Environment

Climate Change Strategy

Adoption of TCFD Recommendations for Enhanced Climate Change-Related Disclosure

In June 2019, we adopted the TCFD* recommendations for enhanced climate-related disclosure. As an energy enterprise whose business activities create a load on the environment, we are making efforts to disclose environmental information to meet the needs of our stakeholders who value ESG in addition to our ongoing referencing of international reporting guidelines.

Going forward, while taking into consideration the content of deliberations by the TCFD Consortium of Japan, in which we participate, and further enhance our disclosure relating to climate change to fulfill our information responsibilities to our stakeholders and contribute to the development of a sustainable society.

*TCFD: Task Force on Climate-related Financial Disclosures. It was established by the Financial Stability Board (FSB) in response to a request by a conference of G20 finance ministers and central bank governors. In June 2017, the TCFD issued a set of recommendations to encourage information disclosure concerning the financial influence of climate change-related risks and opportunities, in order to enable investors to make appropriate investment decisions.

TCFD Recommended Disclosure Items

Governance	• Build oversight structure consisting of internal committees, etc.
Strategy	• Identify short-, medium-, and long-term risks and opportunities • Risks/opportunities impacting business, strategy, and financial planning • Assess management strength with respect to assumed scenarios
Risk Management	• Configure risk identification, evaluation, and management processes • Integrate risk management into the group-wide risk management system
Metrics and Objectives	• Configure metrics to evaluate risks and opportunities with respect to strategy and risk management

Carbon Disclosure Project (CDP)

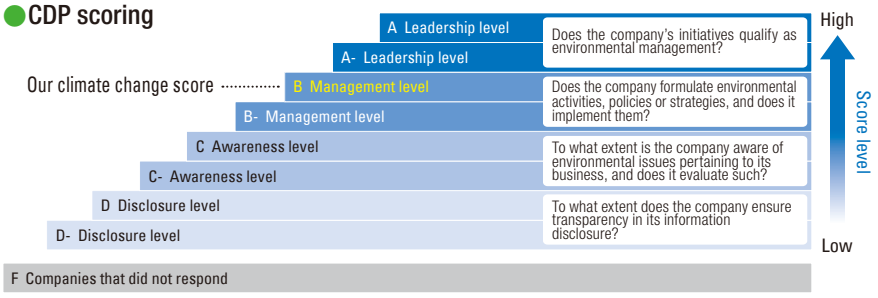
We responded to the Climate Change survey issued by the Carbon Disclosure Project (CDP*), an international NGO, relating to climate change and the environment. In FY2018, Kyushu Electric Power was scored at the Management level in terms of its environmental activities and level of disclosure. This score is high relative to other electric power companies.

*CDP: A project established by UK institutional investors and others to encourage corporate disclosure relating to the environment, including climate change. The survey is sent yearly to top-ranked enterprises around the world, based on market capitalization, and covers climate change, water, and forests. A score is issued for each responding enterprise, and is regarded as an international indicator of corporate value.

Our score

Enterprise	Climate Change Score
Kyushu Electric Power	**B**
Domestic electric company A	B
Domestic electric company B	B
Domestic electric company C	D
Domestic electric company D	D
Domestic electric company E	C

CDP scoring



Greenhouse Gas Emissions Status

We are working hard to curb emissions of CO_2 and other greenhouse gases.

More specifically, we are taking action to address global warming through efforts on both the electricity supply and usage sides. These efforts are based on our pursuit of an optimal energy mix, and include use of nuclear power, provided that safety is ensured; maintenance and improvement of the thermal efficiency of thermal power plants; active development and maximal use of renewable energy; and commitment to our own energy-conservation activities.

