

# 1. Interview with Takayuki Ueda, President & CEO



achieve exceptional performance in our Ichthys LNG Project and other large-scale operatorships while making steady progress in our projects.

Within a period of stagnating oil prices from the latter half of 2014, we had the backup of our domestic gas business, which is hardly impacted at all by oil prices, our Abu Dhabi projects and other businesses, so from the asset portfolio perspective as well, the merger had a great impact.

Going forward, this merger will bring benefits to Abadi, Abu Dhabi and other large-scale projects, which I am certain will enable our company to grow even more.

## Vision 2040, the future of INPEX

**Q** Vision 2040, which you announced in May 2018, details this, but with great changes expected to occur across INPEX and the energy sector out to 2040, what sort of company do you want INPEX to become?

Both INPEX and the international energy market are experiencing great change right now. Over the medium to long term, the global middle-class population will grow and economic growth in emerging countries in the Asia region and elsewhere will continue, so demand for primary energy will continue to increase. As those emerging countries transition away from coal as a fuel source, demand for oil is expected to remain strong into the future. However, even greater growth in demand is expected for natural gas, which results in fewer CO<sub>2</sub> emissions than other fossil fuels, and renewable energies, which have a minimal impact on the environment.

Adopted in 2015, the Paris Agreement set a target of limiting the increase in the average global temperature to less than two degrees Celsius above pre-industrial levels as a long-term, globally shared goal. The agreement also requires proactive measures by the entire international community toward elimination of greenhouse gases and the establishment of a low-carbon society. As a result, the roles that natural gas and renewable energies play will become considerably more important. Stable energy supplies and an improved self-development rate remain challenges for Japan. While the Japanese government set a target

of 40% or higher for self-development rate by fiscal 2030, the actual rate as of 2017 was less than 30%, which was below the target level, so the need for INPEX initiatives will continue.

Partly due to an awareness of this business situation, we established “VISION 2040, Delivering tomorrow’s energy solutions” in May 2018.

In Vision 2040, we established three business targets: (1) Sustainable growth of oil and natural gas E&P activities, (2) Development of global gas value chain, and (3) Reinforcement of renewable energy initiatives.

As the first of our business targets, in our core business area of oil and natural gas E&P activities, we aim to achieve a net production volume of one million barrels of oil equivalent per day over the long term while continuously expanding reserves, and to significantly increase net income and cash flow from operations while improving capital efficiency, to become a top 10 international oil company (IOC) in terms of production volume, reserves, profitability, technical capabilities and other criteria.

As the second of our targets, in development and supply of natural gas, we aim to further expand our gas supply chain, which has been developed so far mainly in Japan, and build a global gas supply chain. We also aim to maximize the value of our natural gas projects, including Ichthys and Abadi, as we become a major player in the development and supply of gas in Asia, Oceania.

And as the third target, in the area of renewable energies, we aim to continue driving our geothermal power business, with its strong synergies with our E&P activities, and to enter and expand our participation in wind power generation. While also maintaining a focus on the contribution of these renewable energies to our bottom line, we aim to bring them to 10% of our portfolio in the long term.

In all of our activities related to these targets, we will reduce our carbon footprint and, through an asset portfolio that allows us to respond flexibly to the changing business environment out to 2040, we aim to continuously increase our corporate value.

## Aiming to become a top 10 IOC through qualitative growth (technical and management capabilities, etc.) and a market perspective

**Q** Vision 2040 details your aim to become a top 10 international oil company, but what points do all members of staff need to focus on for INPEX to become one of those top 10?

As we just discussed, one business target that we established in Vision 2040 is to become a top 10 IOC.

However, the international energy market that we are a part of is approaching a major turning point. While increasing production of shale oil and shale gas in North America is dramatically changing the structure of the international energy market, the LNG market is also undergoing deregulation. With deregulation of the electricity and gas markets in Japan, existing energy providers are expanding into each other’s territories and new providers are entering the markets, while the composition of the global energy industry is also changing dramatically.

