of CO₂ emission sources in the home

Air conditioning (heating) and water heating account for more than 40% of CO₂ emissions from the home, and holds the key to CO₂ reduction in the residential sector.



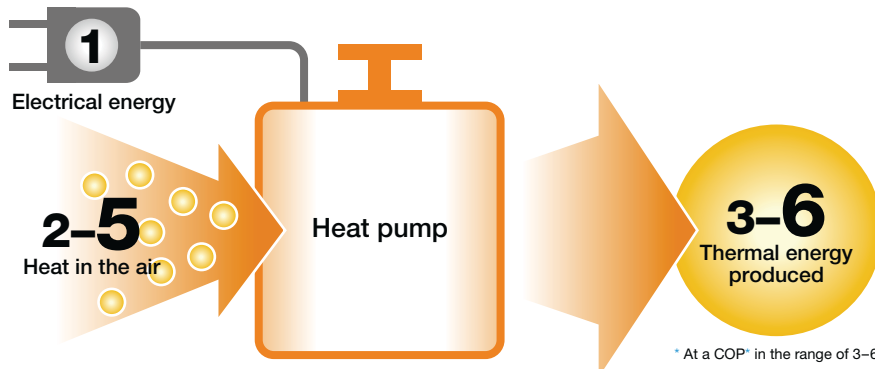
Source: Data from National Institute for Environmental Studies

Heat pumps in extensive use to save energy in water heating and air conditioning

TEPCO is taking action to lower CO₂ emissions not only in the stage of power supply but also in that of power use by customers.

Water-heating and air-conditioning systems powered by heat pumps do much to save energy in the office and home. They can produce thermal energy amounting to anywhere from three to six times as much as the electrical energy they consume.

Heat pump system

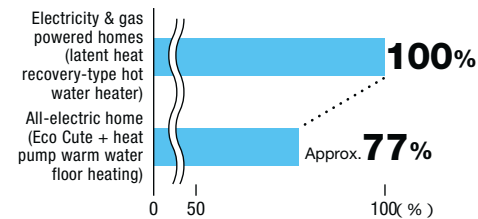


CO₂ reduction in the home: All-electric homes that use heat pumps

Eco Cute water heaters use a high-efficiency heat pump which significantly reduces CO₂ emission compared to conventional combustion-type water heaters. They play an important role in at-home efforts toward the creation of a low-carbon society.

Comparison of CO₂ emissions from the home

CO₂ emissions



Calculation conditions

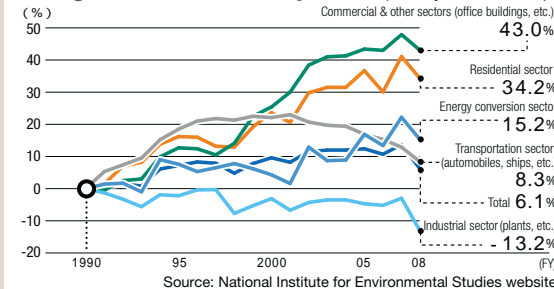
1. Building: wood construction, detached home with two floors, 4LDK layout, about 122m² 2. Family members: 4 3. Insulation performance: Equivalent to Next-Generation Energy-Saving Standard Region IV 4. Yearly load: cooling 8.0GJ/year; heating 6.3GJ/year; floor heating 2.4GJ/year; cooking 2.0GJ/year; hot water 20.1GJ/year; 24-hour ventilation, etc. 1.6GJ/year; light and outlets 10.8GJ/year 5. CO₂ emission intensity: electric power (0.332kg-CO₂/kWh, TEPCO FY2008 results), city gas (enforcement ordinance for Law Concerning the Promotion of Measures to Cope with Global Warming) 6. Device efficiency

	Electricity- and gas-powered home	All-electric home
Cooling	4.23 (Air conditioning)	
Heating	4.56 (Air conditioning)	
Floor heating (latent heat recovery-type hot water heater)	0.87	3.73 (Heat pump warm water floor heating)
Cooking	0.56 (Gas range)	0.90 (IH cooking heater)
Hot water (latent heat recovery-type hot water heater)	0.95	3.2 (Eco Cute)



Eco information

Change in CO₂ emissions by sector (base year: FY1990)



CO₂ emissions from homes and office buildings are rising.

In Japan, CO₂ emissions have risen from the civil (offices, homes, etc.) sector and transportation sector. Each and every one of us must become more aware of the need to conserve energy.

TEPCO is promoting energy conservation in homes, offices, and plants through extensive application of high-efficiency heat pump system.

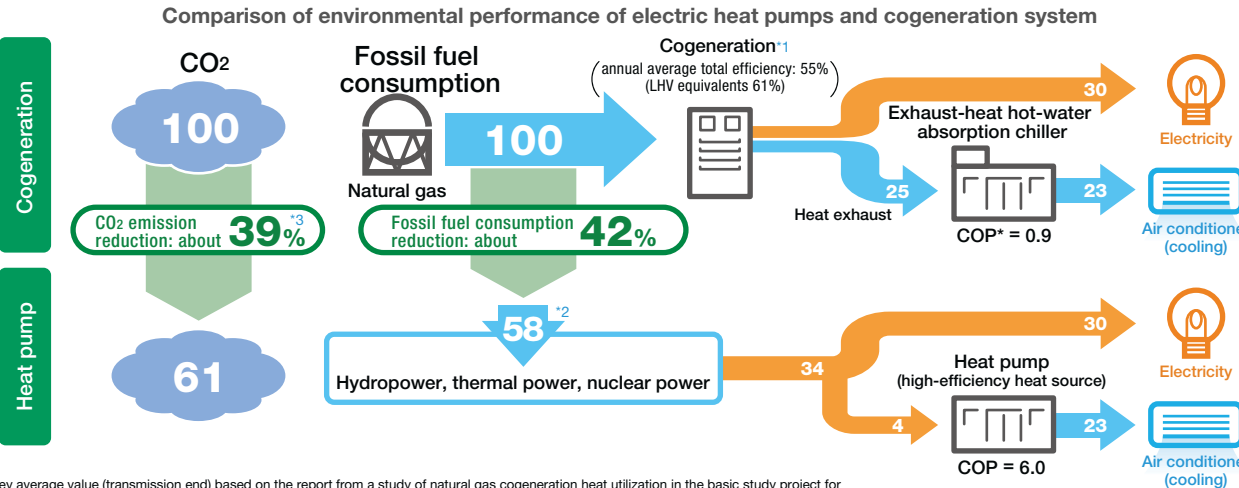


Higher energy efficiency in the business and industrial sectors

Heat pumps can also save energy in office buildings and factories. TEPCO proposes high-efficiency energy systems centered around them.