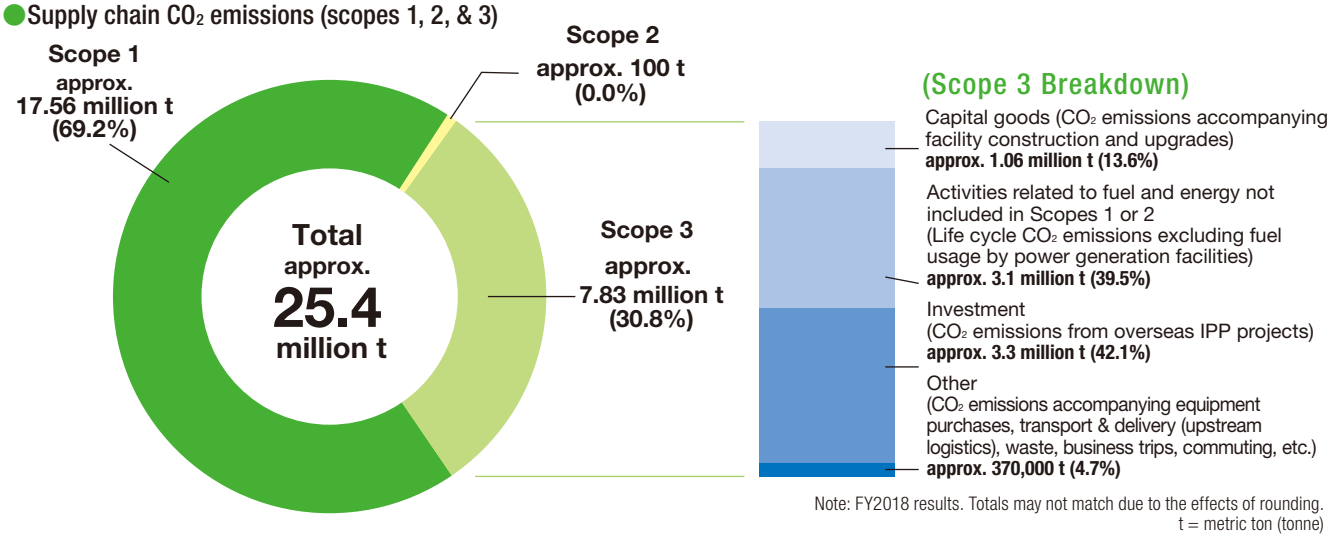
Greenhouse Gas Emissions for the Overall Supply Chain

Scope 1 Direct emission of greenhouse gases by businesses (CO_2 emissions accompanying use of fuel for power generation and vehicles; and emissions of nitrous oxide and sulfur hexafluoride)

Scope 2 Indirect emission accompanying the use of electricity, heat or steam supplied by another party (CO_2 emissions accompanying the use of purchased electricity or heat)

Scope 3 CO_2 emissions other than Scope 1 and Scope 2

Supply chain CO_2 emissions (scopes 1, 2, & 3)