As deregulation is taking many forms in the domestic and international electricity, gas and LNG markets, having a market perspective is more important than ever for us if we are to succeed in becoming a top 10 IOC. In the past, we thought of the oil and natural gas we produced as commodities for sale. From a market perspective though, we will supply markets with what they need at the appropriate prices and times they want. This will enable us to operate as a business with high market value.

The next thing we need to become a top 10 IOC is growth in total capabilities, including qualitative growth areas such as technical capabilities, financial strength, profitability and management in addition to quantitative growth in production volume and reserves. And to achieve growth in our total capabilities, it is important to always be willing to take on challenges.

Finally, perhaps we are not as recognized in society as we might wish. To improve awareness of INPEX in the global community, we have to improve our ability to actively communicate our message both internally and externally in order to become a more visible company.

### Connecting Ichthys operator experience and know-how to Abadi and beyond

**Q** INPEX started gas production operations as part of its operatorship of the Ichthys LNG Project. What are your future plans for the knowledge and human resources you built up through that project?

The Ichthys LNG Project is not just the first large-scale LNG project that INPEX has worked on as operator, but it is the first one for any Japanese company. In addition to the upstream exploration process that led to discovery of the Ichthys Gas-condensate Field, we worked on operation processes including construction and commissioning of large offshore structures and an onshore plant. The valuable technical experience and know-how we acquired through these processes will be great strengths for our future growth. In addition to this technical experience, we also acquired the wealth of experience, and the people with that experience, needed for working on large-scale projects as the operator. That experience included contract negotiation strategies acquired when entering LNG sales contracts with buyers and EPC contracts with engineering companies to construct the plant, and the know-how for procuring materials, obtaining finance, and developing global human resources. The knowledge and people we acquired as operator of the Ichthys LNG Project can be put to use immediately in development of our Abadi LNG Project. Not only are annual LNG production volumes at Ichthys and Abadi similar, producing about 8.9 million tons and 9.5 million tons respectively, but the development concepts are also practically the same, from developing offshore gas fields to constructing and installing offshore facilities, laying subsea gas pipelines, and constructing onshore LNG plants. Therefore, the experience and know-how we built up at Ichthys will be very useful at Abadi. A number of our divisions are already transferring this experience and know-how from Ichthys to Abadi, which includes personnel transfers as well.

As we work toward becoming a top 10 IOC, we will leverage this experience and these people not only in the Abadi LNG Project, but in the various projects we participate in as both operator and non-operator.

### Developing renewable energy businesses with a focus on geothermal and wind power generation

**Q** In light of a diversification of demand for energy over the medium- to long-term, Vision 2040 has a business target of enhancing its renewable energy initiatives. Specifically, what renewable energies, under what organizational structures, are you thinking of when talking about developing the business?

INPEX regards efforts by the international community to achieve the long-term targets of the Paris Agreement as a period of transition toward a low-carbon society, and as such we consider our response to climate change to be an important business challenge. As a responsible member of the oil and natural gas industry therefore, we are taking steps to meet this important challenge.

To communicate INPEX's renewable energy initiatives both internally and externally, including active "reinforcement of our renewable energy initiatives" and efforts to enhance our renewable energy business and power business in fiscal 2017, we established the new independent Renewable Energy & Power Business Unit from what was the New Business Planning Unit previously attached to the Corporate Strategy & Planning Division. Then in May 2018, we changed the status of this unit to create the Renewable Energy & Power Business Division. Our basic policy now is to make renewable energies a core business for INPEX built around this new division. As detailed in Vision 2040, we will also do our best to increase renewable energies to 10% of our project portfolio.

We can expect synergies with the geothermal power generation business because of the many technical commonalities between our core E&P business and drilling wells to uncover underground resources, so we are continuing to implement initiatives in this area. Overseas, we began commercial production in 2017 out of our Sarulla Geothermal IPP Project in the Sarulla Concession on Sumatra Island, Indonesia. Domestically as well, we are in the process of conducting geothermal resource surveys with a view to commercializing geothermal power generation in Hokkaido and Akita prefectures. We have already drilled structure test wells in the Amemasu-dake region

of Hokkaido and the Oyasu region of Akita, and have confirmed production of both steam and hot water through provisional fumarolic testing. After the US and Indonesia, Japan has the world's third largest amount of geothermal resources, so geothermal power generation holds considerable promise from the perspective of a clean, home-grown, baseload power supply. Going forward, we plan to extend our existing geothermal business and pursue new projects in Japan and overseas with a view to becoming a domestic geothermal development operator in the future.

