INPEX, bringing forth the bounty of Ichthys

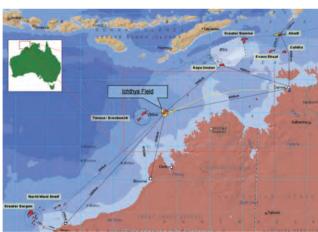


From the northwest continental shelf of Australia, at the turn of a new century, gradually expanding ripples were being created. An ancient fish more than 10 meters long was brought to the peaceful surface of the sea. Slowly, over the 18 years since this gas and condensate field was discovered, the bounty of those ripples has now reached Asia and Japan. The story of "Ichthys," of this magnificent ancient fish, started from a single challenge.

Discovery of the Ichthys Gas-condensate Field

The Ichthys story started 12 years after the arrival of the former INPEX in Australia in 1986. During that period, the former INPEX managed to discover several oil fields and begin production on the northwest continental shelf of Australia, which includes the Timor Sea, through joint projects with BHP Petroleum (currently BHP Billiton) and other operators.

Through these various projects, the former INPEX had independently evaluated the area of offshore Western Australia as having further potential for exploration. Then, in 1998, the





Contract area 2018 (left) compared to the original acquisition in 1998 (right



Mixed Japanese/Australian team at Perth Office, Level 17, Central Park Tower

Australian authorities opened up the 5,000 square kilometers WA-285-P Block, which was an area they had kept closed for many years.

Acquiring this block would give a boost to the company's business expansion in Australia, as well as an excellent opportunity to consolidate its presence in the country. At that time, the company was expanding its businesses in other regions as well, and had to strive to overcome staff shortage and spread exploration risk. Based on its own evaluations, the company attempted to enlist the major oil companies in joint bidding proposals but failed to reach agreement. After deciding to make an independent bid, the former INPEX was awarded the block in August 1998. With both expectations and uncertainties, this was the company's first challenge to take on an exploration operatorship outside of Indonesia.

To overcome the staff shortage, the company sourced local staff in Perth by using the local network it had built up over more than 10 years of joint projects. While preparing to open up its regional office, the company applied to the government and other relevant authorities for licenses and approvals. As a result, two-dimensional seismic surveys were successfully conducted in the block the same year. Through analysis of the newly acquired seismic prospecting data, three potential prospects were confirmed as candidates for obligatory test drilling work as independent structures in the northwestern part of the block. While starting the drilling preparation works in 1999, the company vigorously pursued the option of farming out* some of the work to major oil companies as an attempt to spread risk. Unfortunately, no company followed the option this second time either.

From March 2000, exploration activities continued by drilling three exploration wells in the prospects. Praying for the successful discovery of a large-scale oil and gas field, the company named the wells "Dinichthys," "Titanichthys," and "Gorgonichthys" after the scientific names of giant fossilized fishes.



Sedco 703 drilling rig in operation at "Dinichthys-1," the first exploration well drilled during the first round of drilling



Drill stem test at first exploration well

Production tests were conducted on the first well, "Dinichthys-1," with a successful production of large volumes of gas and condensate. Then, the following two test wells recorded even greater volumes of production, so the wells lived up to

* To reduce capital burden, owners of exploration and development rights may retain part of a concession for themselves and transfer the remaining portion to others.

The prospects were originally expected to be independent of each other. However, after analyzing the geological features of the exploration wells, geophysical logging and drill stem test (DST) data, the former INPEX decided that the three structures could very likely be part of a single giant structure. After the success of the exploration wells, three-dimensional seismic surveys were conducted in 2001 to ascertain the size of the giant structure. At the same time, various geological evaluations were carried out, including the analysis of core samples from the three exploration wells, and an integrated interpretation was conducted. As a result, the company came to the conclusion that there probably were commercial quantities of gas and condensate lying in that giant structure. Then, in 2002, the structure was named "Ichthys" the suffix in the names of all three test well, which on its own means "fish" in Greek language.

A second drilling round commenced in June 2003, with three exploration wells being drilled. As expected, all three wells were successful, which confirmed the continuous nature of the reservoir. This clarified the presence of a giant underground gas and condensate field that could be commercially developed. The former INPEX then applied to the Australian government for permission to investigate commercialization of the giant gas and condensate field and other regions. Authorization was received in May 2004.

