

Contribute to society through stable supply of energy and address social issues towards Sustainable Development Goals.

- Explore, develop, produce and distribute crude oil and natural gas at home and abroad.
- Further strengthen the natural gas supply chain, built on our domestic infrastructures, by combining the electric power supply business.
- Contribute to resolving energy and climate change related challenges towards a sustainable society through developing and commercializing new technologies, drawing on our expertise.
- Achieve sustainable growth and maximize corporate value, while placing top priority on maintaining trust with all stakeholders.

• Contents

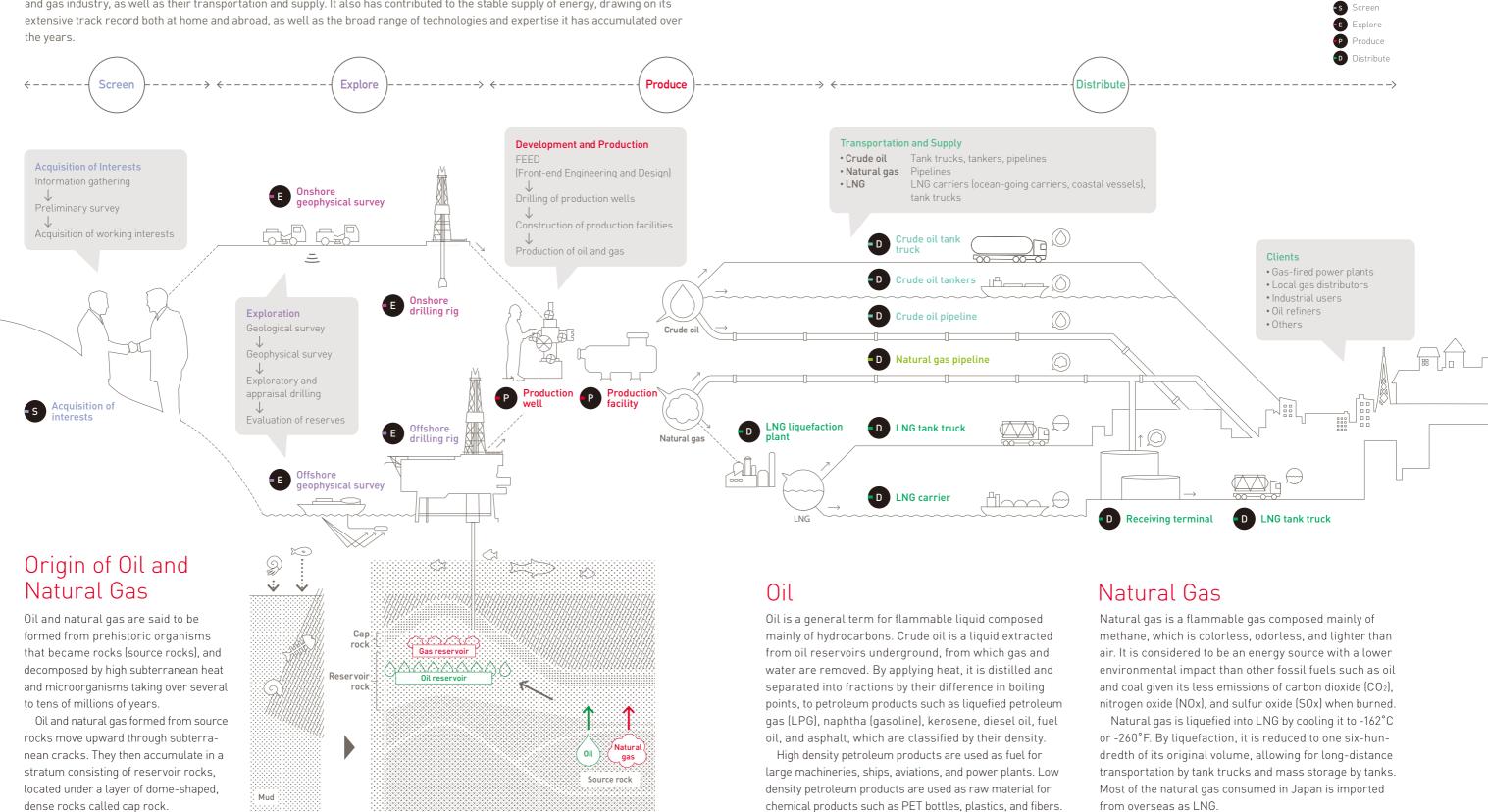
- 2 Overview of Oil and Gas E&P
- 4 Overseas Projects
- 6 Domestic Projects
- 8 Energy Supply
- **10** Carbon-Neutral Businesses and Technologies
- **12** Energy Exploration and Development Technologies
- 14 Sustainability
- 16 Corporate Profile



