

Corporate Position on Climate Change

March 25, 2022

*A New Wind
for Energy*



INPEX has revised its “Corporate Position on Climate Change*¹” based on its “INPEX Vision @2022*²” announced on February 9th, 2022.

This paper outlines INPEX’s position and initiatives concerning the key themes listed to provide stakeholders with a better understanding of how the company is responding to the challenges of climate change.

1. Basic Management Policy Towards a Net Zero Carbon Society by 2050

2. Climate Change Goals

3. Initiatives in the 5 Net Zero Businesses

3-1. Develop a Hydrogen Business

3-2. Promote CCUS *³

3-3. Enhance and Emphasize Renewable Energy Initiatives

3-4. Promote Carbon Recycling and Cultivate New Business Opportunities

3-5. Promote Forest Conservation

4. Towards a Cleaner Upstream Business and Implementation of a Shift to Natural Gas

For more information on the company’s initiatives relating to sustainability including Climate Change response, please refer to our Sustainability Report*⁴.

*1 : This document is a provisional English translation of the “Corporate Position on Climate Change”.

If any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

*2 : https://www.inpex.co.jp/english/company/pdf/inpex_vision_2022.pdf

*3 : Carbon dioxide Capture, Utilization and Storage

*4 : <https://www.inpex.co.jp/english/csr/csr/>

- 1 INPEX will proactively engage in energy structure reforms towards the realization of a net zero carbon society by 2050, while responding to the growing energy demands of Japan and the world and fulfilling its responsibility for the development and stable supply of energy over the long-term.
- 2 The company will set climate change response goals to achieve its own net zero carbon emissions by 2050, to contribute to the realization of the Paris Agreement objectives in relation to climate change.
- 3 INPEX will expand 5 net zero businesses at an accelerated pace through the following three initiatives, in order to offer solutions responding to the needs of society and become recognized as a credible key player.

1. Leverage the company's strengths (knowledge and experience)

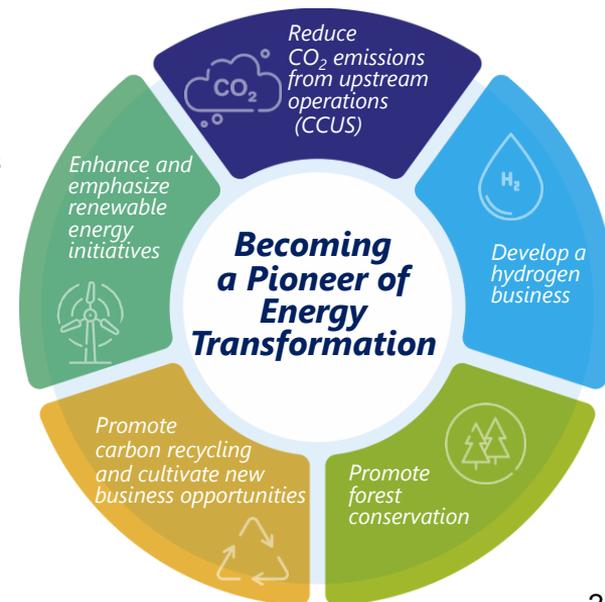
INPEX will make the most of its strengths such as its management, technical and operational experience gained in Japan and around the world to select business targets and apply its management resources including human resources, finances and business knowledge.

2. Strengthen collaboration with industry, academia and government

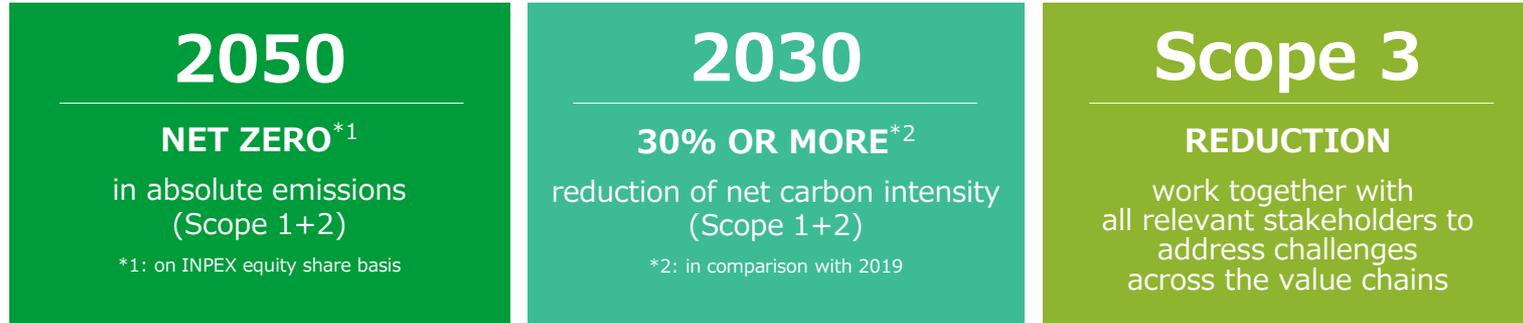
Responding to changing times requires innovation and the realization of new business models. INPEX will promote long-term ties and collaboration with industry, academia and government in a broad spectrum of business fields.