Wanting to develop on its own

In 2000, the year of the Ichthys' successful exploration drill, the former INPEX was conducting exploration projects as an operator and discovered the giant Abadi Gas Field in the Masela concession in Indonesia, and confirmed the extent of the gas and condensate reservoir. The company was faced with a difficult internal management decision—how to develop the two giant gas and condensate fields of Ichthys and Abadi that were discovered at the same time. After through consideration, the company realized the importance of the concept of liquefying the production gas for sale as LNG. However, this concept involved the construction of production wells, offshore facilities, pipelines, and gas liquefaction plants, and this required an enormous investment. Despite listing on the First Section of the Tokyo Stock Exchange in November 2004, the former INPEX only had consolidated sales of 218.8 billion yen and a workforce of 269 employees, which fell short of the human resources and capital required.

On the other hand, other companies which had heard of the large-scale gas and condensate field discovery did approaches to obtain a partial interest in Ichthys and even the role of development operator. However, the former INPEX did not choose that road and, being already involved in oil and gas development business, it naturally had a strong desire to develop and produce on its own this giant field that it had so painstakingly found by itself. Additionally, the successful development and production of Ichthys field would give the company a solid track record as an international operator, which would in turn increase the possibility of obtaining new development concessions. Up to that point, the former INPEX had participated only as non-operator in many exploration and development projects, but it had learned and acquired knowledge from other major and large independent oil companies. In other words, the former INPEX chose the road that offered the most growth as a development and production operator.

But the road to development was not easy

Before producing LNG, an LNG plant for processing and liquefying the gas had to be constructed. From estimated reserves at Ichthys, the company forecast expected production of millions of tons per year. This meant that a large facility would be needed, as well as a large construction site.

In 2005, the local Perth Office started to consider in detail the options of development concepts and conceptual designs, including construction site candidates for the LNG plant, in continuation to the work already started in 2002. Because the construction of an LNG plant has an enormous financial and environmental impact on the surrounding area, the agreement of local governments and residents was essential. Australia in particular has considerable respect for environmental sustainability and for the rights of indigenous Australians. Careful investigation from many perspectives was needed, in addition to studying the technical and economic effects of developing the potential site candidates. As such, narrowing down the number of site candidates was not easy.

At the same time, the gas division of the former INPEX started marketing activities in Japan to secure buyers for its LNG. To successfully raise a large amount of funds and investment return, the company had to secure long-term LNG buyers in advance. This was necessary to fulfil the conditions for the final investment decision (FID). With this in mind, the marketing unit started reaching out to potential buyers such as Japanese electricity and city gas companies. However, due to the oversupplied market, Japanese buyers were taking a cautious approach to procuring LNG by signing a new contract. Therefore, meetings with buyers did not go as smoothly as

Gaining support and beginning the journey

The former INPEX was determined to develop the field on its own, and had made progress with difficulty through trial and error. But then some powerful partners arrived. With the establishment of INPEX Holdings, Inc. in April 2006, the company acquired the support of Teikoku Oil, which had operation experience both in Japan and overseas.

Additionally, the successful execution of the project also required the participation of major oil companies with financial strength, abundant experience in LNG technologies, and involvement in many global LNG projects. As a result of the selection process, joined the Ichthys LNG Project in August 2006 with a participating interest of 24%. The former INPEX had already been involved with Total through various projects, including the Offshore Mahakam Project in Indonesia. With Total's participation, this project was able to make a giant leap forward.

Concurrent with these changes, the Department of Industry, Tourism and Resources of Australia stated that they expected the development of Ichthys to contribute to the economic development of Australia for many years. The project was granted Major Project Facilitation status, which provided support for fast-tracking the necessary licenses and approvals from the federal government, state government, and related local authorities.

The former INPEX head office also established an internal Ichthys Project Division to connect the overseas site and head office departments. It served to advance and manage the project, and to provide business support, which completed a companywide structure to promote the development.

There were also important moves in the site selection activities for the LNG plant. With the Perth Office pushed in all directions, the Northern Territory government hoped to attract the LNG plant to Darwin as one of the potential construction site candidates in November 2007. Darwin had the drawback of being located about 900 kilometers from Ichthys field, which meant increased costs associated with the pipeline, but it had environmental, and infrastructure advantages over other sites. After giving the matter detailed consideration, the former INPEX decided that constructing the LNG plant in Darwin was the best among a number of possible options. After coordinating with all parties, the company signed a Project Development Agreement (PDA) with the Northern Territory government in July 2008. The agreement was for long-term land use and other matters, and then in September 2008, it made the formal decision to construct the LNG plant in Darwin.