Heat pump (turbo chiller)



^{*1} Calculation of consumer CGS measurement survey average value (transmission end) based on the report from a study of natural gas cogeneration heat utilization in the basic study project for promotion of new energy introduction, New and Renewable Energy Division, Ministry of Economy, Trade and Industry (March 2008).

^{*2} Fossil fuel consumption intensity: 6.23 MJ/kWh (TEPCO FY2009 results)

^{*3} CO₂ emission intensity: Electric power (0.324kg-CO₂/kWh, TEPCO FY2009 results), city gas (enforcement ordinance for Law Concerning the Promotion of Measures to Cope with Global Warming).

Terminology

COP (coefficient of performance)

The coefficient of performance indicates the efficiency of equipment. A higher COP indicates a higher energy-saving performance.

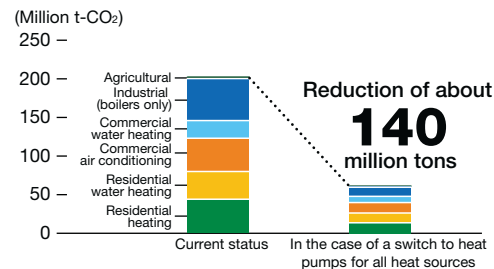
ESCO

Abbreviation for 'Energy Service Company'

The spread of heat pumps may be expected to reduce about 140 million tons of CO₂ emissions

Approximately 140 million tons of CO₂ emissions in the consumer (commercial/residential) and industrial sectors can be reduced if all conventional air-conditioning and water-heating systems powered by heat pumps. This accounts for about 10% of the total CO₂ emissions in Japan.

Potential CO₂ reductions enabled by heat pumps



Source: Estimates by Heat Pump and Thermal Storage Technology Center of Japan (HPTCJ)

Approaches by TEPCO subsidiaries

Providing "ESCO* services"

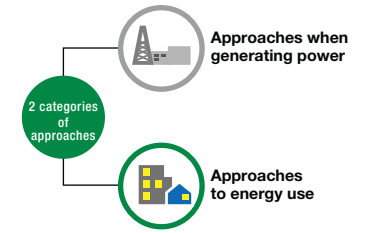
Japan Facility Solutions, Inc. (JFS)

The company provides ESCO services for energy-saving measures in office buildings and plants at no initial investment and with effects guaranteed. By so doing, it assists the simultaneous reduction of CO₂ emissions and energy costs.



Protecting the Earth from global warming

Energy-saving Lifestyles



13

TEPCO approaches

Terminology

Environmental household accounts

This term generally refers to the practice of keeping a record of and making environmental calculations for everyday activities that affect the environment, such as consumption of resources. Devices for calculation of household CO₂ emissions from figures for consumption of power, gas, and water in the home as well as gasoline by the car are in widespread use.

"Denko's Environmental Household Account" supports eco-lifestyles for a low-carbon society.

Energy Saving Life Navigation

TEPCO's Energy Saving Life Navigation energy diagnosis system judges the "ecological level" of a household in five stages based on a comparison with similar households, as well as allows customers to simulate energy-saving effects and offers advice according to each customer's energy usage pattern.



Website page for the Eco-life Navigation (Japanese site only)

CO₂ Household Account

The "CO₂ Household Account" service on TEPCO's TEPORE life information research website allows TEPCO customers to keep track of the amount of CO₂ they emit from their household, for effective management of CO₂ emissions on a continuous basis. It supports eco-lifestyles that are both friendly to the Earth and to household finances.



Website page for the Household CO₂ Accounts (Japanese site only)

We also provide information for better living through TEPCO commercials and leaflets

We provide helpful information for achieving comfortable energy-saving lifestyles, such as tips on how to select and use suitable electric appliances, based on in-house surveys and tests.

Booklet introducing ways to save energy at home



TEPCO's global warming prevention campaign is open to all.

CO₂ Diet Declaration

TEPCO donates one seedling for every twenty CO₂ Diet Declaration participants who pledge to save energy, to elementary schools. Since the launch of the program in 2004, as many as 2 million participants have pledged to reduce a total of some 176,000 tons of CO₂ by March 2010.



Planting seedlings (Sakura Municipal Yatomi Elementary School)

Project for planting trees near Mt. Fuji

Column

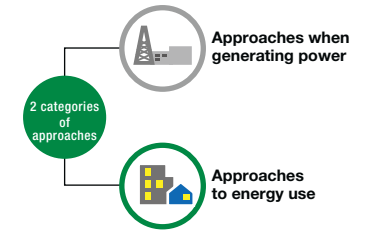
TEPCO has been cooperating and participating in the volunteer forestation project of OISCA (Organization for Industrial, Spiritual and Cultural Advancement) since 2007, supplying beech and oak seedlings to the five-year project under TEPCO's CO₂ Diet Declaration program.



Planting trees near Mt. Fuji



Protecting the Earth from global warming Initiatives in the Transportation Sector



TEPCO approaches

We are actively adopting EVs for corporate use

Electric vehicles do not emit exhaust gas while traveling. They therefore contribute to mitigating air pollution, and can reduce CO₂ emissions by approximately 70% compared to gasoline vehicles of the same class. TEPCO is actively pursuing the introduction of electric vehicles, and has introduced 310 such vehicles to its offices in FY2009. This has brought the number of electric vehicles among our fleet of 8,090 commercial vehicles to 417, as of March 31, 2010.