3. Utilize policy support measures

The company will collaborate on the improvement of policy frameworks and promote rapid and efficient initiatives making use of policy incentives.



- INPEX has set its own goals to contribute to realizing a net zero carbon society as outlined in the Paris Agreement.



TO ACHIEVE THESE GOALS INPEX WILL...

- ▶ Promote CCUS;
- ▶ Strengthen renewable energy initiatives;
- ▶ Promote forest conservation for CO₂ absorption;
- ▶ Maintain current low methane emissions intensity of approximately 0.1%^{*3} (calculated by methane emissions / natural gas production); and
- ▶ Aim to eliminate routine flaring by 2030.^{*3}

*3: in INPEX-operated projects

PROMOTE THE ONGOING DISCLOSURE OF CLIMATE-RELATED INFORMATION IN LINE WITH TCFD RECOMMENDATIONS.

3 Initiatives in the 5 net zero businesses

3-1. Develop a Hydrogen Business

- Commercialize 3 or more projects by around 2030 and aim to produce and supply 100 thousand tons or more of hydrogen/ammonia per year



3-2. Promote CCUS

- Aim to become a leading company in the CCUS business by targeting an annual CO₂ injection volume of 2.5 million tons or more in around 2030 and promoting technical development and commercialization



3-3. Enhance and Emphasize Renewable Energy Initiatives

- Aim to secure 1-2 gigawatts of installed capacity, mainly in the offshore wind and geothermal power generation business, and become a key player by accelerating business expansion using assets acquired through M&A and other means as a platform



3-4. Promote Carbon Recycling and Cultivate New Business Opportunities

- Promote the adoption of methanation in society and aim to supply about 60 thousand tons* of synthetic methane per year through INPEX's natural gas trunk pipeline network by 2030 while pursuing further development

*Equivalent to approx. 200 thousand households



3-5. Promote Forest Conservation

- Strengthen and expand projects aimed at CO₂ absorption through forest conservation, from supportive measures to project participation



Towards a Cleaner Upstream Business and Implementation of a Shift to Natural Gas

4. Towards a Cleaner Upstream Business and Implementation of a Shift to Natural Gas

- Aim to achieve zero routine flaring by 2030 and thoroughly make projects cleaner by introducing CCUS, utilizing forest credits, introducing electricity based on renewables and saving energy.
- Raise the gas investment ratio from the current level of around 50% to around 70% to increase the gas ratio of the portfolio.
- For the natural gas development business, consider feedstock supply for hydrogen and ammonia projects and business transformation opportunities.