Then, in October 2008, after merging into the current INPEX Corporation, INPEX laid out the organizational structure for the Ichthys LNG Project. In January 2009, front end engineering design (FEED) work started and project development got into full swing.

FEED work includes series of thorough investigations

Between 2007 and 2008, an additional two wells were drilled at Ichthys and INPEX gained a deeper understanding of the breadth and other characteristics of the gas reservoir. In 2010, three-dimensional seismic surveys of the area were conducted, and the latest available technique were used to understand the finer details of the Ichthys field structure and to form the base of Ichthys field development planning thereafter.

INPEX applied this data to the FEED work it had commenced in 2009 to investigate a range of development methods and optimal production volumes. It then used the results to determine actual specifications for the production wells, the subsea production facilities, the offshore production, processing and offloading facilities, the subsea pipeline, and the LNG plant. At the same time, it started the process toward selecting an engineering, procurement, and construction (EPC) contractor who would do the actual construction work of the facilities.

While the FEED work was progressing, INPEX thoroughly investigated other previous projects in addition to conducting the basic design work and risk analysis. The investigation included several case studies on schedule delays and cost overruns that actually occurred with large-scale LNG projects in the past. In light of that, company specifications were carefully produced for their use in the tendering processes to select an EPC contractor for each package. From the end of 2010, cost, quality (technical capability) and procurement evaluations were conducted to select EPC contractors. This was done in cooperation with head office specialist resources, for coordination/negotiation with the EPC contractors. As a result, EPC contractors that were highly reliable in Japan and overseas were selected. INPEX then worked carefully with the contractors to look at the FEED results and prepare for the FID.



Additional well drilled to confirm the finer details of the Ichthys Field structure



Briefing for local residents in Darwin

Approvals acquired for FID

In addition to technical and economic verification of the development plan, there were three critical matters for the final investment decision (FID): 1. acquiring licenses and approvals from government, 2. raising funds, and 3. securing buyers.

The basic requirement for acquiring environmental approvals was that construction of the large LNG plant did not negatively impact the natural environment or local communities. Environmental examination began with the delivery of the results of an environmental impact study to the government in April 2010. INPEX took the local situation into consideration and the examination included an eight-week public review process. This was twice the legally-mandated period and, in addition, a briefing was held in Darwin to gain the understanding of locals, as well as to conduct an extensive gathering of opinions from local residents. Thanks to the careful way the process was handled locally, the Northern Territory environment minister granted approval in May 2011, with the federal government environment minister following suit in June 2011. INPEX then continued the process of getting the agreement of local residents. From a survey conducted, more than 80% of residents who knew about the Ichthys LNG Project were in favor of the project.

Licenses for laying the gas export pipeline from the Ichthys Field to Darwin were received from each administrative jurisdiction in May 2011. In April 2011, together with the submission of the concession development plans, INPEX also applied to the Australian federal government and Western Australian government for production licenses in the Ichthys Field, and then received the production license offer in November of that year.

Capital increase and project financing

Raising a large amount of funds was another big challenge when developing Ichthys project. INPEX had to strengthen its own financial position to obtain the massive bank loans it

needed to carry out this upstream development project involving a considerable number of uncertainties. In August 2010, the company increased its capital by about 520 billion yen through a public offering.

Despite being one of the largest capital increase in the Tokyo stock exchange market at that time, and some existing shareholders being critical in a dilution of share price, the management team visited and explained to investors in Japan and overseas to convince them that the development of Ichthys would contribute to increase profits in the future and greatly enhance share price value, and, as a result, INPEX managed to raise funds mostly as planned.

Improving its consolidated capital account from about 1.4 trillion yen as of March 31 2010 to about 2 trillion yen as of March 31 2011, INPEX was able to secure the equity capital for developing Ichthys project and achieve a stronger financial position necessary for obtaining the massive bank loans.

Next, the company focused its efforts on obtaining non-recourse financing* through a large international syndicate. INPEX had experience acquiring corporate loans from Japanese banks, such as Japan Bank for International Cooperation (JBIC) or Japan's three megabanks, with JOGMEC and INPEX's guarantees. However, because of the immense size of Ichthys investment, a level of financing was required that Japanese banks alone could not cover. Therefore, INPEX needed a scheme whereby it would borrow jointly with Total inviting overseas banks as well.

