

June 6, 2025

**INPEX Begins Introduction of Domestic Natural Gas and Commissioning at  
Blue Hydrogen and Ammonia Production and Utilization Demo Project  
in Kashiwazaki City, Niigata Prefecture, Japan**

**TOKYO, JAPAN** - [INPEX CORPORATION](#) (INPEX) announced today it commenced commissioning work including the introduction of natural gas at its integrated blue hydrogen and ammonia production and utilization demonstration test project (hereinafter “project”) in Kashiwazaki City, Niigata Prefecture, Japan on June 2.

The project is the first of its kind in Japan to implement an integrated process from the production to the utilization of hydrogen and ammonia, which are clean energy sources that do not emit CO<sub>2</sub> during usage.

The natural gas used as a raw material in this process is domestically sourced from the INPEX-operated Minami-Nagaoka Gas Field in Niigata Prefecture. Additionally, the CO<sub>2</sub> emitted during production is injected into previously depleted gas reservoirs in the Hirai District of the Higashi-Kashiwazaki Gas Field (using CCUS<sup>1</sup> technology) to minimize atmospheric emissions. The hydrogen produced from this project will be used to generate electricity that will be supplied to local consumers in Niigata Prefecture. Furthermore, a portion of the hydrogen will be converted into ammonia and supplied to local consumers in Niigata Prefecture.

The startup of commissioning work with the introduction of natural gas follows the construction of the project’s plant facilities, which INPEX has undertaken in collaboration with relevant administrative institutions and local residents since the commencement of construction in July 2023.

Moving forward, INPEX will first conduct the commissioning of auxiliary equipment that uses natural gas as fuel and then move on to the commissioning of the hydrogen production and ammonia production facilities. After completion of the commissioning work, the project’s demonstration operations are scheduled to commence in the fall of 2025, followed by the initiation of CO<sub>2</sub> injection into the reservoir.

The production of hydrogen and ammonia as well as CO<sub>2</sub> recovery for commissioning are being conducted under a subsidy program adopted by the New Energy and Industrial Technology Development Organization (NEDO) for the “Development of Fuel Ammonia Production and Utilization Technologies/Technology Development for Blue Ammonia Production.”

Additionally, the assessment and implementation of subsurface CO<sub>2</sub> storage are being conducted as part of a collaborative study with the Japan Organization for Metals and Energy

Security (JOGMEC), under the “Pilot Test for Evaluating CO<sub>2</sub> Storage Capacity Using Domestic Depleted Oil and Gas Fields, Aimed at Decarbonization in Natural Gas Utilization.”

The Company announced [INPEX Vision 2035](#) on February 13, 2025, which is centered on realizing a “Responsible Energy Transition.” As part of this vision, INPEX has set a goal to advance lower-carbon solutions based on CCS and hydrogen by 2035 as one of its growth pillars.

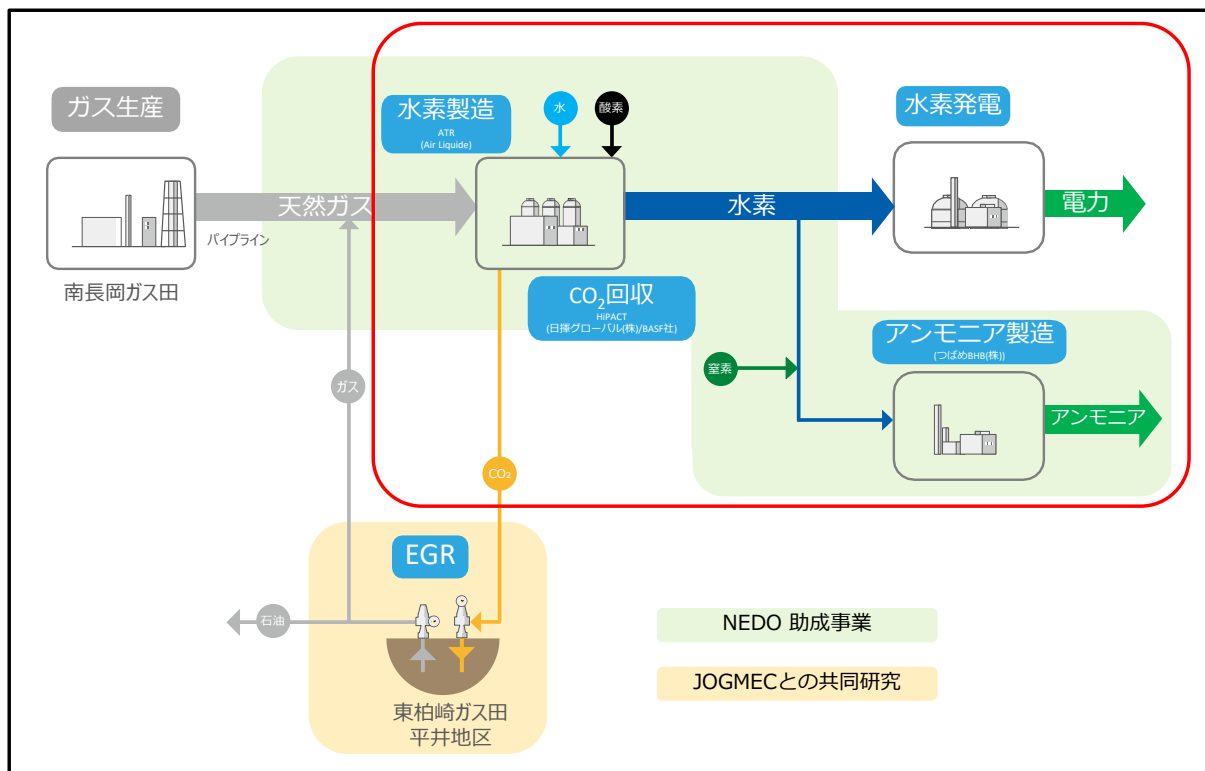
This project represents a key initiative toward achieving this goal, and the commencement of commissioning and introduction of natural gas marks an important milestone toward its success.