INPEX's Current Initiatives

March, 28, 2024

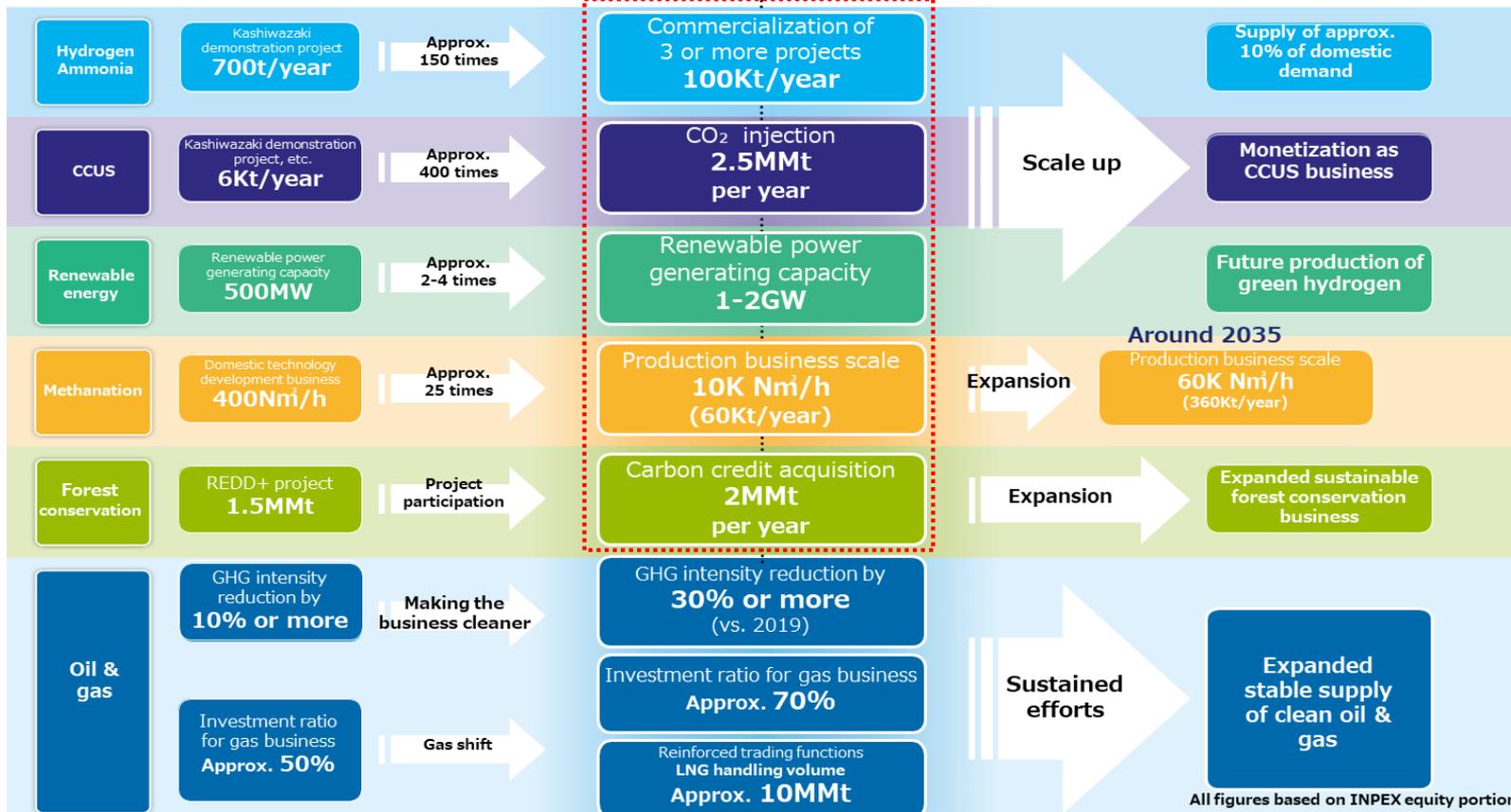
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Medium-term business plan period

Around 2030

Invest up to about 1 trillion JPY in the 5 net zero businesses and aim for these businesses to generate about 10% of operating cash flow by 2030

2050



All figures based on INPEX equity portion

▶ Net carbon intensity

- ◆ Our net carbon intensity (provisional figure) in 2023 was 29kg-CO₂e boe. ※¹
- ◆ Aim to reduce 10% (4.1kg/boe) or more over a 3-year period towards our 2030 target. ※²

▶ Scope 1+2+3

- ◆ Scope 1+2 : Reduction GHG emission towards net zero target by initiatives such as making the oil and natural gas business cleaner with CCUS, hydrogen and ammonia, renewable energy, etc., and complemented offset by forest conservation and afforestation.
- ◆ Scope 3 : Reducing our Scope 3 emissions by cooperating with all our stakeholders on the supply chain through producing clean energy, implementing natural gas shift, methanation and promoting carbon-neutral LNG and gas to customers.

▶ Methane emissions intensity

- ◆ Our methane emissions intensity (provisional figure) in 2023 was 0.05%. Aim to maintain the current low methane emissions intensity.

▶ Eliminating routine flaring

- ◆ At each project, accelerate efforts to make the business cleaner through continued flare reduction measures, etc.

*1 barrels of oil equivalent

*2 Reduction of 2019 net carbon intensity (41.1kg/boe) by over 30%

- ▶ Promoting initiatives in line with TCFD recommendations
 - ◆ Implementing and regularly reviewing economic assessments on each of our projects using internal carbon pricing as a base case, set based on EU price of IEA STEPS(\$90/t-CO₂ in 2030, \$113 /t-CO₂ in 2050) or regulatory carbon price prediction.
 - ◆ Also, conducted financial assessments of our portfolio by referring to the IEA WEO Announced Pledges Scenario (APS) . We also use the Net Zero Emissions by 2050 Scenario (NZE) * as a reference for the assessments.
 - ◆ Established an internal system to evaluate and manage climate-related risks and opportunities in line with TCFD recommendations.
 - ◆ Established an internal system to manage our efforts to achieve our climate change goals.
 - ◆ Established an internal system to address and manage voluntary carbon credits.