• • Overview of Oil and Gas E&P

Oil and Gas E&P Value Chain

Since its foundation, JAPEX has been engaged in the upstream, or E&P (exploration, development and production), sector of the oil and gas industry, as well as their transportation and supply. It also has contributed to the stable supply of energy, drawing on its extensive track record both at home and abroad, as well as the broad range of technologies and expertise it has accumulated over the years.



from overseas as LNG.

Screen

• • Overseas Projects

Maximizing Value of Overseas Projects

JAPEX aims to maximize the value of existing projects and explore opportunities to participate in new projects. Also, our Singapore Branch plays a central role in seeking opportunities for more flexible sourcing of LNG.

U.K. North Sea ٩/ Seagull Project

 Business Site Seagull Block (offshore Aberdeen) Project Company JAPEX UK E&P Ltd.

A development and production project for crude oil and natural gas offshore Aberdeen, UK. Commercial production commenced in 2023.







North Sea and Norwegian Sea) Project Company JAPEX Norge AS

An exploration, development and production project for crude oil and natural gas offshore Norway.



Ole Jørgen Bratland ©Equinor \triangle Offshore production facility

Russia 05 Sakhalin-1 Project

➔ Business Site

Chayvo, Odoptu and Arkutun-Dagi fields (offshore Sakhalin Island) Project Company Sakhalin Oil and Gas Development Co., Ltd. (SODECO)

A project to develop and produce primarily crude oil off the northeast coast of Sakhalin Island, Russia. JAPEX participates in the project as a shareholder of Sakhalin Oil and Gas Development Co., Ltd. (SODECO).

United States Tight Oil Development

06

Southern area of Texas, United States (Eagle Ford formation) Southern area of Oklahoma, United States (Woodford formation) Southern area of Wyoming, United States (Codell formation) Project Company Japex (U.S.) Corp.

A tight oil development and production project in the United States. JAPEX holds several development interests in tight (shale) formations



