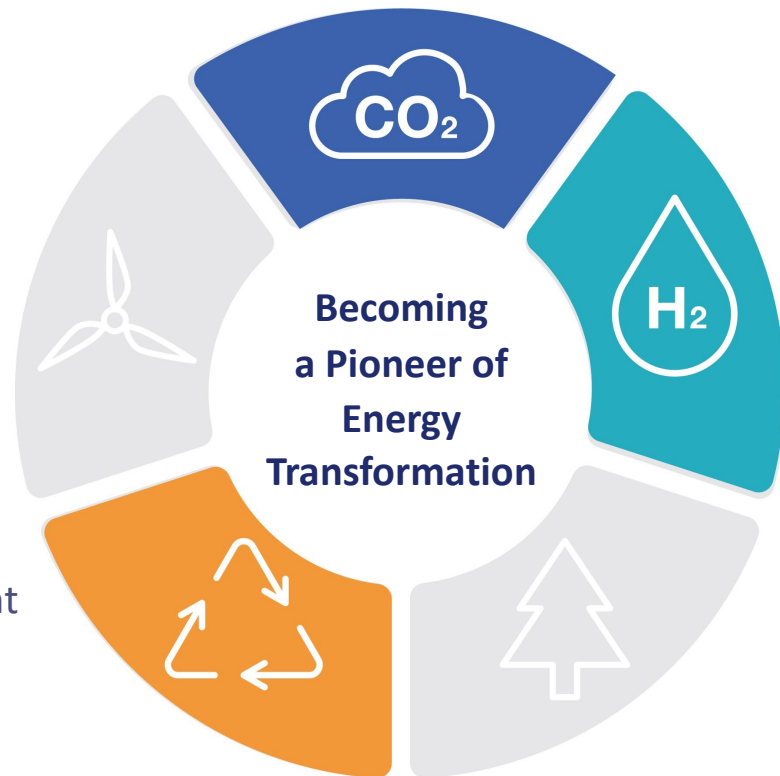


Hydrogen and CCUS Business

Director, Managing Executive Officer,
Senior Vice President, Hydrogen & CCUS Development

Toshiaki Takimoto



5 Net Zero Business

Expand each business at an accelerated pace and become recognized as a credible key player

Oil & Gas business

Maintain stable energy supply on the basis of thoroughly making the business cleaner



Target of Hydrogen/CCUS

CCS · CCUS

Around 2030

CO2 Injection
2.5 MTPA

Around 2050

Commercialization of
CCUS Business

e-methane

Around 2030

Production Volume
10,000Nm³/h
(60,000TPA)

Around 2035

Production Volume
60,000Nm³/h
(360,000TPA)