We plan to increase the number of electric vehicles to around 3,000 in the future, to achieve a CO₂ emission reduction worth approximately 2,500 t/year.



Commercial EV used by TEPCO

We are promoting the development and dissemination of rapid chargers

TEPCO has developed rapid chargers utilizing the charging technologies it has cultivated through the years, and has conducted demonstration tests in cooperation with automobile manufacturers. With the rapid charger we have developed, a 10-minute charge can provide enough power for an electric vehicle to travel approximately 60 km. We also make active efforts to enhance the performance of rapid chargers and promote their use.

In March 2010, we founded the CHAdeMO Association*, in collaboration with a number of automobile manufacturers. As an executive member of the association, we will actively promote the dissemination of electric vehicles



Quick charger developed by TEPCO

through improvement of charging technologies, standardization of charging methods, and provision of information on rapid chargers abroad.



CHAdeMO

We promote CO₂ reduction measures that prevent engine idling

TEPCO has developed a power system that can control temperatures in truck cabs and maintain cold temperatures in the cargo room of freezer trucks even with the engine shut off, and began commercial operation of the system in Autumn 2007. By shutting off their engine and using a power supply stand, large trucks can reduce CO₂ emissions by as much as 98%, as well as minimize exhaust fumes, noise, and fuel costs. As of March 31, 2010, 203 power supply stands are in operation in 29 locations throughout Japan, including rest stops and truck stations along highways, the Tsukiji wholesale market, and Narita Airport.



A truck at a power station (Toshin Truck Station, Kanagawa)

Terminology

CHAdeMO Association

An association founded by Toyota Motor Corporation, Nissan Motor Co., Ltd., Mitsubishi Motors Corporation, Fuji Heavy Industries Ltd., and TEPCO as its executive members. It has a membership of 270 Japanese and foreign companies and organizations, including charging equipment manufacturers, charging service companies, and supporting members consisting of private companies and public agencies (as of August 4, 2010).



Protecting the Earth from global warming

Nuclear fuel cycle

Terminology

Reprocessing plant

A facility for reprocessing spent fuel to recover uranium and plutonium from it. Japan Nuclear Fuel Limited (JNFL) is presently conducting a test run of Japan's first commercial reprocessing plant in the city of Rokkasho-mura in Aomori Prefecture.

MOX fuel fabrication plant

Recovered uranium and plutonium are made into MOX (mixed-oxide) fuel. At present, JNFL is in the process of making the necessary preparations for the construction of Japan's first commercial MOX fuel fabrication plant.

Interim storage facility

Some of the spent fuel is stored at interim storage facility. At present, Recyclable-Fuel Storage Company, which was established jointly by TEPCO and Japan Atomic Power Company, is making preparations for constructing a recycled fuel storage center for safe storage of spent fuel.

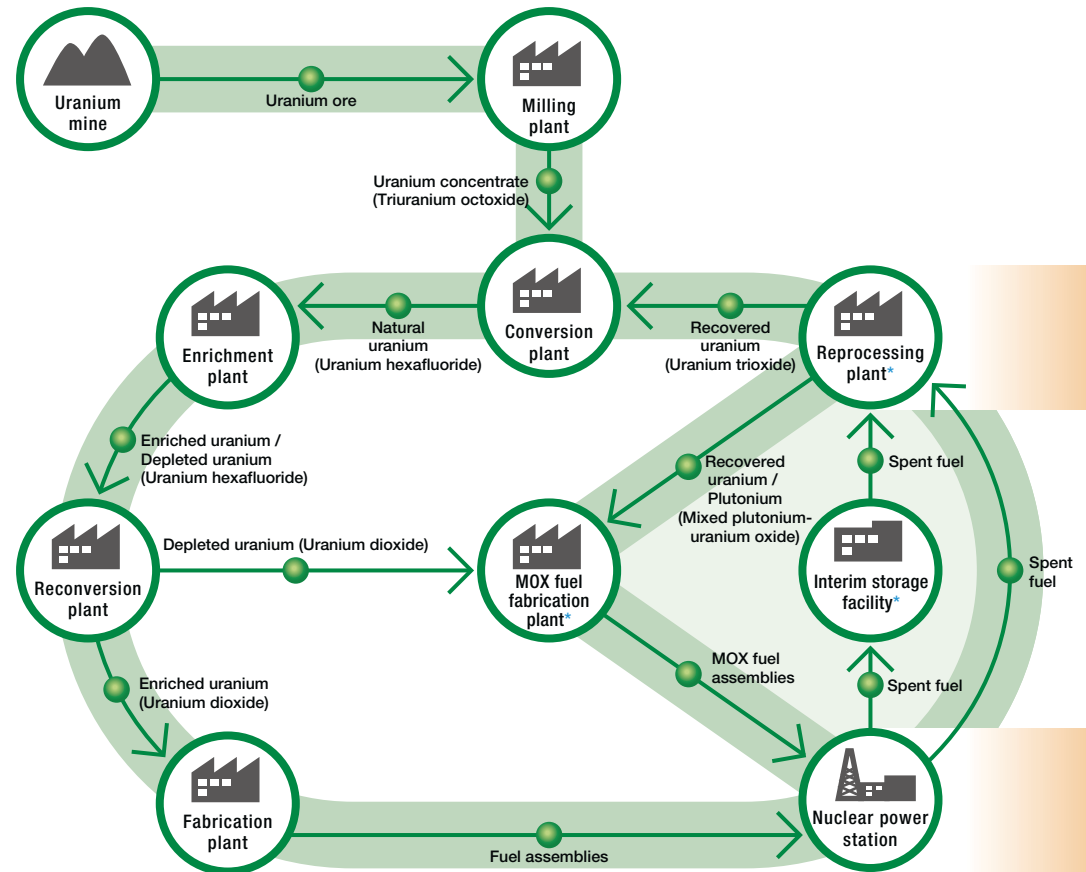
With the understanding of every person, we are promoting nuclear power generation

Nuclear power generation, which does not emit CO₂ in the power generation process, is an essential measure in addressing global warming issues. It also plays an important role in the aspect of assuring the energy security and stabilizing costs. We believe it is necessary to promote it with top priority on safety and the understanding of every person while rigorously managing radiation, radioactive waste, and other items.

