# Trends in Policies to Achieve Carbon Neutrality

In February 2025, the Cabinet Office, the government of Japan, approved the Seventh Strategic Energy Plan, the GX2040 Vision, and the Plan for Global Warming Countermeasures. These plans aim to simultaneously realize stable energy supply, economic growth, and decarbonization. Specifically, they present the policy direction and energy supply-demand outlook toward 2040, strategies to promote transition to a decarbonized growth-oriented economic structure, and greenhouse gas reduction targets. J-POWER will promote initiatives to achieve carbon neutrality under the basic policies of the Japanese government.

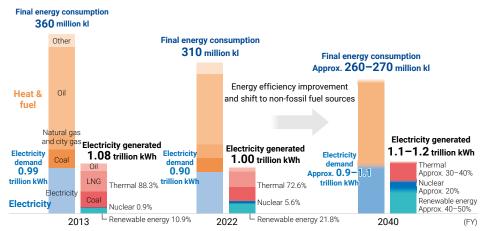


## Seventh Strategic Energy Plan

The Seventh Strategic Energy Plan states that, to realize both stable energy supply and decarbonization, it aims for a well-balanced energy mix, not dependent excessively on certain power or fuel sources, while maximizing the introduction of renewable energies as main power

Also, taking into account various uncertain factors, the Plan presents a multi-scenario outlook for energy supply and demand.

### Outlook for energy supply and demand



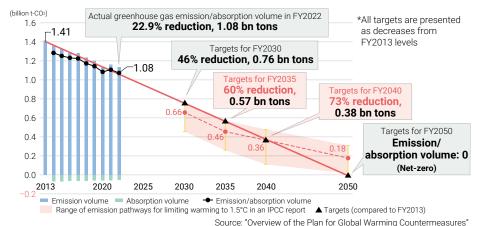
Note: The left graph shows the final energy consumption and the right graph shows the electricity generated. Electricity demand is the amount of electricity generated minus the amount of transmission and distribution losses and the amount of on-site electricity consumption.

Source: "Outlook for Energy Supply and Demand in FY2040"

# **Greenhouse Gas Reduction Targets**

In the Plan for Global Warming Countermeasures, greenhouse gas reduction targets for FY2035 and FY2040 have been set as linear milestones connecting the FY2030 targets and carbon neutrality in 2050. Specifically, the Plan states that it aims to reduce greenhouse gas by 60% and 73% in FY2035 and FY2040, respectively, from FY2013 levels. These targets have been submitted to the United Nations as the nationally determined contribution (NDC) made by Japan for the Paris Agreement.

### Next reduction targets (NDC)



# **Growth-Oriented Carbon Pricing**

The government plans to invest more than ¥150 trillion in coordination with the private sector over the next decade toward achieving Green Transformation (GX). To this end, it intends to take an integrated approach combining support and regulatory/institutional measures to promote investment in GX based on the growth-oriented carbon pricing initiative. Specifically, the government aims to introduce GX Economy Transition Bonds, carbon pricing (the emissions trading system and the fossil fuel levy), and other measures to establish a business environment in which companies that have made investments in GX earlier are highly evaluated.

#### P.59 Strategy: 2030 Scenario Analysis—Estimated Financial Impact—

**GX Economy Transition Bonds** 

system

(full-scale launch

cheduled for FY2026)

Fossil fuel levy

introduction schedule

for FY2028)

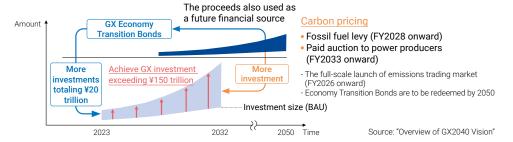
- Issuance of the bonds totaling ¥20 trillion over 10 years from FY2023
- Fossil fuel levy to fund the redemption

 Obligation for all the companies with direct greenhouse gas emission of 0.1 **Emissions trading** million t-CO<sub>2</sub> or more to join the system

- Allocation of CO<sub>2</sub> emissions quotas free of charge to qualified operators based on government guidelines (Paid auctions for the guotas scheduled to be held from FY2033)
- Maximum and minimum prices set for the emissions quotas
- A levy as a uniform carbon pricing on carbon emissions
- Implementation of necessary measures to prevent the overlapping of burden with paid auctions, which will be introduced from FY2033

# Trends in Policies to Achieve Carbon Neutrality

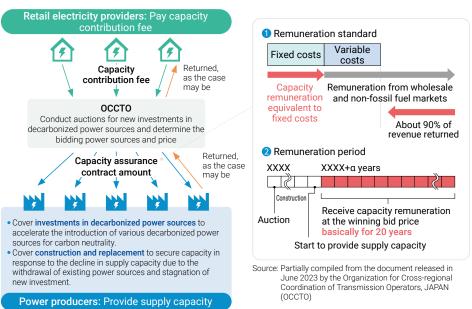
### Growth-oriented carbon pricing initiative



## **Long-Term Decarbonization Power Source Auction**

With lower market prices resulting from the expanded sourcing of renewable energy, there is a concern in recent years that existing power plants could be closed, resulting in a medium-to long-term shortage of power supply capacity. Under these circumstances, the Long-Term Decarbonization Power Source Auctions have been held since FY2023 with the aim of achieving stable supply and facilitating investment in decarbonization power sources. In principle, capacity market remuneration equivalent to fixed costs will be paid for the power sources purchased in the auction over 20 years.

### Overview of Long-Term Decarbonization Power Source Auction



### Master Plan for Wide-Area Interconnected Grid

The Seventh Strategic Energy Plan and GX2040 Vision state that, in order to ensure stable power supply and promote decarbonization, it is essential to steadily move forward with the development of cross-regional interconnection lines and the enhancement of local backbone grids, etc. based on the Master Plan for Wide-Area Interconnected Grid (hereinafter the "Master Plan").

The Organization for Cross-regional Coordination of Transmission Operators, JAPAN (OCCTO) announced in March 2023 the Master Plan to present a long-term prospect for the future development of wide-area interconnected grids and initiatives to crystallize the prospect with a view to achieving carbon neutrality by 2050.

Currently, the organization is discussing the development of cross-regional interconnection facilities connecting Hokkaido to Honshu (the Japan Sea route) and the Chugoku region to Kyushu.

#### Image of the cross-regional interconnection line expansion and new construction in the Master Plan