 \triangle Production site of tight oil development

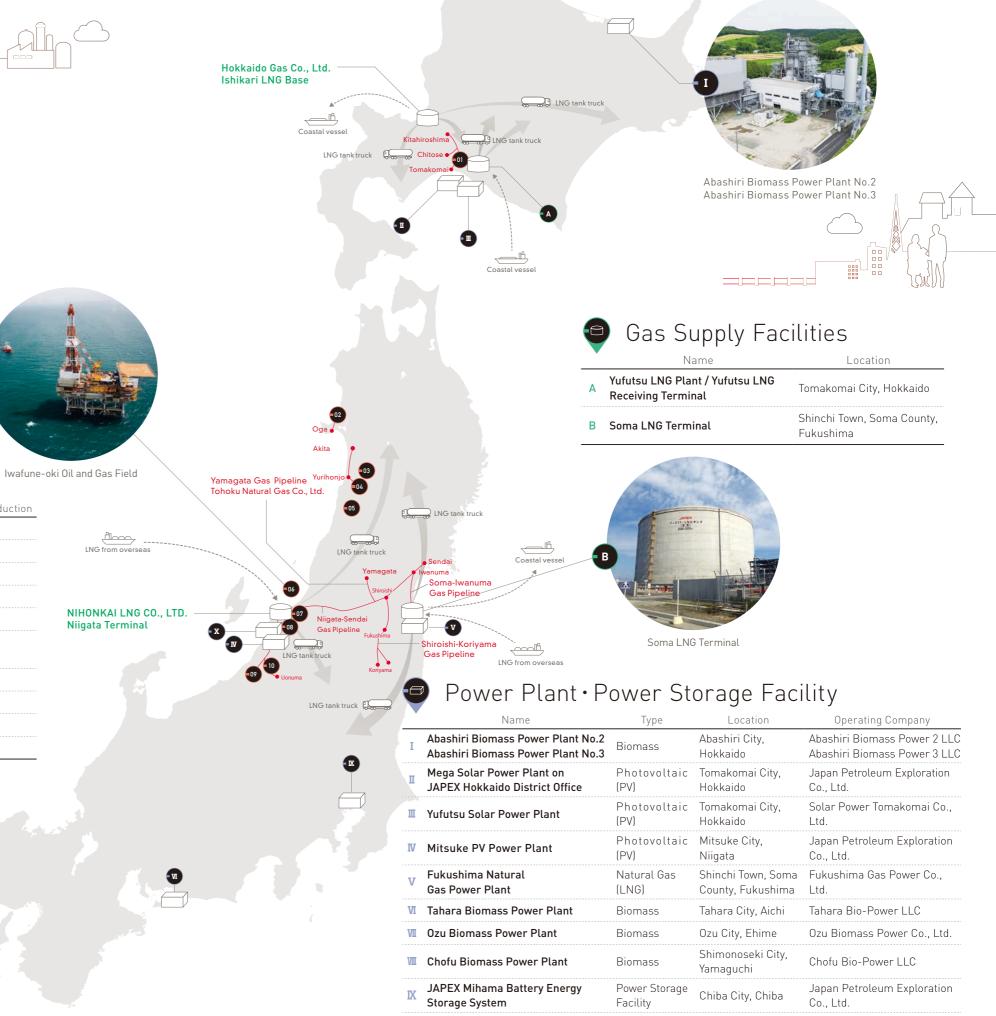
Domestic Projects

Ensuring Stable Supply of Diverse Energies to Clients in Japan

JAPEX currently produces oil and natural gas at oil and gas fields in 10 locations around Japan and supplies the gas domestic natural gas mixed with LNG (liquefied natural gas) from overseas, to the clients in Japan by various methods. We also have been widening the range of energies we can handle, including electricity from renewable energy sources.



🗇 Gas supply facilities Power plant Natural gas pipeline



X Niigata Matsuhama PV Power Plant

	Туре	Location	Operating Company
	Biomass	Abashiri City, Hokkaido	Abashiri Biomass Power 2 LLC Abashiri Biomass Power 3 LLC
	Photovoltaic (PV)	Tomakomai City, Hokkaido	Japan Petroleum Exploration Co., Ltd.
	Photovoltaic (PV)	Tomakomai City, Hokkaido	Solar Power Tomakomai Co., Ltd.
	Photovoltaic (PV)	Mitsuke City, Niigata	Japan Petroleum Exploration Co., Ltd.
	Natural Gas (LNG)	Shinchi Town, Soma County, Fukushima	Fukushima Gas Power Co., Ltd.
	Biomass	Tahara City, Aichi	Tahara Bio-Power LLC
	Biomass	Ozu City, Ehime	Ozu Biomass Power Co., Ltd.
	Biomass	Shimonoseki City, Yamaguchi	Chofu Bio-Power LLC
	Power Storage Facility	Chiba City, Chiba	Japan Petroleum Exploration Co., Ltd.
:	Photovoltaic (PV)	Niigata City, Niigata	Japan Petroleum Exploration Co., Ltd.

Supply Chain to Stably **Distribute Lower Environmental Impact Energies**

JAPEX supplies natural gas produced in Japan combined with LNG from overseas, through a natural gas supply chain that utilizes various infrastructure and methods. JAPEX is also involved in natural gas power generation fueled by LNG.