The nuclear fuel cycle makes reuse of energy resources possible

After the fuel is used at nuclear power stations, it still contains some uranium that did not undergo fission and some newly created plutonium. Reprocessed and recovered, this material can be used as fuel. The chain of operations enabling effective use of uranium resources is known as the "nuclear fuel cycle." In resource-poor Japan, we aim to establish this nuclear fuel cycle in order to assure itself of a stable energy supply for the long term and properly process and dispose of radioactive waste.

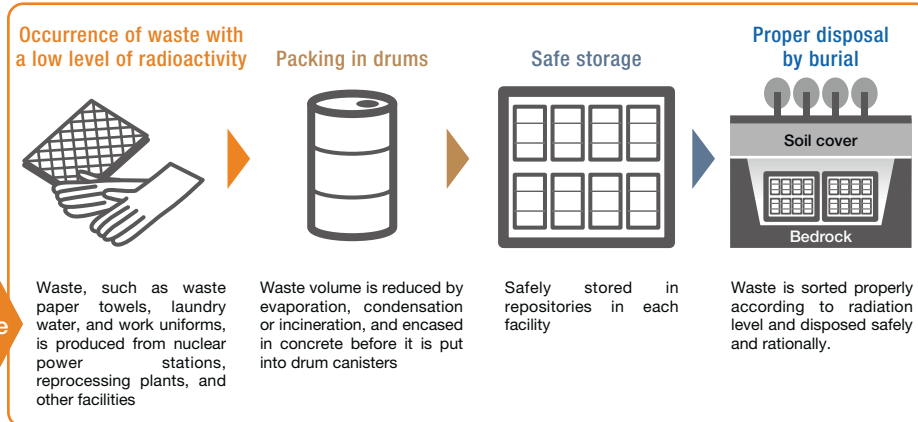
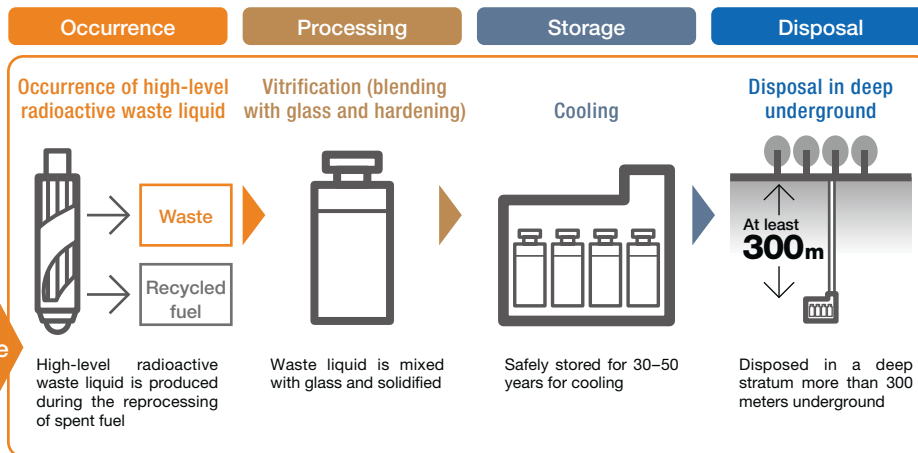
Nuclear fuel cycle



To help prevent global warming, TEPCO is promoting nuclear power development with top priority on safety.



Management of radioactive waste



Proper management in correspondence with the level of radioactivity

Radioactive waste is divided into two basic categories: low-level and high-level. Each type is properly managed so that they will not harm people's life in the surrounding area.

Related information

Disposal of high-level radioactive waste

This task is assigned to the Nuclear Waste Management Organization of Japan (NUMO), which is pursuing work for selection of disposal sites with a view to commencing final disposal in the late 2030s.

Disposal of low-level radioactive waste

Low-level radioactive waste is further divided according to radioactivity level and buried in the manner stipulated for each category of low-level radioactive waste.

Some categories of waste are buried in a pit created on the ground or 50 m below the ground at the deepest. This method is already being implemented at the low-level radioactive waste disposal center operated by Japan Nuclear Fuel Limited (JNFL) in Rokkashomura, Aomori Prefecture.



Clean power generation at thermal power stations

Terminology

Sulfur oxides (SOx)

The generic term for sulfur dioxide (SO₂), sulfur trioxide (SO₃), and other sulfur oxidation compounds. Sulfur oxides are formed by combustion of oil, coal, and other fossil fuels containing sulfur. These chemicals can affect our respiratory organs and also cause acid rain.

Nitrogen oxides (NOx)

The generic term for nitrogen monoxide (NO), nitrogen dioxide (NO₂), and other nitrogen oxidation compounds. Nitrogen oxides are formed by oxidation of nitrogen in fuel and the air due to combustion. These chemicals cause photochemical smog and acid rain.

Particulate matter (PM)

Particulate matter consists of soot and dust from plants, powder caused by pulverization, and solid and liquid particles contained in substances such as exhaust gas from diesel engines. These matters can affect our respiratory organs. Particulate matter with a diameter of no more than 10 microns is called "suspended particulate matter" (SPM).

Soot and dust

Soot, ash, and other substances as a result of combustion.



Air pollution problems

Why does air pollution occur?

Combustion of fossil fuels (e.g., oil and coal) to provide power for plants, automobiles, etc. also produces air pollutants such as sulfur oxides (SOx)^o, nitrogen oxides (NOx)^o, and particulate matter (PM)^o.

Influence of air pollutants

Air pollutants can affect our respiratory organs and also cause factors behind photochemical smog and acid rain.

The future of air preservation in Japan

Japan was affected by serious air pollution in the phase of booming economic growth, but the situation subsequently improved along with various measures by the government, private companies, and other parties. However, while automobile ownership is on the rise, we have been slow in improving NOx and PM levels. Thus, the issue of air preservation remains an important issue for the society as a whole.