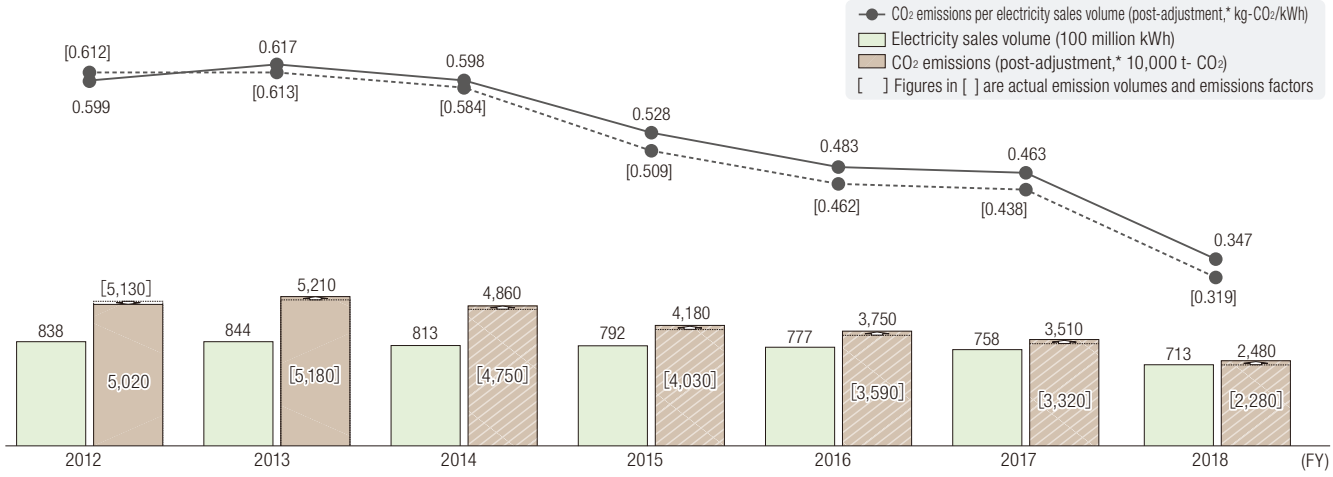


Note: FY2018 results. Totals may not match due to the effects of rounding.
t = metric ton (tonne)

CO_2 emissions in FY2018 totaled 24.8 million metric tons, with an emissions coefficient of 0.347 kg- CO2/kWh* for electric power sold, a decline from the level recorded in FY2017. This achievement reflects stable year-long operation (other than regular inspections) of Sendai Nuclear Power Station Units 1 and 2; the restart of Genkai Nuclear Power Station Units 3 and 4; and an increase in the amount of purchases of electric power generated from renewable energy.

*Definitions of conditions and priorities relating to measures to match supply and demand, as defined by the Organization for Cross-regional Coordination of Transmission Operators Japan.

CO_2 emissions and CO_2 emissions per electricity sales volume



*1: Calculated according to the "Calculation and Announcement of Actual Emission Factors and Post-adjustment Emission Factors for Each Power Provider" released by the national government in accordance with the Act on Promotion of Global Warming Countermeasures (includes portion due to purchasing power from other companies).
*2: As the increase in CO_2 emissions due to feed-in tariff (FIT) adjustments is greater than the decrease due to the acquisition of CO_2 emissions credit and other measures, the emissions coefficient after adjustments for the fiscal years 2013–2017 was greater than our base-level emissions coefficient.
*3: With the full liberalization of the retail market for electric power, the results for FY2016 onwards show the CO_2 emissions volume per electricity sales volume, CO_2 emissions, and electricity sales volume for retail electricity providers only; results are not included for isolated islands overseen by general transmission power providers (excluding the Goto Islands, which are handled as part of mainland Nagasaki Prefecture).
*Adjusted in line with CO_2 emissions credits and feed-in tariffs (FIT).

Environment

Active Renewable Energy Development

Because renewable energy sources such as geothermal, hydroelectric, biomass, wind, and solar power are superior pathways to effective utilization of domestic energy and for coping with global warming, the Kyuden Group is united in its active development promotion is working in cooperation with local communities.

Kyuden Group CO_2 Emission reductions by Renewable Energy Generation

Biomass power and waste power (as of March 31, 2019)	Approx. 89.6 MW
Wind power (as of March 31, 2019)	Approx. 67.6 MW
Solar power (as of March 31, 2019)	Approx. 89.6 MW
Geothermal power (as of March 31, 2019)	Approx. 218 MW
Hydroelectric power (as of March 31, 2019)	Approx. 1,280 MW

CO_2 emission reductions by biomass and waste power generation, FY2018*	Approx. 40,000 metric tons
CO_2 emission reductions by wind power generation, FY2018*	Approx. 30,000 metric tons
CO_2 emission reductions by solar power generation, FY2018*	Approx. 30,000 metric tons
CO_2 emission reductions by geothermal power, FY2018*	Approx. 510,000 metric tons
CO_2 emission reductions by hydroelectric power, FY2018*	Approx. 2,360,000 metric tons

*Calculated using FY2017 CO_2 emissions coefficient

Maximum Adoption of Renewable Energy

We are working to maximize the use of solar, wind, and other energy sources, whose power output varies greatly with weather and time of day, by optimally combining them with thermal power or pumped hydropower.