* Non-recourse financing: A loan where the repayment is made out of project cash flow only with security over the project assets, so that lenders are not entitled to

Luckily there were no country risk concerns with Australia, and shareholders (partners), INPEX, Total and the various utility companies buying the LNG had all excellent creditworthiness. The forecasted earnings from LNG were solid, and the price of oil at the time was high. For all these reasons, INPEX sought a financing method based on future cash flow from Ichthys LNG Project being used for repayments. Preparations started in 2009 and included many meetings with Total, financial advisors, and lawyers. The initial talks were with IBIC, the biggest potential lender which required relatively stringent conditions. The project was also presented to Nippon Export and Investment Insurance (NEXI), JOGMEC, overseas export credit agencies, and Japanese and Australian banks capable of providing large loans. After preparing a full set of documents on the project, serious negotiations with the financial institutions began in April 2011.

Unlike corporate financing, with shareholders guaranteeing

the debt, in project financing the lending institution carries the repayment risk once the completion guarantee is released. For this reason, INPEX was hit with a barrage of questions from financial institutions around the world who wanted to analyze the project risk. The Finance Unit set about answering the questions with the cooperation of external advisors in a range of fields, in addition to internal engineers and field experts. In May 2012, INPEX launched a syndication putting together major terms and conditions, and received finance amounts and interest offers from banks. Terms and conditions were further negotiated while completing a massive amount of work on documentation of agreements. Finally, in December 2012, finance-related agreements were signed for the unprecedented total amount of 20 billion US dollars, from eight Japanese and overseas export credit agencies and 24 commercial banks.

Despite an adverse situation, INPEX secures buyers through ongoing serious dialogue

Gas Business Unit was going through difficulties to secure LNG buyers, which was another requirement for the FID. Due to the global financial crisis of 2008, the LNG demand forecasts were revised downward and, therefore, domestic buyer requirements became even stricter than ever before. With the difficulty of finding enough domestic buyers for the entire production, INPEX started communications with buyers overseas in mid-2010. Despite the regular visits and close communication with domestic and overseas buyers, it was tough to reach the stage of negotiating detailed terms and conditions.

In the beginning of 2011, INPEX finally received a concrete counteroffer from one buyer, which triggered progress in discussions with other buyers and drew closer to agreements. On such occasion, in March 2011, the Great East Japan Earthquake struck Japan. Due to this unprecedented event, the negotiations were almost stalling again, but INPEX marketing unit continued sincere dialogue with buyers. Finally, at the end of June 2011, INPEX succeeded in reaching basic agreements with 10 buyers. By the time of FID in January 2012, the company had already signed long-term LNG sales and purchase agreement for the full production.

Arranging the largest ever construction insurance

With the help of its Logistics & Insurance Unit, INPEX negotiated the details of construction insurance, needed after obtaining the FID, with the EPC contractors. Because EPC

contractors take responsibility for any loss or damage to the facility and equipment during construction, they sought a broader range of indemnities in the construction insurance arranged by INPEX. The insurance capacity required for the Ichthys LNG Project was on a scale never seen before in the insurance industry. To see whether the construction insurance conditions agreed with the EPC contractors could really be arranged, INPEX reached an agreeable compromise with the contractors under advice from insurance consultancies. It took a long year or so after obtaining the FID. But at the end of 2012, INPEX succeeded in arranging construction insurance terms that the EPC contractors agreed with through the participation of more than 50 insurance companies from the insurance markets of London, Tokyo, Singapore, Australia, and the Middle East.

FID obtained with everyone's cooperation

The final investment decision drew near over the period from the end of 2011 to January 2012. Busy with final confirmations and checks of FID prerequisites, relevant departments in INPEX's Tokyo and Perth offices were also extremely busy preparing for a quick start to work after obtaining the FID. INPEX adjusted the pace of progress in various areas, including making EPC preparations, completing financing, arranging sales contracts, arranging insurance, and assigning interests to LNG buyers. These, and the timing of the FID, were both extremely critical, so departments in charge frequently gathered for detailed meetings and coordination.

Licenses and approvals were obtained or secured, and while project financing was not yet obtained, financial institutions had expressed their willingness to lend. Long-term 15year LNG purchase agreements were entered into with buyers, and basic design documents were completed after FEED and subsequent EPC preparations were completed. Terms and conditions of EPC contracts for LNG plant construction, offshore production facilities, gas export pipeline, and other facilities were also negotiated with major domestic and foreign companies. Agreements were signed, at which point preparations for starting the EPC work were complete. With prospects also looking good for the supply base, personnel transport, and insurance arrangements, the timing was ripe.

