

Hydrogen/CCUS Policy Challenges for 2025
— Growing clarity of challenges toward social implementation —
<Summary>

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1. The development of hydrogen supply projects around the world is currently at a standstill. According to the forecast by the International Energy Agency (IEA), the world's hydrogen supply capacity is expected to reach a maximum of 49 million tonnes per year in 2030, and the scale of potential supply is expanding. On the other hand, due to factors such as the recent cost inflation, the stagnation of purchase commitments on the demand side, and the failure of policy support to reach full momentum, few projects have reached the stage of actual investment decisions.
2. In Europe, the selection of projects eligible for government support is ongoing with a focus on hydrogen electrolysis projects, but the contents of the selected projects suggest that the supply costs are higher than expected and the supply volume per project is small. In the future, it is expected that policy support in Japan and the United States, which will prepare larger budgets, will become a new catalyst for hydrogen project development worldwide.
3. Regarding CCS projects in Japan, policy-side initiatives are progressing steadily, including the enactment of the Act on Carbon Dioxide Storage Business (CCS Business Act) and government support for nine feasibility studies (FS). Going forward, in order to make a final investment decision within FY2026 for projects that are currently in the phase of FS, it will be necessary to develop legal systems and secure financial resources to support specific projects, develop detailed ordinances and technical standards for actual operations, and continue dialogue with local communities. In addition, in order to realize the cross-border expansion of CCS, it will be important to advance discussions toward bilateral agreements with the host government, as well as to carry out the matching of support systems by both governments.
4. Concerning the impact of the inauguration of the Trump administration in the United States, support for hydrogen and CCS is expected to continue, due to the fact that CCS has been highly compatible with the oil and gas industry, and because many of the states that benefit from the Biden administration's support policies for hydrogen are Republican-led states (so-called "Red States").

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