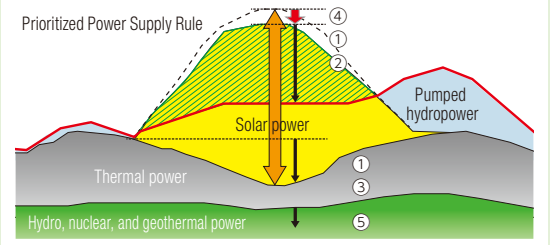
[Responding When Output Exceeds Demand]

In spring and autumn, when demand for electric power is comparatively low, daytime solar power output sometimes exceeds demand.

To maximize the utilization of solar and similar renewable power sources in such instances, we take steps such as reducing power output from thermal power stations. In addition, in some cases when power supply capacity exceeds demand, we must manage solar and wind power output in accordance with the prioritized power supply rule.* This rule functions as a safety valve for unstable solar and wind power, and contributes to greater supply to the power grid.

The World Energy Outlook, published by the International Energy Agency (IEA), categorizes the degree of integration of variable renewable energy (VRE), such as solar and wind power, into power systems into four phases (see diagram below). Development and use of VRE in Kyushu is at the same level as that of the EU or Germany.

*Definition of conditions and priorities relating to measures to match supply and demand, as defined by the Organization for Cross-regional Coordination of Transmission Operators Japan.

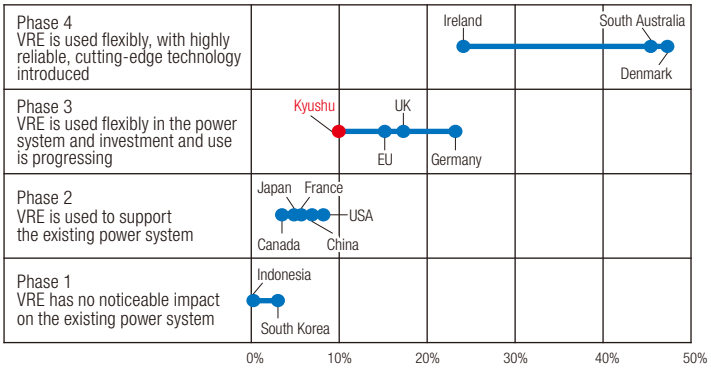


Power Supply Management Priority

1. Pumped hydropower storage of excess renewable energy output; thermal power output management
2. Power transmission to areas outside Kyushu using interconnectors
3. Biomass power output management
4. Solar and Wind power output management
5. Hydro, nuclear, and geothermal power output management

Annual share of variable renewables generation and related integration phase in selected regions/countries, 2017

(Referring to World Energy Outlook 2018)



Water Management

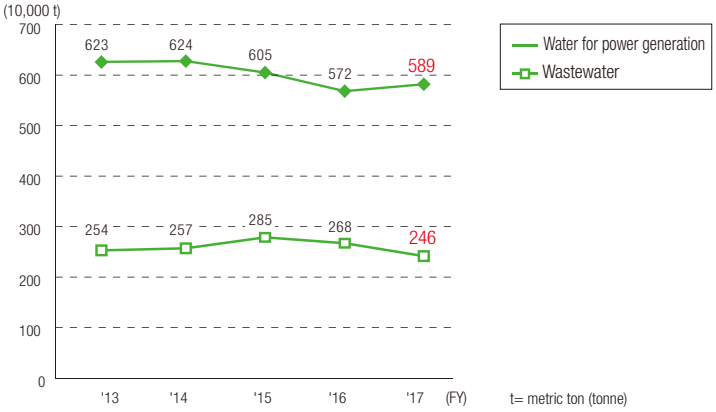
Industrial water used in thermal and nuclear power generation is drawn from rivers and other sources within usage limitations and we are working to reduce the amount of freshly supplied water we use such as through recycling. Further, in regards to wastewater, we follow all national and local laws and regulations for water quality and treat water appropriately with our specialist water treatment equipment, and in these ways, we are endeavoring to lower the risk of water pollution.