We have to continue with efforts into the future!

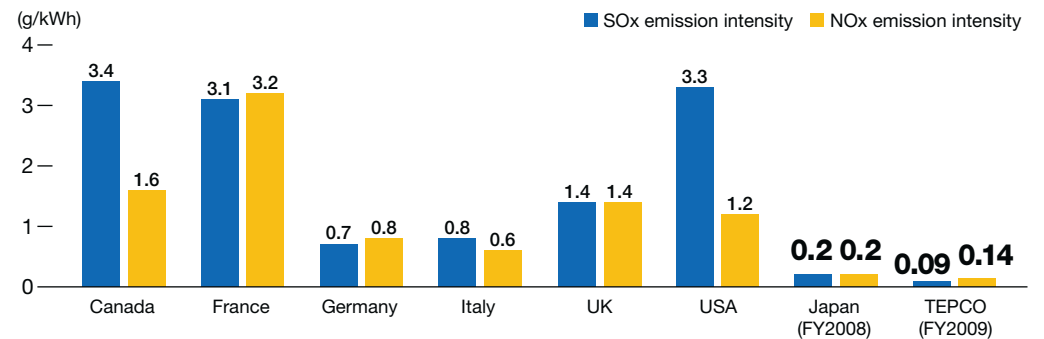


The world's cleanest production of electrical power

TEPCO's measures to prevent air pollution are the world-class.

We use clean fuel, rigorously treat exhaust gas, and take other steps to keep our SOx and NOx emission intensity accompanying thermal power generation on levels that are much lower than those in other countries. Our nuclear power and hydropower stations, which emit no SOx or NOx when generating, are also contributing to preservation of the atmosphere.

International comparison of SOx and NOx emission intensity (average for thermal power stations)



Source: Calculations based on "OECD Environmental Data Compendium 2006/2007" and "Energy Balances of OECD Countries 2010 Edition"
* Figures for TEPCO are based on FY2009 data, figures for Japan are based on FY2008 data from the Federation of Electric Power Companies of Japan, and figures for the other six countries are based on 2005 data.

At thermal power stations, TEPCO is taking various steps to reduce air pollutants.



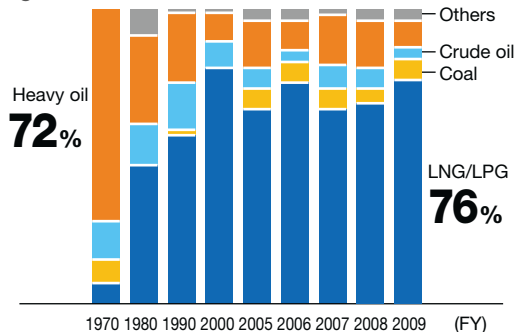
Three approaches to preventing air pollution at thermal power stations

1 Use of clean fuel

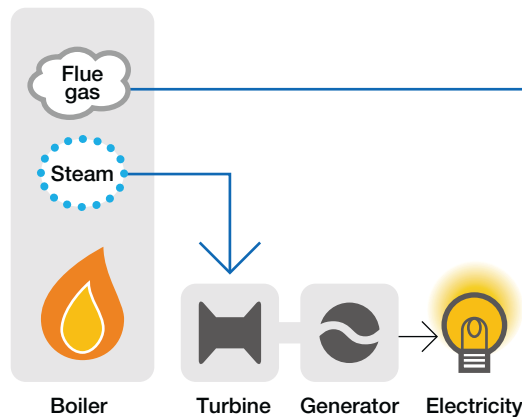
We use environment-friendly fuel, mainly LNG (liquefied natural gas)

When combusted, LNG (liquefied natural gas) has zero emissions of SOx and soot and dust*, and only very low emissions of NOx. In 1970, TEPCO became the first electric power company in the world to begin burning LNG at its thermal power stations. Today, these stations are fired mainly by LNG. It is also making active use of crude oil and heavy oil, which contain little sulfur that causes SOx emissions.

Trends in ratios of fuels used for thermal power generation at TEPCO



2 Improvement of the combustion method



We are improving combustion methods to reduce NOx

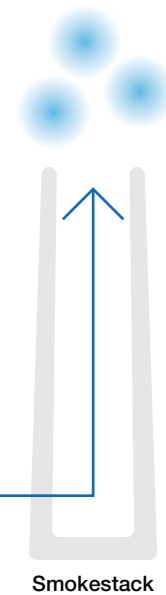
Because NOx is easily formed at high temperatures, we rigorously control NOx emissions by adopting a combustion method that does not create high-temperature spots inside boilers and gas turbines.

3 Equipment for removal of air pollutants

- **Flue gas denitrification facility**
Removal of NOx in flue gas by reaction with ammonia
- **Electrostatic precipitator**
Removal of soot and dust by adsorption with the power of electricity
- **Flue gas desulfurization facility**
Removal of SOx in flue gas by reaction with lime

We have installed facilities for removing air pollutants

Flue gas from boilers is released into the atmosphere only after removal of its atmospheric pollutants by means of flue gas denitrification facilities, electrostatic precipitators, and fuel gas desulfurization facilities.





Environmentally friendly recycling

Recycling of industrial waste

Terminology

Industrial waste

Certain types of waste derived in industrial activities, stipulated in the Waste Management Law. The list contains 20 items, including cinders, metal scrap, and waste oil.

General waste

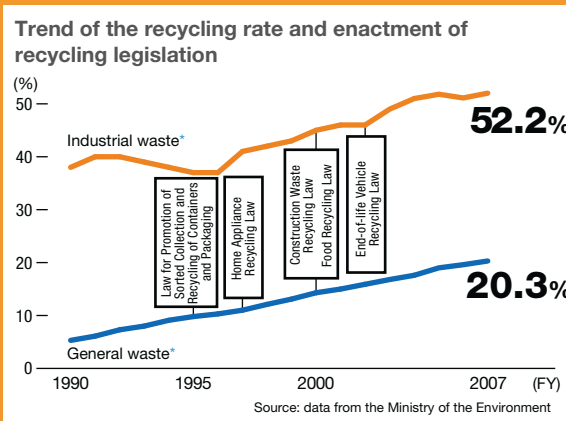
Waste other than industrial waste, including residential refuse and non-industrial waste derived at corporate enterprises.