TOPICS OD Domestic Natural Gas Supply Network

JAPEX has built and operated a proprietary gas supply network to ensure stable supply of natural gas, both produced in Japan and procured from abroad, to its clients. The network is made up of high-pressure gas pipelines that connect gas fields in production and LNG terminals.

The network, consisting mainly of the Niigata-Sendai Gas Pipeline and extending more than 800 km, combines and supplies the gas produced in the Niigata area and the LNG vaporized gas stored at LNG terminals on the Sea of Japan side and the Pacific Ocean side. As a means to adapt flexibly to seasonable fluctuations in demand, we store natural gas, produced in other gas fields, in the underground gas storage at the Shiunji Gas Field in Niigata Prefecture (see) page 7- 10 during summer, and then reproduce and supply it during winter.

LNG terminals, which serves as hubs for ocean-going LNG carriers from overseas and domestic LNG coastal vessels, also are an integral part of our natural gas supply network.

The Soma LNG Terminal (Osee Opage 7-B) with two 230,000 kl LNG tanks, the largest class ground type tanks in Japan, is central to our gas supply network. The terminal receives and stores LNG from abroad, supplies LNG vaporized gas to pipelines, ships LNG in its original liquefied form to clients, and transports LNG to other locations by coastal vessels.

At the Yufutsu LNG Receiving Terminal and the Yufutsu LNG Plant (osee Opage 7-A), LNG vaporized gas, produced from LNG received via coastal LNG vessels, and natural gas produced at the Yufutsu Oil and Gas Field, are combined and supplied to the Hokkaido area.



△ Niigata-Sendai Gas Pipeline



△ Soma LNG Terminal



The LNG Satellite System, which supplies LNG to remote places beyond the reach of our gas pipelines, also is an integral part of our natural gas supply network.

To supply LNG to clients in a wider area, JAPEX ships LNG by tank trucks in Hokkaido and Tohoku area.

Response to New LNG Demands

In order to respond the demands for LNG which has lower environment impact, including fuel conversion to LNG, JAPEX has been promoting the energy services together with the city gas suppliers in Japan, and developing the LNG supply infrastructure business at overseas, particularly in Southeast Asia where demands for natural gas and LNG is expected to grow.

TOPICS O3 Natural Gas Power Generation

Natural gas power generation is fueled by LNG, which has the lowest emission and thus the lowest environmental impact of all fossil fuels. As a cleaner energy source, it is expected to serve energy demand in Japan over the medium- to long-term.



△ Fukushima Natural Gas Power Plant (Fukushima Gas Power Co., Ltd.)



LNG Satellite System

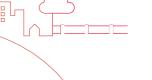


riangle LNG shipping facility for tank trucks at the Soma LNG Terminal





The Fukushima Natural Gas Power Plant, adjacent to the Soma LNG Terminal, is capable of generating a maximum of 1.18 million kWh of electricity using LNG vaporized gas as fuel. The plant has achieved world-class efficiency by adding innovative technology components to the well-tested facilities which have adopted the gas turbine combined cycle (GTCC) method. The main facilities are designed to withstand the level of disasters equivalent to that of the Great East Japan Earthquake. Under the consignment from Fukushima Gas Power Co., Ltd., an entity responsible for operation of the plant, the Soma LNG Terminal receives and stores LNG, and supplies LNG vaporized gas to the plant.



Promoting Development of New Businesses to Contribute Towards Realization of a Carbon-Neutral Society

JAPEX seeks to contribute to achieving net-zero CO₂ emissions worldwide by 2050. To this end, we are working to expand our renewable energy business as well as to develop technologies to utilize CO₂ and store it underground by leveraging expertise on underground and experience of managing various projects we have accumulated in our E&P business.

TOPICS 1 Renewable Energy



 \triangle Mega-solar power plant in Hokkaido

In the solar power generation, JAPEX Hokkaido District Office Mega-Solar Power Station and Yufutsu Solar Power Plant, both in Tomakomai City, Hokkaido Prefecture, Mitsuke PV Power Plant in Mitsuke City, Niigata Prefecture and Niigata Matsuhama PV Power Plant in Niigata City, Niigata Prefecture are in operation.

