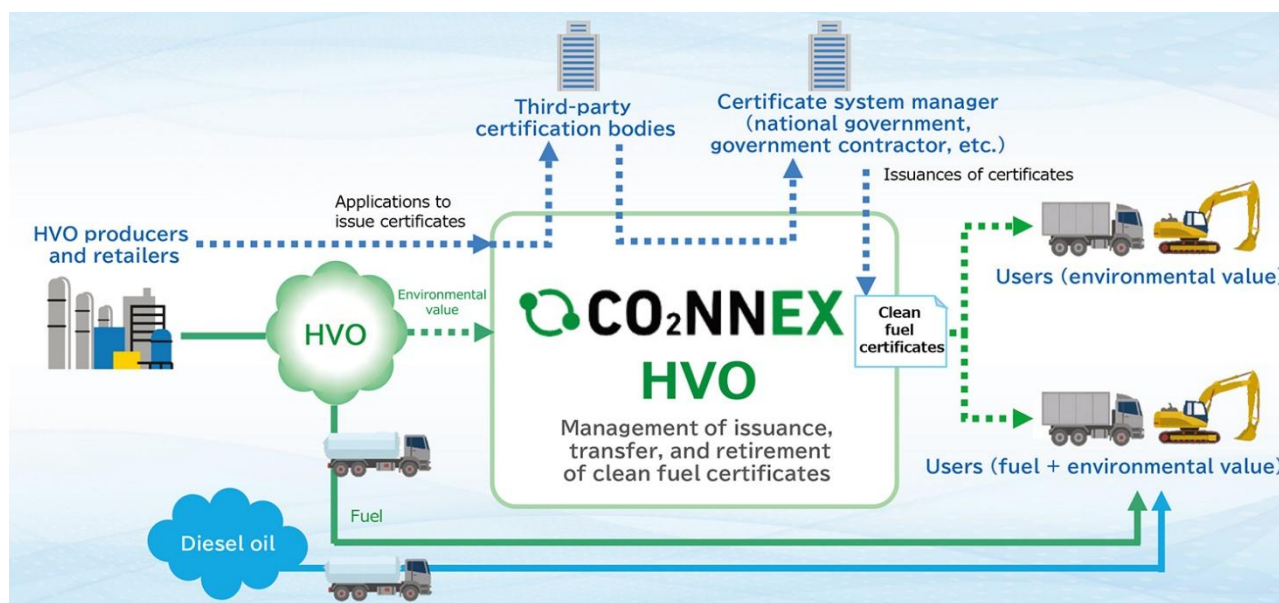


CO₂NNEX[®] Digital Platform for Integrated Management of the Environmental Value of Sustainable Liquid Fuel (HVO) to Commence Operation in Demonstration of Sustainable Fuels Certificates Scheme

Tokyo, October 21, 2026 – Osaka Gas Co., Ltd. (“Osaka Gas”) and Mitsubishi Heavy Industries, Ltd. (“MHI”) today commenced operation of CO₂NNEX[®]*1, a digital platform jointly developed and deployed by the two companies, under the 2026 Project for the Establishment of Environmental Value Certification Scheme, etc. (Demonstration Project for Consideration of the Building of a Scheme for Certification and Transfer of Environmental Value of Sustainable Fuels) implemented by the Agency for Natural Resources and Energy of the Ministry of Economy, Trade and Industry of Japan (“ANRE”) (hereinafter referred to as “the Scheme Demonstration”)*2. In the Scheme Demonstration, CO₂NNEX will be used in consideration of the system requirements needed for the processes of issuing, transferring, and retiring sustainable fuel certificates.

Toward the widespread deployment of sustainable fuels (e-gasoline, SAF, HVO*3, e-methane, biogas, etc.), the adoption of sustainable fuels certificates scheme to certify and manage the environmental value of those fuels is being considered. The Scheme Demonstration is being conducted to examine issues in the adoption and the design of this scheme.

Figure: Expected initiative using CO₂NNEX in the Scheme Demonstration



Osaka Gas and MHI aim to create value in the following forms through CO₂NNEX, with a view to the widespread deployment of Sustainable liquid fuels and full-scale operation of the system in the future.