In January 2012, INPEX obtained the FID for the Ichthys LNG Project, the long-awaited first time for a Japanese company to lead an LNG development operatorship of this scale. The decision was also the result of company-wide efforts that seemed to leave no employee without some involvement in the project. At last, development work on this massive project started making concrete moves toward its planned annual production of 8.4 million tons of LNG and about 1.6 million tons of LPG, and 100,000 barrels of condensate per day at its peak.

Then President & CEO Toshiaki Kitamura emphasized that the FID was only a checkpoint in the development process: "From the perspective of the overall project, the final investment decision for Ichthys was just a single milestone, even though the process required unwavering resolve while staking the future of the company. From the planning stage, we had progressed to a new starting line where we had to actually begin, and complete, construction of some of the largest production facilities and equipment in the world." Mr. Kitamura then spoke of the importance of the development work: "The period prior to production was an important time that really put us to the test as an operator."



Final investment decision (FID) ceremony

Design and construction work begins around the world

With the FID obtained, INPEX signed a series of EPC contracts for onshore and offshore facilities and started detailed design and construction work for each facility at more than 10 sites throughout Europe, America, and Asia (the development concept and an outline of structures manufactured around the world are shown on pages 46-47). With the giant production facilities comprising everything from production wells to liquefaction facilities, works began on the various work packages for drilling, subsea production systems (SPS), umbilical, riser and flowline (URF), the central processing facility (CFP), the floating production, storage and offloading (FPSO) facility, the gas export pipeline and the onshore LNG plant.

In May 2012, INPEX held a groundbreaking ceremony for the Darwin LNG plant. Guests at the ceremony included Prime Minister Julia Gillard and the Resources, Energy and



LNG plant groundbreaking ceremony Left: INPEX Chairman Naoki Kuroda Center left: Australian Prime Minister Julia Gillard Center right: Northern Territory Chief Minister Paul Henderson Right: TOTAL E&P Australia Managing Director Mike Sangster

Tourism minister from the federal government, and the Northern Territory chief minister. Many government dignitaries also attended from Japan, showing the high expectations that each country had for the project. The first stage of construction for the LNG plant was large-scale civil works, followed by preparations for large-scale construction. For this, lodgings had to be constructed on the outskirts of Darwin for a 3,500-strong workforce. The LNG plant was constructed using a modular construction technique, so construction of the various LNG modules started at four yards in Thailand, China, and the Philippines. From August 2012, dredging work was also conducted at Darwin Port for a period of about two years. Despite original concerns that underwater blasting would be needed to remove hard rocks-and this greatly impacts the marine environment—a state-of-the-art cutter suction dredger was successfully employed to remove the material.



FPSO groundbreaking ceremony



Subsea wellhead assembly installation operations

In January 2013, a CPF construction keel-laying ceremony was held at Samsung's shipyard in Korea. As a core facility, the CPF is one of the world's largest offshore facilities for separating gas and liquids such as condensate out of production from the gas and condensate fields. In June 2013, a keel-laying ceremony was also held for the FPSO, another core facility where liquids from the CPF are further separated to produce condensate for storage and offloading to tankers. It took place at the shipyard of Daewoo Shipbuilding & Marine Engineering Co., Ltd. (DSME), also in Korea, and construction work got into full swing.

With building and construction work proceeding well, the halfway mark was reached in Darwin LNG plant construction in June 2014 and then from July the modules manufactured in the various yards were brought in and installation started. Meanwhile offshore, two drilling rigs were brought in in February 2015 and drilling of 18 Phase 1 production wells started into the gas and condensate reservoir between 4,000 and 4,500 meters beneath the seabed. Then work to lay the gas export pipeline, which measures about 890 kilometers in total length, kicked off in June 2014, and was completed in November 2015.

In September 2016, the final three of 230 modules manufactured in the yards was brought into Darwin and installed. At the same time, work was continuing on construction of other facilities, including LNG, LPG and condensate tanks, the high thermal-efficiency combined-cycle power generation facility, product shipping berths, and office buildings. In March 2018, after carefully completing commissioning, preparations for the first LNG plant train to start production were finalized. Prior to completion though, in September 2015, INPEX revealed that LNG production capacity was expected to increase from the initial plan of 8.4 million tons per year to 8.9 million tons.

