

Daigas Group Energy Transition 2050

The Daigas Group has announced its ambition to achieve carbon neutrality ("CN") by 2050 through publication of its "Carbon Neutral Vision" (January 2021), and has outlined its approaches and specific strategies for the energy transition by 2030 in "Energy Transition 2030" (March 2023).

Since then, we have deepened our activities, while being faced with increasing international geopolitical risks, such as Russia's invasion of Ukraine, as well as even greater demands to achieve both carbon neutrality and energy supply stability. In light of this situation, we formulated "Energy Transition 2050" in February 2025, which clarifies our energy transition roadmap for achieving carbon neutrality by 2050.

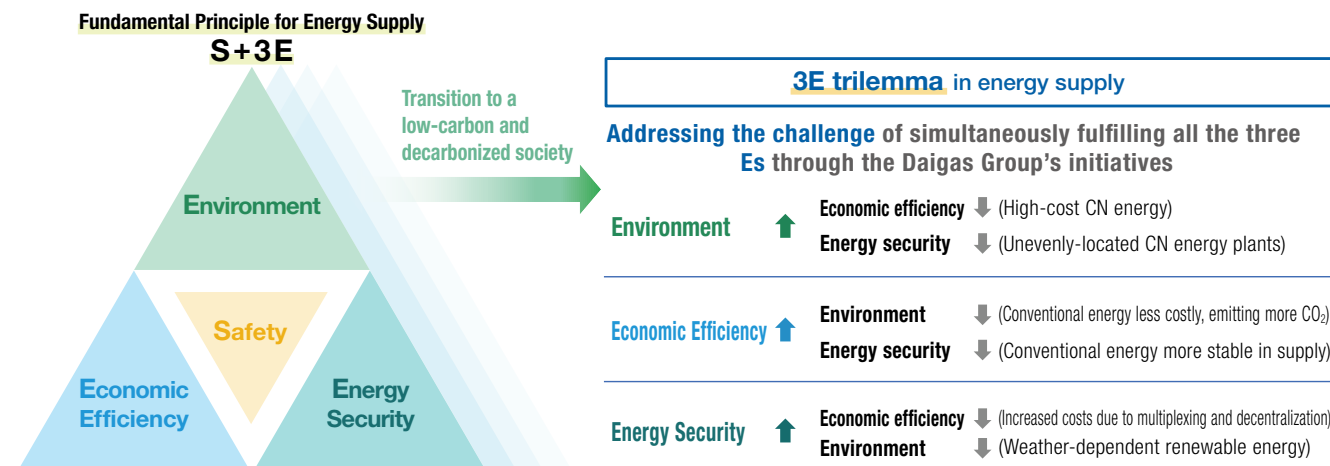
Energy Transition 2050 summarizes the "Comprehensive Overview of Carbon-Neutral Strategy," "Low-Carbon and Carbon-Neutral Energy Initiatives," and "Daigas Group's Solutions for Customers," and outlines our approaches, initiatives, and co-creation with our customers.

Challenges Regarding Energy Supply and the Daigas Group's Principle

Our basic approach to energy supply is S+3E*, in which balancing the three Es is essential for the transition to low-carbon and decarbonized energy.

However, switching to environmentally friendly energy currently leads to increased costs and reduced supply stability when the supply chain is not yet established. This relationship is referred to as the "3E trilemma," and the Daigas Group will challenge itself to satisfy all three Es simultaneously. In particular, because Japan is not blessed with natural resources and has a low energy self-sufficiency rate of 12.6%, it relies on energy imports from overseas. As a result, it is necessary to pay close attention to changes in the international situation and global energy policies.

In light of this background, the Group's fundamental principle is to prioritize supply stability while ensuring safety as a cornerstone, and to offer our customers a variety of environmentally and economically friendly options.



*1 S+3E: Safety, Energy Security, Economic Efficiency, and Environment

*2 FY2023.3 Energy Supply and Demand Results (confirmed report)

Carbon Neutral Vision

(released in January 2021)

Energy Transition 2030

(released in March 2023)

Energy Transition 2050

(released in February 2025)

Japan's energy Policy

Achieving S+3E is considered important in Japan's energy policy. The Seventh Strategic Energy Plan, approved by the Cabinet in February 2025, outlines a new policy direction for 2040, placing emphasis on natural gas in a balanced manner with the country's basic policy of S+3E, and indicating a policy of prioritizing a stable supply of energy on the premise of safety.