In addition to the current projects, JAPEX will continue to discover, develop, and invest in a wide range of projects in Japan and overseas, with the aim of contributing to the realization of a carbon-neutral society by 2050.



JAPEX is promoting the expansion of its renewable energy business with the aim of achieving a carbon-neutral society by 2050.

In the biomass power generation business, JAPEX are participating in the Abashiri Biomass Power Plant (No. 2 and No. 3) in Abashiri City, Hokkaido Prefecture, the Ozu Biomass Power Plant in Ozu City, Ehime Prefecture, the Chofu Biomass Power Plant in Shimonoseki City, Yamaguchi Prefecture, and the Tahara Biomass Power Plant in Tahara City, Aichi Prefecture.

JAPEX supplies the biomass fuel used in the biomass power generation projects in Chofu, Ozu, and Tahara respectively. In carrying out our biomass fuel supply operations, JAPEX have established a "Commitment Regarding Handling of Certified Biomass Products in Supply of the Biomass Fuel" and has also obtained certification from the international third-party organizations.



riangle Ozu Biomass Power Plant



JAPEX aims at early practical application of CO₂ under-ground storage technologies by utilizing our capabilities to develop and produce oil and natural gas.

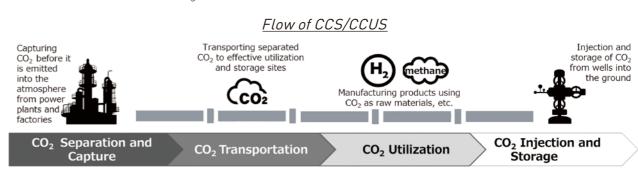
In Japan, JAPEX is participating in the large-scale CCS demonstration project at Tomakomai City, Hokkaido Prefecture as a member of Japan CCS Co., Ltd. established by private companies.

Also, JAPEX in cooperate with partner companies is conducting engineering design work at Tomakomai area of Hokkaido Prefecture, Higashi-Niigata area of Niigata Prefecture and Sarawak, Malaysia, which has been entrusted as "Japanese Advanced CCS Projects" aims at starting CO2 injection by 2030. In these works, JAPEX is considering business deployment by using the concept of hub and clusters, which connects various sites such as CO₂ utilizers, in addition to CO₂ emitters and injection points.

In overseas, JAPEX is evaluating business toward commercialization through capital participation in Blue Spruce Operating LLC, based in the United States where the CCS/CCUS business environment is well established. In Indonesia, JAPEX is also participating in the demonstration experiment of CCUS and the applicability evaluation of BECCS, which combines biomass power generation and CCS.

What is CCS/CCUS?

Carbon dioxide Capture and Storage (CCS) and Carbon dioxide Capture, Utilization, and Storage (CCUS) have been drawing attention as methods to contribute to "carbon neutrality," a state in which net zero carbon dioxide (CO₂) emissions are achieved. CCS is a technology that captures CO₂ from exhaust gas emitted from factories, power plants, and other facilities, injects it deep underground, and stores it stably. CCUS is CCS combined with the utilization of CO2, including CO2-EOR/EGR







riangle CCS Demonstration Project ground facilities at Tomakoma (photo courtesy of Japan CCS Co., Ltd.)



(Enhanced Oil/Gas Recovery).

For promoting the project, the establishment of technologies and expertise for surveying geological formations suitable for storing CO₂, drilling wells for injecting into the ground and stable storing CO₂ in the long term are required. JAPEX can provide the CCS business independently within its group with the technology and services that have been built up through E&P business.

• Energy Exploration and Development Technologies

Establishing Technologies for Next Generation to Underpin Development of Energy Resources

The application of JAPEX's proprietary technology to explore underground is expected not to be limited to the development of oil and natural gas. We have consistently sought to establish and enhance development and production technologies for unconventional resources such as shale formation and methane hydrate, which is a potential domestic energy resource for the future.