Our score for the FY2018 CDP survey on water

Our FY2018 evaluation was management level, B-.

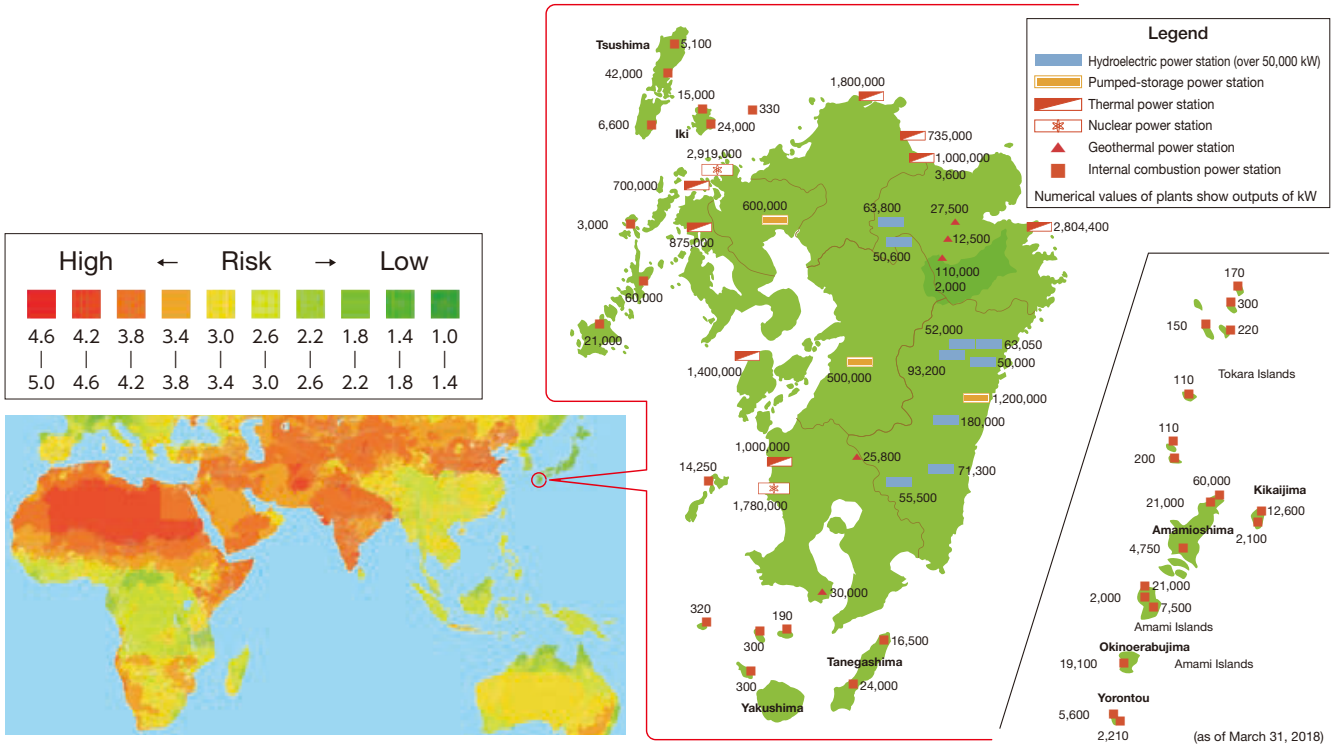
Utility	Water score
Kyushu Electric Power	**B-**
Domestic electric company A	B
Domestic electric company B	F (no response)
Domestic electric company C	F (no response)
Domestic electric company D	F (no response)
Domestic electric company E	F (no response)

Water usage for power generation and wastewater volume at thermal and nuclear power stations



Water Risk Assessment

According to the Water Risk Filter of the World Wide Fund for Nature (WWF), in the Kyushu area where we have installed power plants that use freshwater or seawater, there is no danger of water shortage. We also endeavor to manage water used in power generation and wastewater properly.



Created internally, based on “The Water Risk Filter” from the World Wide Fund for Nature(WWF) website