Risks to consider in energy supply

- International affairs (international conflicts)
- Geopolitics (low energy self-sufficiency)
- Natural disaster (earthquakes, typhoons)
- Pandemic (COVID-19)
- Regulation (carbon pricing)
- Foreign exchange (yen depreciation)

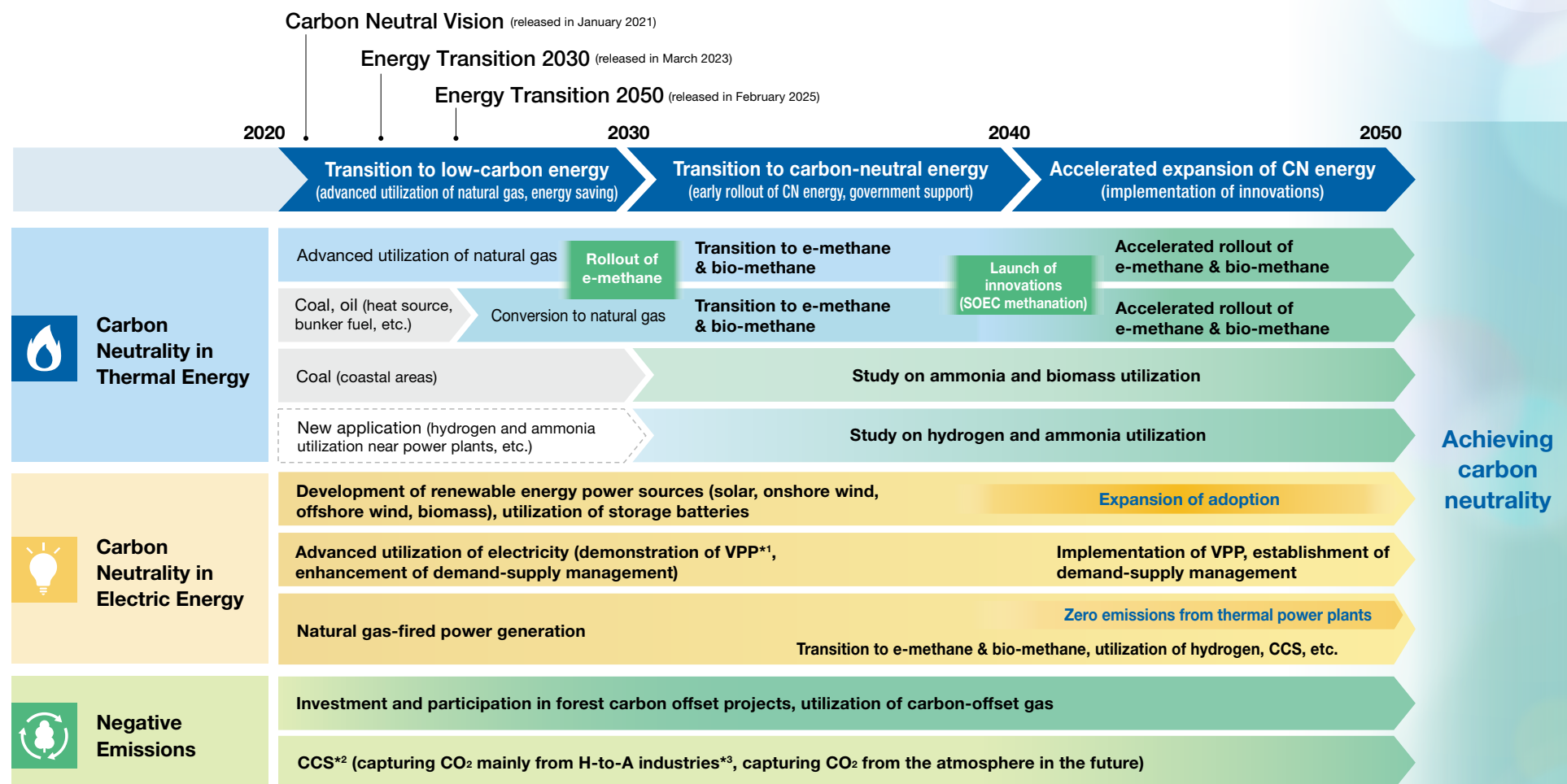
Japan's energy self-sufficiency: 12.6%^{*2}

→ Reliance on energy imports

Roadmap to Low-Carbon and Carbon-Neutral Energy

As carbon-neutral (CN) energy remains relatively expensive at the current stage, we believe a phased transition is essential to minimizing social costs.

In line with this approach, we will drive the energy transition by reducing carbon emissions through energy savings and existing technologies until 2030, shifting to carbon neutrality with CN energy from 2030, and accelerating the growth of CN energy through innovation from 2040. Through these efforts, we will fulfill our role as a comprehensive energy company in achieving carbon neutrality with stakeholders while delivering optimal solutions in light of S+3E.



^{*1} Virtual Power Plant: Operating as a single power generation facility by integrating and controlling distributed energy sources through an aggregator, utilizing information and communication technology.