Japan's waste problem

Current status of the waste problem in Japan

Our society generates enormous amounts of waste owing to the pursuit of material affluence and resulting continuation of massive production and consumption. Recycling programs are expanding the cyclic utilization of resources, but are not yet fully sufficient.



Building the recycling-oriented society

To make judicious use of our finite resources and build a recycling-oriented society, enterprises generating waste must carry out proper recycling and disposal of waste. Furthermore, the society as a whole must practice the 'three Rs' of reduce, reuse, and recycle.

Nearly 100% recycling of industrial waste

We have mounted a companywide effort to recycle industrial waste and had virtually attained our targeted recycling rate of 100%. Our next goal is to increase the rate for industrial waste recycling to 100% at all companies in the TEPCO Group by FY2010.

Breakdown of major industrial waste (TEPCO, FY2009)

Unit: kt/year

Type of waste	Amount produced *1	Use after recycling
Coal ash	475.2	Raw material for cement, land reclamation, etc.
Scrapped concrete utility poles	109.7	Roadbed material, etc.
Desulfurized gypsum	90.7	Gypsum boards, cement raw material, etc.
Metal scraps	57.9	Metal materials, recycled cables, etc.
Waste oil	8.2	Fuel substitute, heat recovery, etc.
Shells	7.5	Fertilizer, raw material for cement, soil amendment, etc.
Sludge from wastewater treatment	5.0	Raw material for cement, steel, etc.
Insulator scraps	3.3	Blocks, roadbed material, etc.
Heavy / crude oil ash	2.6	Metal recovery, raw material for cement
Waste plastics	1.3	Plastic recycling, heat recovery, etc.
Concrete fragments	1.1	Roadbed material, etc.
Thermal insulation scraps	0.4	Recycled thermal insulation, roadbed material, etc.
Other	11.0	—
Total	774.0	Recycling volume 773.0 Waste sent to landfill 1.0 (Recycling rate*3 99.9%)

*1 Amount of waste produced = Salvaged materials + materials reused in-house + industrial waste
 Radioactive waste is not included in industrial waste, as it is separately governed by nuclear power laws and regulations.
 *2 Weight after dehydration.
 *3 Figures have been rounded to the nearest tenth.

TEPCO is working to recycle various types of waste and make judicious use of resources.



Recycling examples

Scrapped concrete utility poles



Dismantled concrete utility poles are sorted, nondefective poles to be reused.



Defective poles are crushed, separated into steel and concrete.



Concrete is used for roadbed material, iron reinforcement is recycled as raw material for steel.

Shells



Power stations use seawater for cooling, and shells such as blue mussels adhere to water intakes.

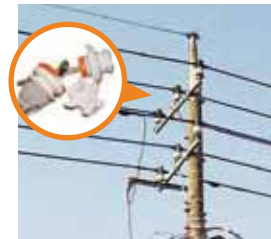


These shells undergo intermediate processing such as composting and incineration.



The output is used for fertilizer, raw material for cement, and other purposes.

Insulators*



Attached to utility poles, insulators are made of ceramics that do not conduct electricity.



After removal, the ceramic parts are separated from the metal ones and ground into fine powder.



The ceramic powder is used as material for pottery and roadbeds, and the metal parts, as material to make steel.

Terminology

Insulators

Ceramic devices attached to transmission towers and utility poles, insulating the electricity from the cable etc.



Zero waste in the office as well — attainment of a 100% recycling rate

We recycle waste derived in the office, too. Our head office is conducting the 'Zero Waste Office' campaign as well. Under this campaign, waste is sorted into 17 categories. The goal of a 100% recycling rate has been attained since FY2005. We are going to continue this campaign over the coming years.

Recycling of office waste (TEPCO head office)

Waste (17 sorting categories)

Recycling applications

Copier/printer paper, magazines, newspapers, cardboard	Copier/printer paper, newspaper, etc.
Paper products, shredder output	Toilet paper
Glass bottles	Glass cullets
Cans and metals	Materials for production of metals
Plastic, vinyl, PET bottles	Blast furnace feedstock (steel reducing agent)
Products made of both plastic and metal	Materials for production of metals etc.
Batteries, fluorescent light bulbs	Recovery of iron and mercury, glass cullets, etc.
Miscellaneous refuse, cigarette ends	Use of surplus heat at the time of incineration (power generation and supply of heat)
Food waste	Fertilizer



Presorting of waste into 17 categories in the head office

Support of efficient recycling of wastepaper from offices

Office *Chonai-kai* (Office Community Network) is an environmental non-profit organization (NPO) dedicated to the recycling of copier/printer paper, newspapers, and other types of wastepaper. TEPCO provided assistance in all aspects for its establishment and operation. Its work has been made more efficient through joint recovery by member companies, and this is linked to lower costs. Office *Chonai-kai* is also initiating new activities, such as promoting the use of paper made from thinned trees, to protect the forests.



Office *Chonai-kai* at work



Approaches by TEPCO subsidiaries

Use of sewage sludge for power generation

Bio Fuel Co., Inc.

Sewage sludge has conventionally been disposed of by incinerating it and burying the ash in landfill. Bio Fuel recycles it by carbonizing it to permit use as biomass fuel for coal-fired power generation. It has built Japan's first total setup for such business in all stages from construction, operation, and maintenance of the facilities to sale of the fuel.



Environmentally friendly recycling Safe disposal technology

TEPCO is also safely treating PCB.



Technology for safe treatment and recycling of PCB

Ascertaining that traces of PCB (polychlorinated biphenyl) are contained in some of the insulating oil* used in its pole transformers*, we process this oil at our own recycling center to detoxify. We use the processed oil to fuel power generation, and clean each transformer part and piece to enable recycle as material for steel or roadbeds.