(1) Realization of digitalization and operational efficiency improvement for procedures, including collaboration with third-party certification bodies

Exchange of information between applicants and third-party certification bodies for procedures such as application, verification, and issuing of certificates will be completed on CO₂NNEX. The introduction of a digital platform will enable the building of processes for prompt verification and issuance of certificates, minimizing the workload involved in procedures such as document handling. It will also enable reliable management of certificates without manual operations as the results of the digital authorization performed by the third-party certification bodies will be automatically reflected in transfer, retirement, and management processes after the certificates are issued on the system.

(2) Prevention of double-counting, enabling appropriate management and enhanced reliability of environmental value

A mechanism to prevent double-counting of environmental value through the use of digital trust technology will be built into the system. System requirements will also be organized with the aim of contributing to a highly reliable certificate system design that will ensure traceability.

ANRE is also conducting a demonstration of a sustainable fuels certificates scheme for e-methane and biogas in the area of utility gas. Osaka Gas and MHI are making considerations for the use of CO₂NNEX by the parties involved in that demonstration for e-methane and biogas. Going forward, Osaka Gas and MHI will contribute to the practical application of various sustainable fuels through the building and provision of system requirements with a high level of utility and reliability to meet the needs of future social infrastructure in the areas of both gas and liquid fuels.

Notes

*1: CO₂NNEX:

CO₂NNEX is a digital platform developed by MHI for the visualization and management of CO₂ supply chain. In the Scheme Demonstration, Osaka Gas and MHI will use CO₂NNEX to jointly consider the system requirements needed for the operational processes for issuing, transferring, and retiring sustainable fuels certificates. This system also has functions for transfer and management of attribute data for clean gas certificates used to certify the environmental value of e-methane and biogas, which have been used for purposes such as Expo 2025 and Nagaoka Methanation Demonstration.

"CO₂NNEX" is a registered trademark of MHI in Japan and other countries.

For details, see the following press release:

"Operations Started for the Nagaoka Methanation Demonstration Utilizing the CO₂NNEX[®] Digital Platform for Transfer and Management of e-Methane Clean Gas Certificates" (June 4, 2026)

https://www.osakagas.co.jp/en/whatsnew/_icsFiles/afieldfile/2026/06/03/260604_1.pdf

<https://www.mhi.com/news/260604.html>

*2: 2026 Project for the Establishment of Environmental Value Certification Scheme, etc. (Demonstration Project for Consideration of the Building of a System for Certification and Transfer of Environmental Value of Sustainable Fuels):

A demonstration conducted by the Ministry of Economy, Trade and Industry in fiscal 2026 for the phased establishment of sustainable fuels certificates scheme.

For details, see the following document:

11th Environmental Improvement Working Group, Public-Private Joint Meeting to Promote the Adoption of Next-Generation Fuels (March 11, 2026)

Document 5: Direction of Considerations on sustainable Fuels Certificates Scheme in the Next Fiscal Year

https://www.meti.go.jp/shingikai/energy_environment/e_fuel/kankyo_wg/pdf/011_05_00.pdf

(in Japanese only)

*3: HVO:

Hydrotreated vegetable oils, a biofuel produced by reacting vegetable oil or used cooking oil with hydrogen at a high temperature and pressure (hydrotreating) to improve properties such as oxidative stability. Mainly expected to be used as a substitute for diesel oil.

About Osaka Gas

Daigas Group, based on its Energy Transition 2050 released in February 2025, will work to develop technologies and services that contribute to a carbon-neutral society, actively address climate change and other social challenges, and aim to be a corporate group that contributes to the further advancement of everyday life and business.

About Mitsubishi Heavy Industries

Since its founding in 1884, Mitsubishi Heavy Industries (MHI) Group has been a global leader in engineering and manufacturing, sincerely addressing societal challenges and supporting people's lives. By integrating cutting-edge knowledge with the advanced technological capabilities cultivated over its long history, we will continue to tackle social issues through technology and contribute to the realization of a safe and prosperous society. For more information, please visit www.mhi.com or follow our insights and stories on spectra.mhi.com.