The construction of CPF and FPSO was completed in February 2017, and the facilities were named Ichthys Explorer



CPF and FPSO onsite



Panoramic view of onshore LNG plant

and Ichthys Venturer, respectively. Ichthys Explorer departed Korea in April 2017 bound for Australia, and arrived at Ichthys field in May. Ichthys Venturer then arrived in August, and both facilities were installed in their offshore locations.

After that, commissioning work picked up pace ahead of the start of production. Although troubled by issues including bad weather from cyclones and the always-complicated commissioning work, the FPSO was ready for production in March 2018, followed by the CPF in May. Incidentally, during 2015, INPEX had more than 2,200 employees engaged in EPC work for Ichthys project at locations all round the world.

First ship sets sail on a new era for INPEX

With all facilities ready by July 2018, the production wells were at last able to be opened to start producing gas. All upstream facilities were carefully started up in order, starting from the CPF, using produced gas. LNG production was then started at the LNG plant, and the first condensate cargo was shipped from the FPSO on October 1.

Finally, on October 22, the first ship bound for Japan, the LNG tanker PACIFIC BREEZE, was loaded with LNG, and departed from Darwin. Twenty years after acquisition of the exploration concession in 1998, 18 years after discovery of the gas and condensate field, and six-and-a-half years after the final investment decision, the long-awaited first LNG cargo had shipped.

After about one week at sea, the LNG tanker appeared out of a rainbow-spanned sea on the morning of October 31 and, under the watchful eyes of the Naoetsu LNG Terminal operators, pulled alongside the pier and unloaded its cargo of Ichthys LNG to onsite tanks. After regasification, the LNG was transported by pipeline to domestic consumers.

Chairman Toshiaki Kitamura attended the November 16 ceremony in Darwin to commemorate the commencement of operations for the Ichthys LNG Project, where he thanked everyone for their support, including representatives of the governments of Japan and Australia, members of the local communities, Ichthys LNG buyers, financial institutions, joint venture partners and contractors. He explained that mutual bonds and trust were the main driving force behind the Ichthys LNG Project to date, and that he would take all possible measures to achieve a quick ramp-up to peak production and safe operations. He also expressed his wish to contribute over the coming 40 years to a stable energy supply to Japan, and to the economic and social development of the Northern Territory and the rest of Australia.

During the EPC work, INPEX experienced a range of difficulties, from staff shortages stalling progress to sudden withdrawals of subcontractors, poor workmanship discovered during construction and commissioning, difficult negotiations

Condensate:85,000 bbl/d (at peak) LNG: 8.9 mtpa (Max Capacity) LPG: 1.65 mtpa (Max Capacity) Condensate: 15,000 bbl/d (at peak) Floating Production, Central Processing Storage and Offloading Facility (CPF) (FPSO) Darwin Gas Export Pipel ■:Gas+Liquid Subsea Production System (SPS) **■**:Condensate

with contractors about contract interpretations, and division of responsibilities, and ongoing coordination with joint venture partners. With reflection back on that time, it is possible that any one of those issues could have affected the success or failure of the project. All stakeholders, institutions, and organizations joined forces to apply extraordinary effort and exertion to overcome these difficulties, until they finally managed to secure the start of production.

Epilogue

With a burning passion to bring forth the bounty of Ichthys by itself, INPEX took on a great challenge at the start of the 21st century. Now INPEX has reached this milestone, an important challenge to achieve 40 long years of stable operation lies ahead. It is only by meeting this challenge that INPEX will be considered a fully-fledged development and production operator. The path will be long, but it will also be an opportunity to demonstrate the true value of the company.

On the other hand, the bounty of Ichthys is not just evident in high asset values, but also in the development of an ability to support the company into the future. From before Ichthys FID and through the EPC work, young employees from every department at INPEX, from administration to engineering, have been thrust to the frontline of active operations. They have gained experience alongside veteran employees at the local Office and at worksites. Working valiantly on the frontline of Ichthys and tackling difficulties as they arose has been an ideal opportunity for young employees. They acquired

> a broad range of necessary knowledge and experience, expertise, and communication skills as true oil men and women. In this way, capable young INPEX employees will be able to fly off to new ventures after Ichthys to pass on their experience and knowledge to others. The capabilities developed through Ichthys will certainly become the driving force for unlocking the future for INPEX.

Project Development Concept

Major construction and instruction works around the world

