<sup>1</sup> Carbon Capture Utilization and Storage: A technology for capturing, storing, and utilizing carbon dioxide.

## 1. Project overview

Content	<ul style="list-style-type: none"><li>- Hydrogen/ammonia production and CO<sub>2</sub> recovery (NEDO subsidization expected)</li><li>- CCUS, including evaluation of CO<sub>2</sub> storage potential of depleted oil and gas fields in Japan (Joint research with JOGMEC)</li></ul>
Timeline	Second half of fiscal 2022 until end of fiscal 2025 (After the completion of the subsidy programs and collaborative research, the company plans to continue the demonstration operation as part of its own business initiative. )
Location	INPEX Higashi-Kashiwazaki Gas Field Hirai District, Kashiwazaki City, Niigata Prefecture
Summary	<ol style="list-style-type: none"><li>1) Demonstration of production of blue hydrogen and supply of clean electricity using blue hydrogen</li><li>2) Ammonia production using a recently developed low-temperature, low-pressure synthesis process</li><li>3) Evaluation and verification of CO<sub>2</sub> storage potential of depleted oil and gas fields in Japan</li><li>4) Confirmation of enhanced gas recovery (EGR) by CO<sub>2</sub> injection</li><li>5) Implementation of CO<sub>2</sub> injection monitoring to confirm safety</li></ol>

## 2. Project diagram (The plant facilities currently undergoing trial operations are highlighted within the red frame.)



## 3. Aerial Photograph of the Demonstration Plant

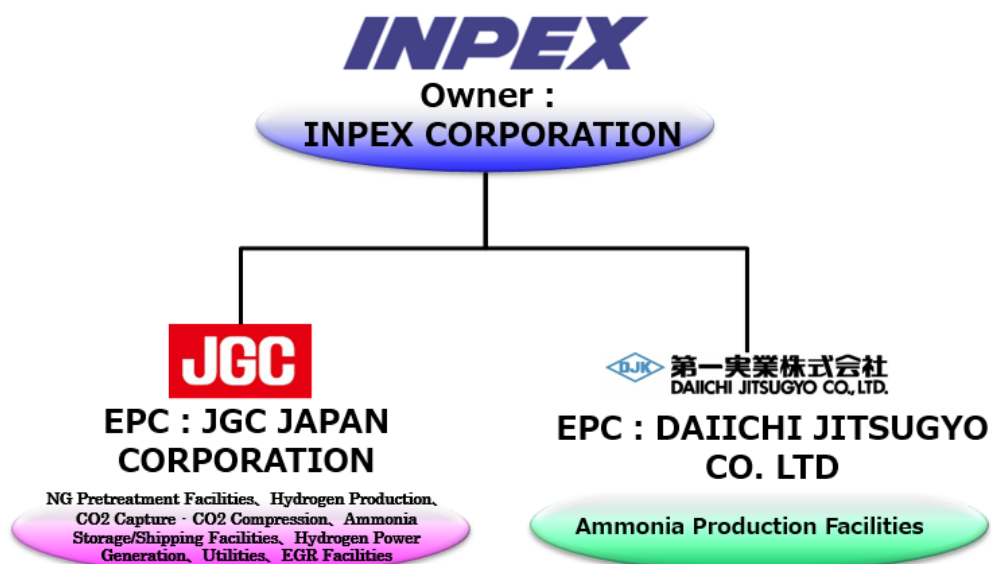


# **INPEX**

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4. Operation of plant facility construction



## **About INPEX**

INPEX is Japan's largest exploration and production (E&P) company, engaged in the development and operation of oil and gas projects worldwide. We are committed to contributing to a brighter future by delivering energy in a sustainable way. As part of this commitment, we are also engaging in lower-carbon solutions such as CCS, hydrogen and integrated power supply, while pursuing new opportunities in the evolving energy landscape. For more information, visit <https://www.inpex.com/english/index.html>.

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