^{*2} Carbon dioxide Capture and Storage

^{*3} H-to-A (Hard-to-Abate) industry: Sectors in which CO₂ emissions reduction is challenging

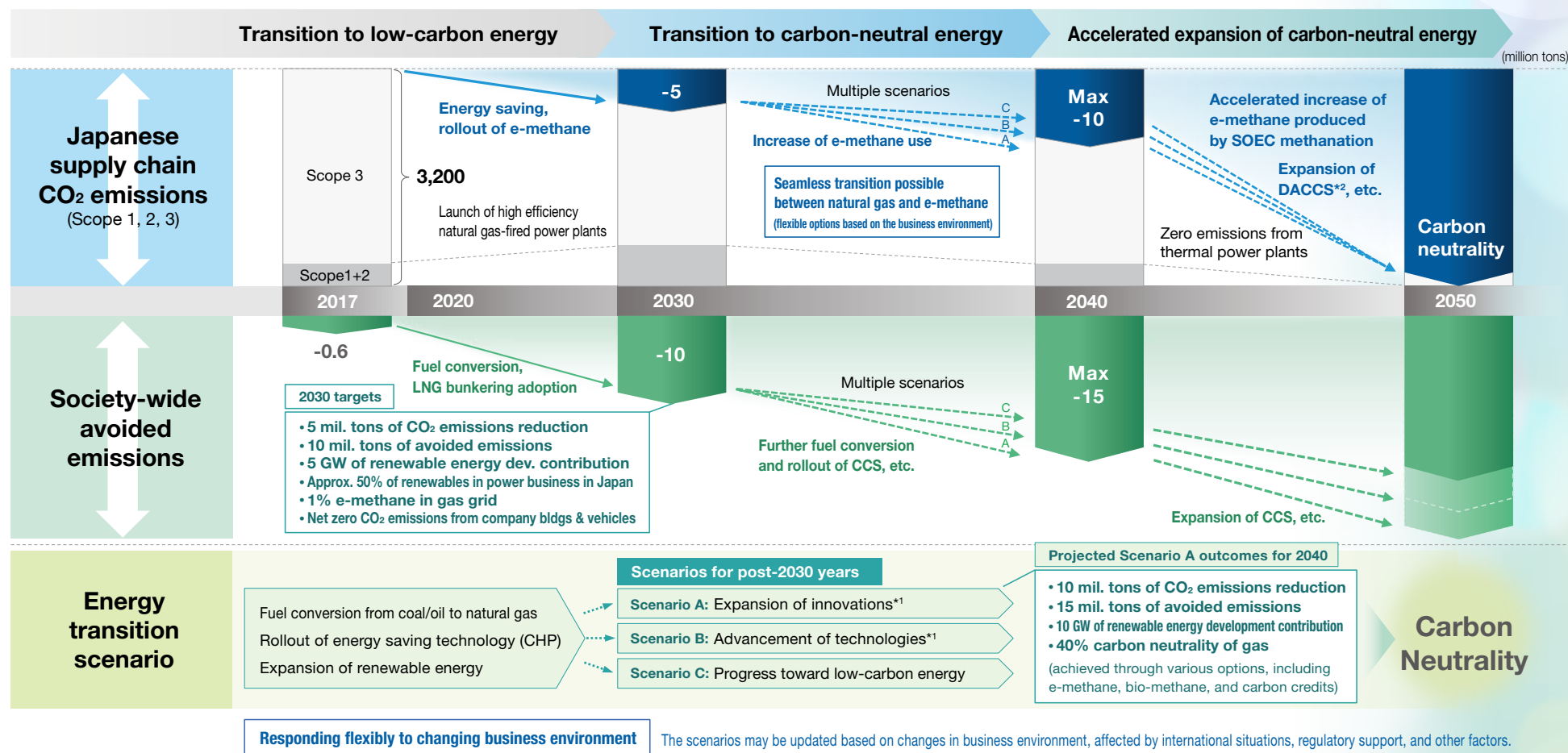


Roadmap to CO₂ Emissions Reduction

The Daigas Group has formulated a CO₂ reduction roadmap to achieve a CN society in 2050.

With the current emphasis on energy security, the country's energy supply and demand outlook for 2040 requires a variety of scenarios, including risk cases.

Based on this, the Group had considered multiple scenarios for 2040, including the scenario assumed by the government. Below are the estimated values based on the scenario of "Expansion of innovations," in which assumes the maximum progress toward carbon neutrality. This is merely one scenario, and we intend to determine its feasibility by around 2030, and to review the scenario, taking into account international situations and trends in regulatory changes.



*¹ Energy demand and supply outlook scenarios from Japan's Seventh Strategic Energy Plan.

*² Direct Air Carbon Capture and Storage: Technology that combines DAC for separating and capturing CO₂ with CCS for underground storage.