- ▶ Building an organizational framework and optimizing personnel allocation to develop and enhance clean energy technology
 - ◆ To accelerate the implementation of energy transformation (EX) through technical research and new business investment, the existing Technical Research Center (TRC) within the Technical Division will be progressively reorganized. The division overseeing EX research and development at TRC will be integrated with the New Business Development Unit of the Renewable Energy & New Business Division to create the Innovation Division. The New Venture Unit, which will inherit the functions of the New Business Development Unit, and the I-RHEX Unit, which will inherit the EX research and development functions of TRC, will be established at INPEX headquarters.
 - ◆ Built a framework to execute business operations more efficiently and flexibly by reinforcing organizational structure and personnel, including the establishment of the Hydrogen & CCUS Development Division.

*Scenario that assumes that the global energy sector will reach net zero in 2050



- ▶ *Integrated demonstration of hydrogen & ammonia production and usage in Kashiwazaki City, Niigata Prefecture, Japan*
 - ◆ In 2023, commenced construction of surface plant facilities of Kashiwazaki Clean Hydrogen/Ammonia Project with the aim of completing construction in 2025.

- ▶ Commercialization of blue hydrogen project in Niigata Prefecture, Japan
 - ◆ Based on the results of the above initiative, aim to construct a blue hydrogen production plant utilizing INPEX natural gas fields and existing infrastructure and produce hydrogen on a commercial scale by around 2030 (100-thousand-ton scale)

- ▶ Clean Hydrogen and Ammonia Projects Overseas (Australia, U.S., Abu Dhabi, etc.)
 - ◆ Signed a strategic collaboration agreement (SCA) with ADNOC, the Japan Organization for Metals and Energy Security (JOGMEC) and Mitsui & Co., Ltd. (Mitsui) regarding a joint study for the verification of greenhouse gas (GHG) emissions at a clean ammonia production project implemented by ADNOC in Abu Dhabi in the United Arab Emirates (UAE).
 - ◆ Jointly awarded a one million Australian dollar grant from the Australian Government to conduct a feasibility study into the growth potential of a clean hydrogen market in Darwin, northern Australia. The Darwin Clean Hydrogen Hub joint study between INPEX, Santos, Xodus and CSIRO will explore opportunities to provide clean hydrogen solutions.
 - ◆ In 2023, concluded a shareholder agreement for INPEX to acquire shares in Japan Suiso Energy, Ltd. (JSE), a joint venture between Kawasaki Heavy Industries, Ltd (Kawasaki), Iwatani Corporation (Iwatani). Aiming to steadily build a commercial-scale international liquefied hydrogen supply chain from Australia to Japan.
 - ◆ In 2023, agreed to conduct a conceptual design (pre-FEED) for a large-scale low-carbon ammonia project in Texas, USA with Air Liquide Group, LSB Industries and Vopak. Targeted to produce more than 1.1 million tonnes per annum (MTPA) of low-carbon ammonia by the end of 2027
 - ◆ In 2023, commenced joint study with Green Hydrogen International (GHI) for large scale green hydrogen/ammonia project in South Texas.



- ▶ CO₂EOR demonstration at Minami-aga (Niigata Prefecture, Japan)
 - ◆ In 2023, CO₂ injection tests were conducted.
- ▶ CO₂EOR scale up in Abu Dhabi
 - ◆ Pursue technical evaluations to increase CCUS capacity of ADNOC Onshore CO₂EOR activities from the current 0.8 million tons per year with ADNOC.
- ▶ Promotion of CCS/CCUS business development in Japan and overseas
 - ◆ Conduct surveys of suitable CCS/CCUS locations and technical development in Japan and overseas. Make full use of knowledge, experience and assets in the oil and natural gas sector with the aim of commercializing the CCS/CCUS business.
 - ◆ Since 2022, have been participating in the CCS Long-Term Roadmap Study Group organized by the Ministry of Economy, Trade and Industry (METI) and involved in discussions to develop policies of the commercialization of CCS in Japan.
 - ◆ Tokyo Metropolitan Area CCS and Tohoku Region West Coast CCS have been selected by JOGMEC to conduct a feasibility study on Japanese Advanced CCS Project, a public offered project in FY2023.
- ▶ CCS Introduction of the Ichthys LNG Project (Australia)
 - ◆ Conducted pre-appraisal reservoir evaluation and preparation for planned 3D-seismic survey and exploration drilling in GHG assessment permit (G-7-AP) in Bonaparte Basin, offshore Northern Territory of Australia.
 - ◆ Aiming to start the injection of more than 2 million tons of CO₂ per year in the latter 2020s.
- ▶ Carbon Credit Development for CCUS
 - ◆ Participated in the development of the CCS+ Initiative[※] since September 2021 and joined as a Partner in March 2022.