TOPICS OI Subsurface Exploration Technology

In the exploration phase of oil or natural gas, we assess the amount of available resources by exploring the subsurface structures and rocks that cannot be observed directly with the human eye. In particular, surveys called geophysical survey require special facilities and technologies.



 \triangle Land seismic survey using a vibroseis vehicles

Seismic survey is one of the typical example of geophysical surveys. Seismic survey is a method that generates elastic waves artificially near the ground to record the data of reflected waves, which have hit and bounced back from the interface of subsurface strata. Recorded data are then processed and analyzed using a computer. The method is the most effective way of understanding subsurface structure over a wide area. On land, a special-purpose vehicle called vibroseis or an explosive source is used to make the land vibrate, whereas an airgun is used to generate elastic waves in the sea. The reflected waves from underground or under the seabed are measured using the receiver system placed on the ground or near the sea surface.

Taking advantage of strength of being able to complete these surveys within its own group, we have utilized the obtained subsurface data not only in the exploration and development of oil and natural gas but also in the evaluation of reservoirs for Carbon dioxide Capture and Storage (CCS) and Carbon dioxide Capture, Utilization, and Storage (CCUS).



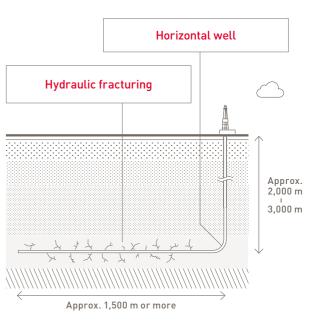
Crude oil and natural gas contained in low-permeability tight/shale formations is called tight/shale oil and gas. The development and production used to be extremely challenging with conventional methods. However, since the first decade of 2000, full-scale commercial production has been enabled by commoditization of the horizontal well drilling technology and the hydraulic fracturing technology, which uses high-pressure water to crack the formations to improve productivity.

JAPEX has been involved in developing and producing tight/shale oil and gas at Japan and overseas. In overseas, we are participating in the tight oil development in Texas, US. In Japan, JAPEX succeeded in Japan's first commercial production of tight oil in 2014 at the Ayukawa Oil Field in Akita Prefecture, and conducted a verification test for tight oil development using multistage fracturing at the Fukumezawa Oil Field in Akita Prefecture. As such, we have been pursuing the potential of the tight oil development in Japan.



Methane hydrate is an ice-like mixture of water and methane, the principal component of natural gas. It is typically formed under the seabed over 500 meters deep at low temperature and high pressure. It has been confirmed to exist abundantly in the sea near Japan, raising expectation as one of the potential domestic energy resources going forward.

Currently, the government-led project towards commercialization is under way to develop stable production technology and prepare for the next offshore production test. JAPEX contributes to developing technology for the sand-layer type methane hydrate as one of the shareholders of Japan Methane Hydrate Operating Co., Ltd. (JMH) established jointly by private companies engaged mainly in oil and gas E&P or plant engineering.



riangle Illustrative diagram of shale gas and tight oil development & production



riangle Combustion of artificial methane hydrate (photo courtesy of the MH21-S Research Consortium

• Sustainability

Achieving Sustainable Growth and Enhancing Corporate Value through Trusted Relationships with **Stakeholders**

For JAPEX to achieve sustainable growth and enhance its corporate value through its mission of "stable energy supply," it is essential to build trusted relationships with local communities where JAPEX operates, clients, related parties and employees. We are working to manage environment and human resources with a view to contributing towards a sustainable society as well as ensuring safety and security and involving in community activities to be a company trusted by stakeholders.

TOPICS OI HSE and Crisis Management

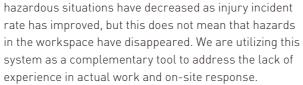
With Health, Safety and Environment (HSE) as a top priority agenda in business activities, JAPEX has established JAPEX HSE Policy, developed HSE Management System (HSE-MS), and deployed it at our business. Under the HSE-MS, we are working on to properly control and reduce HSE-related risks, comply with relevant laws and regulations, and manage employee health. The operational status of HSE-MS is appropriately audited and improved as necessary.