We are actively working on our wind power generation business as well. In 2015, the annual volume of electricity generated from renewable energies exceeded that which was generated from fossil fuels and nuclear power throughout the world. The wind power generation business is also becoming the lowest cost choice for many regions adopting new power sources over recent years, largely due to the increased size and efficiency of wind generators. Despite the Japanese wind power generation market facing many challenges, including site restrictions, wind power generation is being promoted through fixed price purchasing schemes with conditions that are competitive by international standards. We plan to start with a focus on new development of onshore wind power, together with partners who have development know-how in the area of wind power generation, to build up our own level of technical knowledge and development know-how. Then, using our entry into the domestic onshore wind power generation business as a stepping stone, we will actively consider entry into the offshore wind power generation business in the future through participation in existing domestic and overseas wind farms and mergers and acquisitions of operating companies.

Apart from geothermal and wind power, we also plan to conduct development into carbon dioxide capture and storage technologies to capture CO<sub>2</sub> emissions from the atmosphere and store them in geological formations in order to reduce the CO<sub>2</sub> emissions causing global warming. In this way, and through enhancement of initiatives in areas such as storage batteries and new technology research and development, we hope to build our competitive edge in the renewable energy sector as well.



### Enabling personal growth and active participation

**Q** The Medium-term Business Plan you announced at the same time as Vision 2040 touches on various initiatives, including work style reform, creating workplaces that offer job satisfaction, and developing global human resources. From perspectives like these, what message do you have for INPEX's employees within Japan and around the world?

Full employee participation is essential to achieve our targets in Vision 2040. I want to increase energy levels across the whole company by creating workplace environments where every employee can be creative and fully demonstrate their individual abilities in line with the INPEX Values, and where the company can continue to grow together with society. Looking ahead to 2040 in the midst of a continually changing business environment, in addition to sustainable growth in our oil and natural gas E&P activities, INPEX will need new knowledge more than ever as it takes on challenges in the renewable energy sector of Japan including commercialization of geothermal power generation and entry into the wind power generation business, and new challenges overseas including entry into midstream and downstream businesses in the supply of natural gas. I also want to provide our employees with the necessary support and work environments that enable them to take on the challenges of these new sectors.

In any case, we will always recognize the hard work of all our employees as the most important factor in the growth of INPEX. I want our company to be a place that considers diversity and work-life balance, where everyone can demonstrate their autonomy and participate with a strong sense of mission, and where they can grow and prosper together with us.



## 2. Vision 2040 and the Medium-term Business Plan 2018–2022

### ● Vision 2040



In 2012, INPEX formulated its “INPEX Medium- to Long-term Vision—Ichthys and the Next 10 Years” with concrete initiatives for the five years till start of production on the Ichthys LNG Project, and with a focus on growth thereafter. Despite dramatic changes in the business environment after that, including drops in the price of oil and the shale revolution in North America, the company has continued to steadily implement initiatives to achieve this medium- to long-term vision.

INPEX achieved the significant milestone of starting production at Ichthys in 2018, but looking at the entire energy sector again, energy companies are expected to meet global energy demand, which will continue to grow. On the other hand, the long-term business environment is undergoing major changes, with greater emphasis on addressing climate change and transitioning to a low-carbon society. In light of this changing business environment, INPEX decided in May 2018 to present its long-term vision for the period until 2040 in the form of “Vision 2040, Delivering tomorrow’s energy solutions.” The sub-heading “Delivering tomorrow’s energy solutions” encompasses INPEX’s desire to deliver a stable supply of energy as required while actively addressing climate change.