Hydrogen

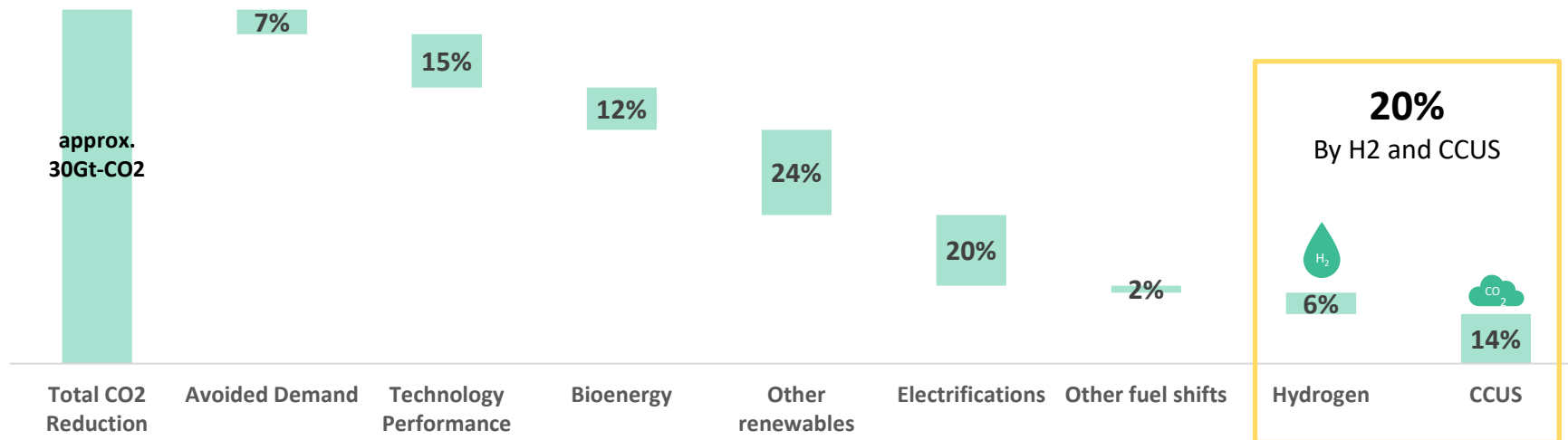
Around 2030

>=3 projects
100,000TPA

Around 2050

Supply 10%
demand in Japan

Hydrogen & CCUS contribution to global CO₂ reduction in 2050

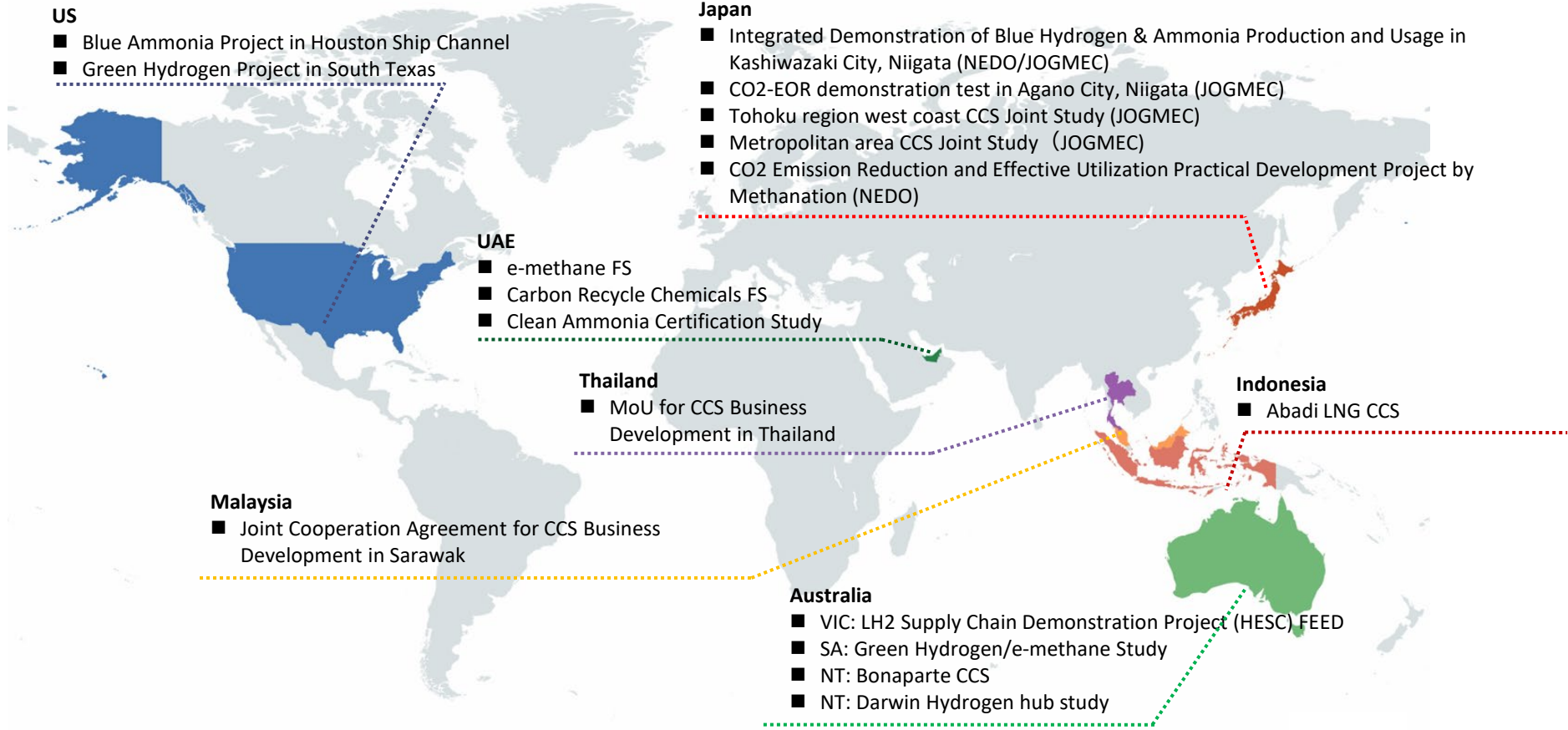


Note: INPEX created based on "Energy Technology Perspective 2020" (IEA)

H₂ and CCUS will play an important role toward 2050, as the benefits of **H₂ and CCUS deployment will account for more than 20% of the global CO₂ reductions in 2050.**

