

(3) Hydrogen energy



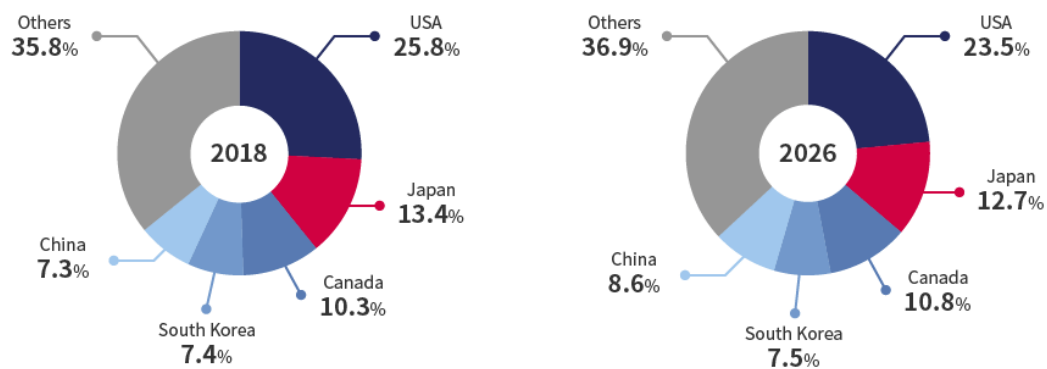
Instead of fossil fuels, hydrogen energy is expected to be the preferred energy source for the future. Hydrogen can be produced from several compounds, including water, and is considered a clean energy source that does not emit any CO₂. Utilizing surplus electricity from renewable energy sources to produce hydrogen makes it possible to have a “carbon-free” energy source that emits net-zero CO₂ from production to use. Various demonstration experiments have already been conducted, and hydrogen is expected to play a central role in future energy.

In March 2018, the automobile manufacturers Toyota, Nissan, and Honda and 11 major gas and energy companies including the French industrial gas company Air Liquide, established a new company called Japan H₂ Mobility, to utilize hydrogen as a next-generation energy source. By 2022, 80 new hydrogen stations will be established. On March 12, 2019, the Government of Japan formulated a new Strategic Roadmap for Hydrogen and Fuel Cells in order to realize the goals set forth in the Basic Hydrogen Strategy, and set forth specs and cost targets related to the development of necessary basic technologies.

Japan possesses highly advanced technologies related to hydrogen energy, and the number of patent applications in the field of hydrogen fuel cells is the world's highest. Against this backdrop, Japan's share of the global fuel cell vehicle market was 13.4% in 2018, the second largest market in the world after the United States. Market forecasts through 2026 predict this size to be maintained (See Figure 10).

Figure 10

Global Fuel Cell Vehicle Market Share Forecast
from 2018 to 2026 (Top 5 Countries)



(Source) Created based on data from Allied Market Research

Source: https://www.jetro.go.jp/en/invest/attractive_sectors/env_and_energy/attractive_markets.html

JETRO provides a survey on “Hydrogen/Fuel Cell Situation In Japan”

(for potential and approved JETRO clients only)

■ Hydrogen/Fuel Cell Situation in Japan

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