JAPEX provides all employees with educational programs and lectures by the external instructors to raise their HSE understanding and improve our HSE culture.

We have introduced virtual reality (VR) hazard simulation equipment at our domestic sites. The opportunities for employees to encounter directry



 \triangle VR training for new employee education



We are also working on to ensure the safety of business sites and employees and to manage crisis under our Health, Safety, Security and Environment (HSSE) policy. The HSSE Committee, chaired by the executive officer responsible for the HSE department and organized by the other relevant executive officers, deliberate and determine the HSSE principal strategy and key focus areas.

For employees working in abroad and head office, we are working on to raise awareness of crisis management even in normal times by collection, analysis and assessment on overseas security information, providing cases and alerts, and conducting overseas security seminars to those to be dispatched or assigned as an expatriate abroad, in addition to overseas emergency response drills.

We have also formulated a business continuity plan (BCP) against emergencies such as large earthquakes and a pandemics. We regularly develop and put in place initial response procedures; and conduct emergency drills at business sites, employee safety confirmations and walk-home (from work) drills for emergencies.

TOPICS O2 Protection and Preservation of Environment

We are striving to reduce greenhouse gas (GHG) emissions by saving energy at our operation sites across the world. We also identify risks of soil, water resources, and air pollution to take preventive measures against them. Among others, we ensure to reuse water we heavily depend on for our business activities and to protect environment when discharging water to public waters.

surrounding environment after the business is launched.

We are also mitigating environmental impact, including conserving ecosystems. In addition to assessing the environmental impact at the feasibility study stage and taking necessary measures based on the assessment results, we continue to review risks and measures and monitor the

TOPICS O3 Good Relations with Communities



 \triangle Educational class provided by Soma District Office

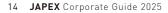


Employer of Choice

We will work to promote diversity with the aim of ensuring that every one of our diverse employees feels engaged and fulfilled in their work, achieves their full potential, and actively contributes to innovation for change.

For employees' career development, we provide educational programs to facilitate each employees' proactive career development as well as to support developing and improving their competency and skill set.

Also, we have established a health management promotion system based on JAPEX Health Management Declaration, and offers regular health checkups required by law, programs to support employee health promotion, work-life balance promotion.







2019 Present riangle Planting trees of native species at the Fukushima Natural Gas Power Plant

JAPEX strives to remain a trusted company in the regions around the world where we operate through dialogue and communication with various stakeholders and contribution to local communities.

In Japan, we join or otherwise support events hosted by local governments and offer lectures, facility tours, and work experience programs to local school students. We also join local events and volunteer activities in the regions where we operate.

Overseas, we help to develop social infrastructure for, provide donations and support to, and cooperate and interact with, local communities where we participate.



riangle Management training seminar at Head Office

• • Corporate Profile

Company Name:	Japan Petroleum Exploration Co., Ltd.
Established:	April 1, 1970
Paid-in Capital:	JPY14,288,694,000
Representative:	Representative Director and President Chief Executive Officer YAMASHITA Michiro

Main Offices

Head Office: SAPIA Tower, 1-7-12, Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan TEL: +81-3-6268-7000



 \triangle Head Office

Hokkaido District Office: 134-648, Numanohata, Tomakomai City, Hokkaido

059-1364, Japan

TEL: +81-144-51-2205 Akita District Office: 85-2, Hirune, Terauchi, Akita City, Akita 011-0901, Japan TEL: +81-18-866-9511

Main Businesses:

Nagaoka District Office: 2-2-83, Higashi-Zao, Nagaoka City, Niigata 940-8555, Japan TEL: +81-258-31-1401

Soma District Office: 159-2, Imagami, Komagamine, Shinchi Town, Soma County, Fukushima 979-2611, Japan TEL: +81-244-26-9846