INPEX’s mission as stated in Vision 2040 is “contributing to the creation of a brighter future for society through our efforts to develop, produce and deliver energy in a sustainable

way,” while its goal is to “become a leading energy company serving an essential role in global society by meeting the energy needs of Japan and countries around the world.”

The business targets it set for itself to achieve this vision ahead of 2040 were (1) to become a top 10 international oil company through sustainable growth of oil and natural gas E&P activities, (2) to become a key player in natural gas development and supply in Asia & Oceania through development of global gas value chain business, and (3) to make renewable energy 10% of its project portfolio through reinforcement of renewable energy initiatives. While oil and gas will continue to be at the core of INPEX’s business operations, these targets reflect the growing importance of renewable energy initiatives and the diverse expectations placed on the company over the long-term.

In its core business area of oil and natural gas E&P activities, INPEX aims to achieve volume (net production volume of one million barrels of oil equivalent per day over the long term while maintaining and expanding reserves) and value (significantly increasing net income and cash flow from operations while improving capital efficiency) to become a top 10 international oil company in terms of total capability, including production volume, reserves, profitability, and technical capabilities.

INPEX is also developing a global gas value chain business to capitalize on the growing LNG market. Specifically, INPEX will increase its supply of natural gas within Japan to over three billion cubic meters annually; develop gas demand in growth markets across Asia and beyond by participating in gas infrastructure projects including IPP (independent power producer), FSRU (floating storage and regasification unit) and LNG bunkering initiatives; and strengthen its global trading functions to maximize the value of its upstream assets, respond flexibly to market shifts and provide value across the entire supply chain. Through these initiatives, INPEX aims to become a key player in the development and supply of natural gas in Asia & Oceania.

To proactively address climate change and meet long-term

demand for renewable energy, INPEX will also accelerate the development of new renewable energy projects. It will expand its participation in wind power generation and other areas with considerable potential in addition to its geothermal power business, which draws on synergies with its oil and natural gas E&P activities. The company will consider leading projects as operator and, while maintaining a focus on profitability, it aims for renewable energy to account for 10% of its project portfolio in the long term.

Going forward, INPEX also plans to help achieve the SDGs (Sustainable Development Goals) by strengthening its ESG (environment, society and governance) initiatives through CSR management.



Vision 2040, Delivering tomorrow’s energy solutions: Overview

## ● “Medium-term Business Plan 2018–2022”



Along with Vision 2040, INPEX established its “Medium-term Business Plan 2018–2022—Growth & Value Creation” as a set of concrete goals and initiatives from 2018 to 2022 to achieve that vision. In addition to volume growth, “Growth & Value Creation” encompasses the pursuit of value creation through improved profitability and efficiency and, as a result, an increase in the company’s corporate value.

### Basic policy on cash allocation

INPEX will prioritize allocation of its approximate ¥2.5 trillion cash flow from operations before exploration expenditure in the order of (1) debt reduction, (2) enhanced shareholder returns, and (3) investment for growth (about ¥1.7 trillion). It also aims to achieve the following financial targets and business targets.

INPEX’s business targets in the area of shareholder returns, during this medium-term business plan, are to maintain stable dividends and enhance shareholder returns in stages in line with growth of company performance.

### Business targets

#### (1) Oil and Natural Gas Upstream

INPEX aims to gradually deliver key project milestones, including starting production and shipping LNG from the Ichthys LNG Project, and quickly achieving and maintaining stable production. Its quantitative targets are 700,000 barrels of oil equivalent per day net production volume by fiscal 2022, maintaining 100% or higher 3-year average reserve replacement ratio (RRR) during the plan period, and reducing production costs to US\$5 per barrel.