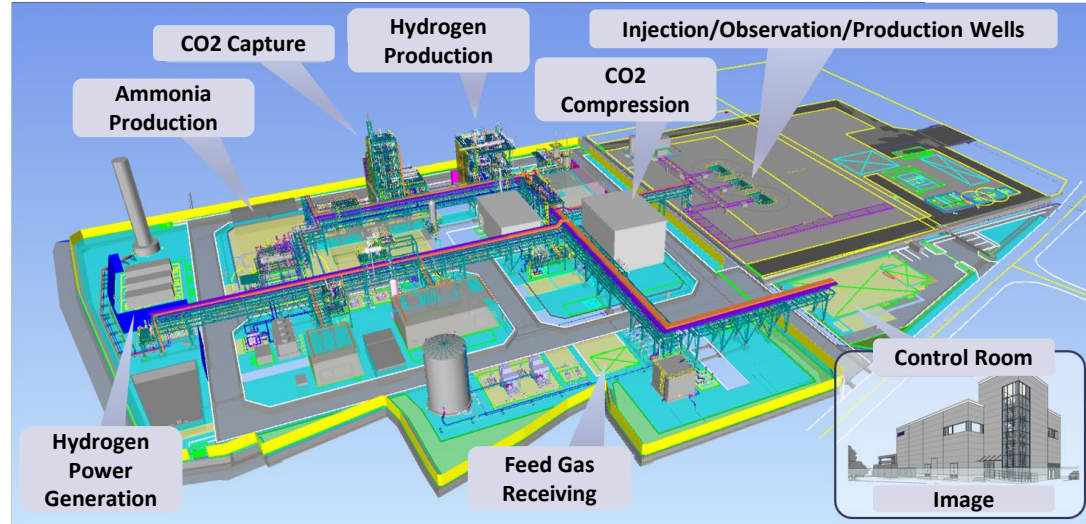
For INPEX, CCUS is not only a way to reduce CO₂ from its own upstream operations and **to obtain a Social License to Operate**, but also **to create a new business pillar** by supplying clean energy to customers.

INPEX aims to be a first mover to gain first-mover advantage, and to commercialize multiple projects by around 2030.



INPEX Activities - 1

Kashiwazaki Integrated Demonstration Project



Overview

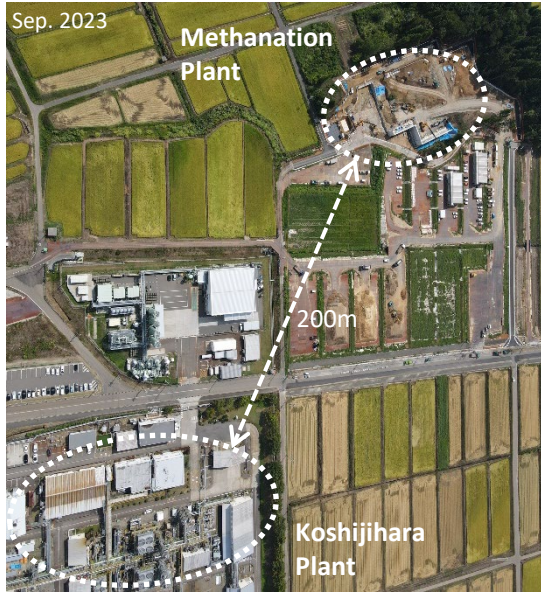
- Demonstration project of blue Hydrogen/Ammonia production with CO₂-EGR, with full utilization of existing assets
- NEDO supports Hydrogen/Ammonia production and CO₂ capture, JOGMEC supports CO₂-EGR
- INPEX is the operator, JGC and Daiichi Jitsugyo (Ammonia production) take construction work

Schedule

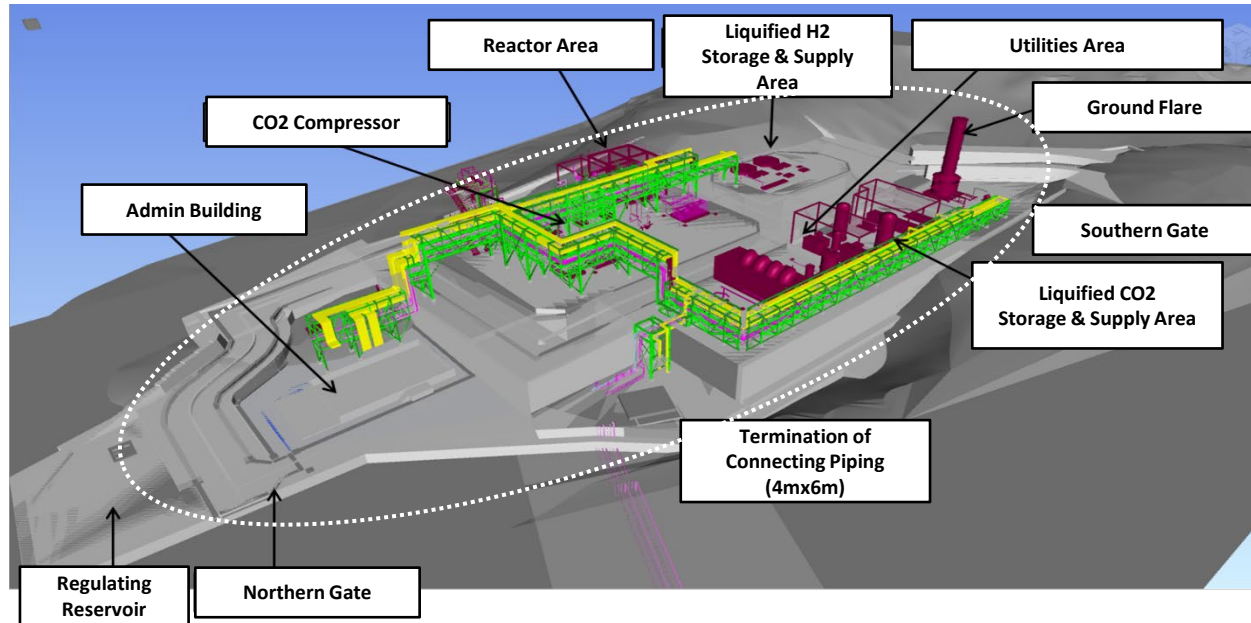
| | |
|-----------|---|
| Oct. 2022 | : FID |
| Jul. 2023 | : Commencement of construction of surface plant |
| Mar. 2025 | : Commissioning (planned) |
| Aug. 2025 | : Completion (planned) |