Eco information

About PCB



PCB

Polychlorinated biphenyl (PCB) has outstanding resistance to heat, stability, and insulating characteristics, and had been used widely as a material for insulating oil for transformers and so on. It was later found to be poisonous, and its production was banned in 1972, when the government also made it mandatory to remove and store equipment containing PCB. This storage had been for a long time, that is, until the establishment of technology for effective treatment of PCB. This regulation required electric power companies to keep PCB in storage for a long period of time until the establishment of effective treatment technology. In 2001, the enactment of the Law Concerning Special Measures Against PCB Waste prompted the creation of a proper treatment system, and a number of treatment facilities are now in operation.

Profile of the TEPCO recycling center

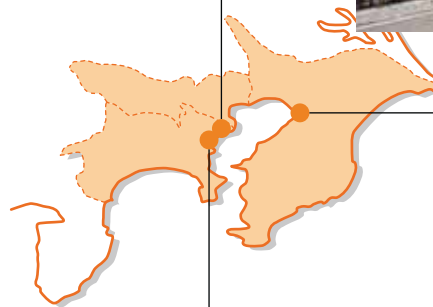
TEPCO Kawasaki Recycling Center

Facility for treatment of low-concentration PCB insulating oil

Startup: October 2002

Facility for container cleaning

Startup: November 2003



TEPCO Chiba Recycling Center

Facility for treatment of low-concentration PCB insulating oil

Startup: March 2002



TEPCO Yokohama Recycling Center

Facility for treatment of low-concentration PCB insulating oil

Startup: October 2001



Terminology

Pole transformers

Equipment attached to utility poles to change high-voltage power to a low voltage suitable for use in ordinary households etc.

Insulating oil

Oil that acts to insulate and cool electrical equipment such as transformers, condensers, and cable.



Protecting and supporting nature

Approaches to harmonization with nature

23

ECO-knowledge

Eco at TEPCO

TEPCO approaches

Terminology

Biodiversity

This is a blanket expression for the rich variety of life. Diversity is generally considered in terms of three levels: ecosystems, species, and genes. Measures must be taken to preserve diversity on each level.



Ramsar Convention

The official name is the "Convention on Wetlands of International Importance Especially as Waterfowl Habitat." The Convention's objective is to promote the protection of wetlands, conservation of the plant and animal life inhabiting them, and wise use of wetlands.



Biodiversity*

Toward construction of a society at harmony with nature

There are said to be 30 million species of creatures on the earth—maybe even more. The natural environment rests on the sound maintenance of this diverse life and the ecosystems consisting of air, water, soil, and other elements.

Human life, too, benefits from biodiversity in many ways, including food, medicine, and fuel. It is of vital importance to curtail the burden imposed on the natural world by our production, consumption, disposal, and all other activities, and to live at harmony with nature.

All creatures on earth live in interrelation with each other.



Responsibility to protect nature

TEPCO has long taken action to protect the nature at Oze and preserve or create green belts around its power stations. As a company whose business activities have an effect on the environment, we see it as key social responsibility of ours to protect our precious nature and pass it on intact to succeeding generations.

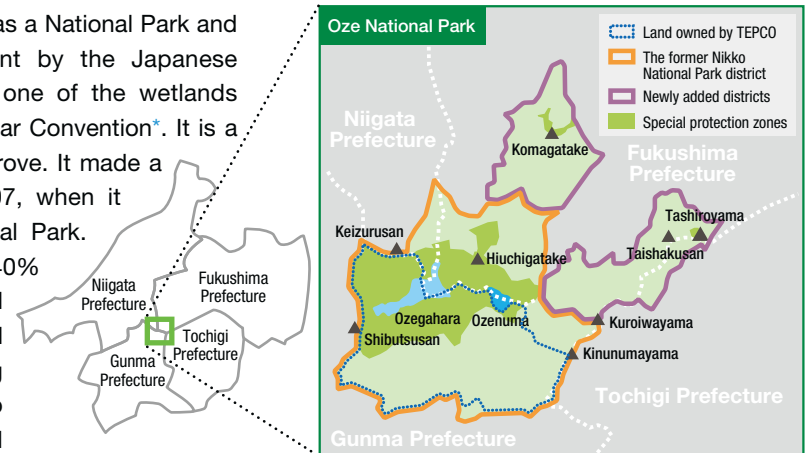


Ozegahara

Passing the natural beauty of Oze on to future generations

Nearly a half century of activities to preserve Oze

Oze has been designated as a National Park and Special Natural Monument by the Japanese government, and is also one of the wetlands registered under the Ramsar Convention*. It is a veritable natural treasure trove. It made a fresh start in August 2007, when it was renamed Oze National Park. TEPCO, owning roughly 40% of the national park and roughly 70% of its special protection zones, has long taken active measures to preserve the vast natural environment.



TEPCO is working to restore the Oze wetlands, plant trees and create waterside space on the grounds of its power stations, and protect wildlife.



Maintaining wooden walkways (Oze)



Volunteer tree planting (Tokura Forest)



Biotope at the Shinagawa Thermal Power Station



Rhythemis fuliginosa (Yokohama Thermal Power Station)



Japanese tree frog (Chiba Thermal Power Station)



Silver dragonfly (Shinagawa Thermal Power Station)



Jewelweed (Hitachinaka Thermal Power Station)



Japanese white-eye (Chiba Thermal Power Station)

Wildlife on power station grounds

Restoration of the Ayame Daira marshlands

Trampled by visitors, who came in rapidly increasing numbers in the 1960s, the Ayame Daira marshlands became barren over an area of approximately 10,000 m². Ever since that time, TEPCO has been working to restore the wetlands, which are now green again.



Devastated Ayame Daira



Present Ayame Daira recovering vegetation

Maintenance of wooden walkways

Oze is now equipped with wooden walkways to curtail impact on its natural elements by visits for communion with them. TEPCO built these walkways for an extended distance of about 20 km, and also maintains and manages them.