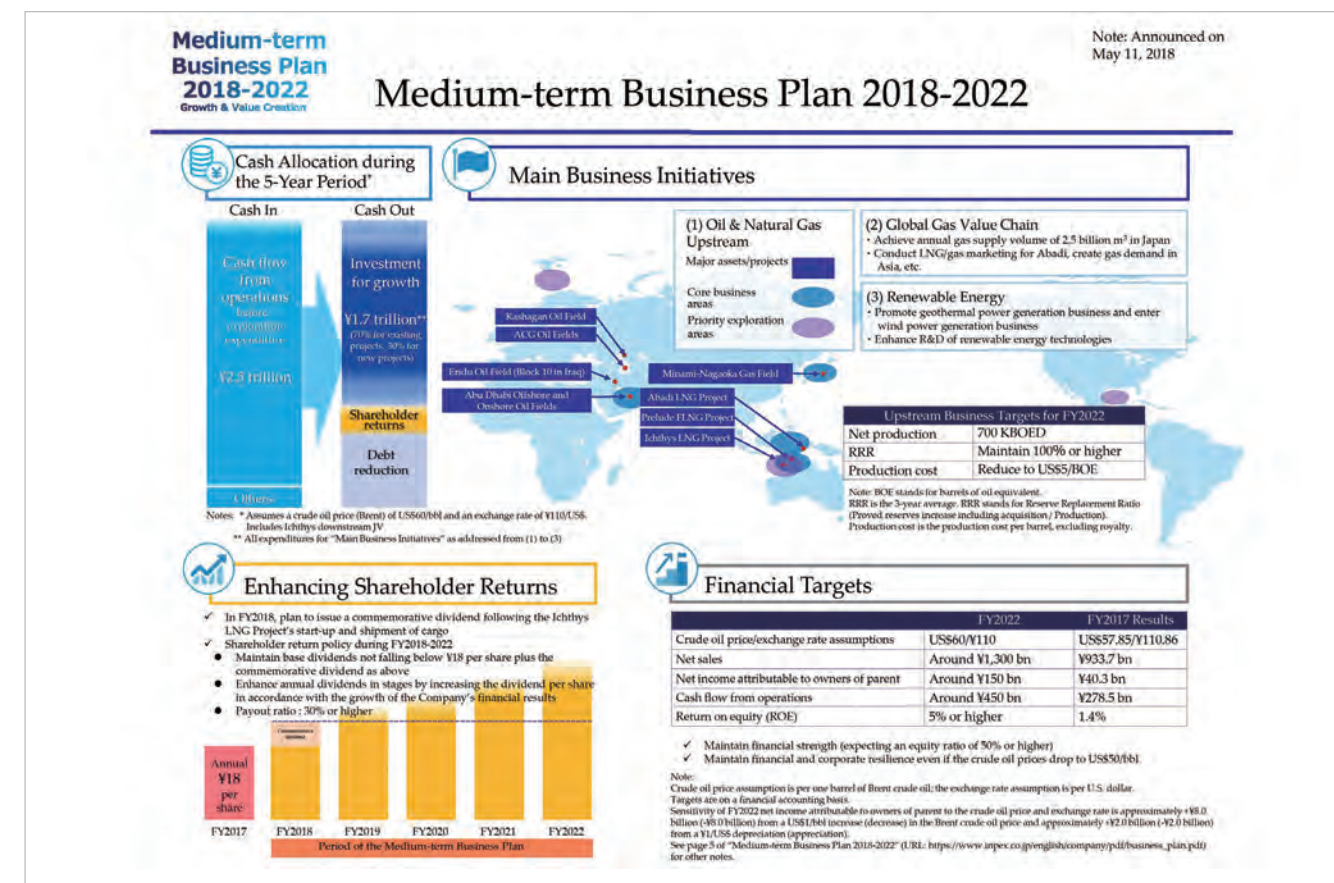
#### (2) Global Gas Value Chain

In Japan, INPEX aims to achieve annual natural gas supply volume of 2.5 billion cubic meters. Overseas, it aims to independently create natural gas demand in Asia and other growing markets, where increased natural gas demand is expected in the future, through participation in midstream and downstream natural gas businesses.

#### (3) Renewable Energy

INPEX will promote the geothermal power generation business in both Japan and overseas, while proactively entering the wind power generation business in Japan. It will also work on research and development of renewable energy technologies.

Vision 2040 and the Medium-term Business Plan 2018–2022 clarify future directions for INPEX. Going forward, the entire INPEX Group must strive together to help bring them to fruition.



Medium-term Business Plan 2018–2022—Growth & Value Creation: Overview