INPEX Activities - 2

Nagaoka Methanation Pilot Project



Overview



Schedule

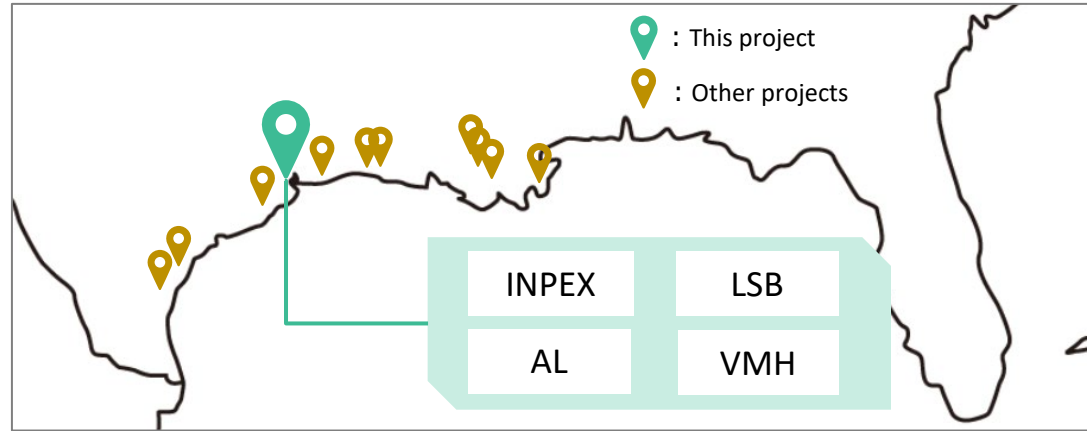
- Methanation test facilities, producing 400 Nm³/h, equivalent to the amount of methane consumed by 10,000 households in Japan
- NEDO supports the project, INPEX is the operator, Osaka Gas develops reaction process technology, Nagoya University develops simulation technology and Chiyoda takes construction work

| | |
|-----------|--------------------------------|
| Oct. 2023 | : Commencement of construction |
| 2025 | : Commissioning & Start-up |



Overview

- INPEX, Air Liquide Group(AL), LSB Industries, Inc.(LSB), and Vopak Moda Houston LLC(VMH) have agreed to collaborate on the pre-FEED for the development of a large-scale, blue ammonia production and export project on the Houston Ship Channel
- The port is close to the open ocean, and there are existing infrastructures such as natural gas/hydrogen/CO2 pipeline, etc.
- Discussing with potential Asian off-takers incl. Japan



Schedule

- Targeted to produce more than 1.1MTPA of blue ammonia by the end of 2027

Company's Effort

- **Production cost reduction**
 - ✓ Procure cheaper and cleaner H2
- **Technology development of efficient H2 production facilities**
- **Development of efficient CO2 removal equipment**
- **Establish value chain and secure off takers**
- **Secure CO2 storage site**

Regulation (Sticks)

- **Carbon Pricing**
 - ✓ Carbon tax, Emission trading scheme, Carbon credit etc.
- **Legislation System**
 - ✓ CCS legislation system in Japan etc.
- **GHG Counting Rule**
 - ✓ Important especially for e-methane

Govt. Support (Carrots)

- **Early commercialization utilizing IRA**
- **Establishment of Japanese government support**
 - ✓ Price difference support, Long-term decarbonization power source auction, Maintenance of bases
 - ✓ Support scheme within advanced CCS projects
- **Public acceptance support**
- **Carbon credit / Certification scheme**