[※]Initiative which is developing a methodology for generating carbon credits from CCUS projects



▶ Wind power

- ◆ In February 2022, acquired a 50% stake in the Luchterduinen offshore wind farm and a 15% stake in the Borssele III/IV offshore wind farm operating off the coast of the Netherlands. Acquired a 16.7 percent stake in the Moray East Offshore Wind Farm in March 2023.
- ◆ In April 2022, Goto Floating Wind Farm project in Nagasaki, which INPEX joins, was awarded Japan's first public offering plan certification as an offshore wind power generation facility by the Ministry of Economy, Trade and Industry (METI) and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) of Japan. Construction work began in the same year. Commercial operation is planned in January, 2026.

▶ Geothermal Power

- ◆ In 2021, joined the Muara Laboh Geothermal Power Project in Indonesia, there after acquired additional shares (INPEX in essence holds approximately 30%), and considering further development.
- ◆ In 2022, joined the Rantau Dedap Geothermal Power Project in Indonesia (INPEX in essence holds approximately 27.4%).
- ◆ In 2022, joined the Rajabasa Geothermal Project in Indonesia (INPEX in essence holds approximately 31.45%).
- ◆ In 2023, started construction of the Geothermal Power Project in the Oyasu area, Yuzawa City, Akita Prefecture, Japan. Conducting preparations toward commencement of operations in March 2027.
- ◆ Continuing geothermal surveys at Amemasudake, Hokkaido.



▶ Metanation

- ◆ As part of the NEDO grant project, we are promoting the construction and operation of a 400 Nm³/h e-methane production plant in Nagaoka City, Niigata Prefecture, and the development of practical application technology through sales at our company Gas Pipeline. Construction of the test facilities started in 2023.
- ◆ Commencing with Masdar and Mitsubishi Chemical Group, a joint feasibility study for carbon recycle chemicals project in Abu Dhabi.

▶ Artificial Photosynthesis

- ◆ As a member of the Japan Technological Research Association of Artificial Photosynthetic Chemical Process (ARPCChem), conducting research and development on a part of solar hydrogen generation technology under "Development of Technology for Producing Raw Materials for Plastics Using CO₂ and Other Sources" Projects.

▶ Developing Business in New Fields

- ◆ Study of methane pyrolysis, CO₂ capture, next-generation lithium-ion battery, and drone utilization.
- ◆ Investment in OCOchem to develop technology for producing green formic acid from CO₂ and water.
- ◆ Invested in Kyoto Fusionneering Ltd., a Japan-based fusion energy startup.



▶ Business Participation in Forest Conservation Projects

- ◆ In August 2023, started planting trees in collaboration with the Bank of Australia and New Zealand and Qantas Airlines under the carbon farming* and renewable biofuels project.
- ◆ Examining opportunities for forest conservation projects by utilizing knowledge obtained through afforestation and savanna fire management in Australia.

*An agricultural method that aims to improve soil quality and reduce greenhouse gas emissions by incorporating atmospheric CO₂ into soil through afforestation projects

▶ Clean Upstream Business

- ◆ Ichthys: Introduce measures to minimize flaring during production and fuel gas consumption and promote low-carbon operations.
- ◆ Abu Dhabi: In addition to partially-started clean power utilization at operation of onshore facilities, make operations cleaner in cooperation with ADNOC by supplying offshore facilities with clean power from onshore, etc..
- ◆ Norway: The company started supplying electricity to Snorre from the Hywind Tampen floating offshore wind power plant in the Snorre oil field.
- ◆ Japan: Conducted direct measurement of methane leaks with JOGMEC at INPEX operated Naoetsu LNG Terminal as well as Koshijihara plant.

▶ Implementation of a shift to natural gas

- ◆ Carry out exploration projects in Vietnam, Malaysia, etc. to acquire more natural gas resources in Asia,
- ◆ Carry out gas exploration, expand gas assets in Europe..

INPEX

Revision History

<i>Corporate Position on Climate Change</i>	<i>INPEX's current initiatives</i>
<i>December 2015 Published</i>	<i>December 2015 Published</i>
<i>July 2018 Updated</i>	<i>February 2017 Updated</i>
<i>January 2021 Updated</i>	<i>July 2018 Updated</i>
<i>March 2022 Updated</i>	<i>February 2020 Updated</i>
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	<i>March 2022 Updated</i>
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