Volunteer tree planting in the Tokura Forest in Oze

TEPCO has been sponsoring volunteer tree-planting events in the Tokura Forest since 1997, to restore the original vegetation of the forest lying adjacent to Oze.

Constructing power stations with lush greenery

Planting of trees adapted to the surrounding area

When constructing power stations and other facilities, we strive to preserve and create greenery. We select types of tree that will thrive in the soil on that particular land, and create wooded and waterside space that makes a fine habitat for local wildlife. Recently, all sorts of birds and insects have been paying visits to the stretches of rich natural settings on our power station grounds.



Sodegaura Thermal Power Station (photo taken in 1984, when the planting began)



Sodegaura Thermal Power Station (photo taken in 2005, 21 years later)



Sharing the task of saving our Earth

Environmental education and events for people

25

Eco at **TEPCO**

Terminology

Environmental education

Programs of education aimed at producing personnel who are concerned about environmental problems, understand the involvement between humankind and the environment, and are capable of taking action out of consideration for the environment.

Enacted in 2003, the Law for Enhancing Motivation on Environmental Education calls on citizens and private-sector groups to provide and assist environmental education on their own initiative toward the goal of building a sustainable society.

Assisting environmental education*

We support programs of environmental education so our children, as tomorrow's leaders, will be interested in and concerned about energy issues and environmental problems.

TEPCO Nature School

TEPCO Nature School commenced its activities in April 2008, in rich natural settings nurtured by TEPCO over a period of many years in the vast environment of Oze and Tokura, the green tracts of power station sites, and the grounds of the Atema Kogen Resort (Tokamachi City, Niigata Prefecture). The School offers nature observation tours, nature experiences such as tree-planting activities, as well as environmental training programs and other human resource development programs intended for school teachers. Many events and tours are also open to the public, to provide opportunities to reflect on the intricate relationship between nature and human lifestyles.



Nature observation tour (Chiba Thermal Power Station)

TEPCO Nature School's new initiatives

Column

Nature observation at a substation

At the Shin-Kisarazu Substation, TEPCO Nature School implemented a new program, which featured an observation tour of the substation's biotope, a workshop on making crafts using bamboo growing in the substation site, and a tour of the substation's facilities. The program effectively took advantage of the substation's role in

connecting power plants and customers, to promote awareness of nature.



Nature observation at the Shin-Kisarazu Substation

Nature observation at hydropower plants

Hydropower plants utilize water – a blessing of nature – to produce electricity. Based on this relationship between power plants and nature, TEPCO Nature School offers programs that examine the relationship between people and the natural environment through tours of hydropower plants and watershed protection forests that supply abundant water to the plants.



Nature observation in Tambara Marsh

Support for energy and environmental education

Since 1993, TEPCO employees have been holding classes on energy and the environment to teach students in elementary and junior high schools in various parts of the country. In addition, they hold seminars for teachers on energy and environmental education, and provide all sorts of educational materials.



Teaching an energy and environmental class

Programs for "Shokuiku" (Food Education)

TEPCO Food Classes offer cooking lessons that focus on environment and energy efficient cooking, as well as provide vegetable-based recipes for children (Paku-paku recipes) and recipes that junior high school teachers could use in cooking lessons they give in home economics classes in junior high schools.



The cooking lessons TEPCO Food Classes

TEPCO is working to restore the Oze wetlands, plant trees and create waterside space on the grounds of its power stations, and protect wildlife.



Partnership with communities

We are taking approaches based on partnership with NPOs, governments, schools, and other parties.

National Environmental Activity Contest for University Students Column

Since 2003, TEPCO has sponsored the National Environmental Activity Contest, otherwise known as Eco Contest, to support the environmental initiatives of university students. The contest provides a forum where university students introduce their environmental initiatives to a panel of judges composed of members of society, who evaluate each entry and select a winner according to a public screening process. In FY2009, approximately 1,300 students from 58 organizations participated in the contest.

The 7th Contest held in December 2009



Community-based environmental event

Every year, TEPCO's Chiba Branch plans and operates Eco Messe, an environmental event that everyone from children to adults can enjoy, in cooperation with local residents, private companies, government offices, and students, as part of its contribution to realizing a sustainable society.



Eco Messe in Chiba 2009

Bringing back greenery to Ashio

TEPCO's Tochigi Branch assists and participates in a tree-planting project conducted by the Committee to Grow Greenery in Ashio, an NPO planting one million trees on the Ashio mountains.



Planting trees in Ashio

Protection and growth of Fuji thistles

Since 1990, TEPCO's Numazu Branch has been engaged in activities for the protection and growth of Fuji thistles. The seeds harvested in autumn are planted in a seedling bed on the office grounds in the following spring. The seedlings are cultivated for about one year, and planted on Mt. Fuji in the early summer of the third year.



Planting of Fuji thistles (Mishima Service Center, Numazu Branch)

Vigorous activities for beautification

TEPCO has mounted a companywide campaign for cleaning up and beautifying areas around its offices, along seashores and rivers, and on the grounds of public facilities and historical sites.



Helping to hang a sacred rope on the gate of Kasama Inari Shrine (Shimodate Service Center, Ibaraki Branch)

Service by electric vehicles

TEPCO is conducting proving tests of electric vehicles to promote their introduction for business purposes. Because they do not emit any combustion exhaust and make almost no noise, they are also in use for parades and marathon events.



Electric vehicle leading the Children's Mikoshi parade at the 29th holding of Yokohama Port Festival (Kanagawa Branch)

Donation of Jomo Karuta

TEPCO's Gunma Branch has donated Jomo Karuta cards (produced by the Gunma Cultural Association) to primary and junior high schools in the prefecture since FY2007 by way of social welfare associations and municipal boards of education. These cards and the supplementary teaching material, "Gunma as seen through Jomo Karuta cards" (issued by Gunma Prefecture), are both printed on paper made by recycling old wood planks from the wooden trails in Oze.



Jomo Karuta Competition (Gunma Branch)



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