Sendai Representative Office: Kakyoin Square Building 5F,

Kakyoin, Aoba-ku, Sendai City, Miyaqi 980-0013, Japan TEL: +81-22-224-0731

Research Center: 1-2-1, Hamada, Mihama-ku, Chiba City, Chiba 261-0025, Japan

TEL: +81-43-275-9311

• Main Group Companies

Akita Natural Gas Pipeline Co., Ltd. SK ENGINEERING CO., LTD. JAPEX SKS Corporation North Japan Oil Co., Ltd. Shirone Gas Co., Ltd. Japex Pipeline Ltd. JGI, Inc. Geophysical Surveying Co., Ltd. North Japan Security Service Co., Ltd.

Japex Offshore Ltd. GEOSYS, Inc. Japex Energy Co., Ltd. Japex Garraf Ltd. TOHOKU NATURAL GAS Co., Inc. TELNITE CO., LTD. Fukushima Gas Power Co., Ltd. Sakhalin Oil and Gas Development Co., Ltd. Abashiri Biomass Power 2 LLC Abashiri Biomass Power 3 LLC

Number of Employees: 1,641 (consolidated basis) (as of March 31, 2024) Exploration, development, production, and sale of oil, natural gas, and other energy resources, contact service-related operations such as drilling; development of solar, wind, geothermal, biomass, and other renewable energy resources; and supply of electric power

> Houston Representative Office: 5051, Westheimer, Suite 425 Houston, TX 77056 United States TEL: +1-713-334-9800

Jakarta Representative Office:

Gama Tower 19th Floor, Jl. H.R. Rasuna Said Kav. C-22, Jakarta 12940 Indonesia TEL: +62-21-2519-9938

Aberdeen Representative Office: Neo House, Riverside Drive, Aberdeen, AB11 7LH, UK TEL: +44-12-2401-3480

Singapore Branch: 10 Collyer Quay, Level 40 Ocean Financial Centre, Singapore 049315 TEL: +65-6808-6050

Ozu Biomass Power Co., Ltd.

Japex (U.S.) Corp.

JAPEX Norge AS

JAPEX UK E&P Ltd.

JAPEX Insurance Ltd.

Energi Mega Pratama Inc.

Kangean Energy Indonesia Ltd.

EMP Exploration (Kangean) Ltd.

Gulf Coast LNG Holdings LLC

Blue Spruce Operating LLC

Corporate History

1950s to 1960s December 1955 O Founded as a government-owned company by the Law of Japan Petroleum Exploration Co., Ltd. July 1956 Discovered the Biratori oil field in Hokkaido, the first oil field discovered by JAPEX (in production from 1956 to 1961) May 1965 \diamondsuit Expanded the business regions to overseas by revision to the Law of Japan Petroleum Exploration Co., Ltd. October 1967 Integrated into a newly established Japan Petroleum Development Corporation (JPDC) 1970s to 1980s April 1970 🔶 Reorganized as a private company by separating from JPDC May 1971 Established Japex Offshore Ltd. March 1972 Discovered the Aga-oki oil and gas field in Niigata, the first offshore oil field discovered since the establishxment of Japex Offshore Ltd.(in production from 1976 to 1998) ···· 1990s to 2000s March 1996 Commenced operation of the Niigata-Sendai Gas Pipeline March 2000 Commenced transportation of LNG tank container on rail January 2003 Commenced production of bitumen in Canada (End of our operation in 2021) December 2003 Listed on the First Section of the Tokyo Stock Exchange May 2007 Participated in the Kangean project in Indonesia 2010s and thereafter November 2011 Commenced operation of the Yufutsu LNG Receiving Termina August 2012 Participated in the tight oil development business in United States. **April 2013** O Participated in the shale gas project in Canada (End of our participation in 2021) August 2013 Commenced production of crude oil of the Garraf project in Iraq June 2014 Commenced operation of the mega-solar power station located at the Hokkaido District Office October 2014 Participated in the Seagull Project in the U.K. North Sea Commenced operation of the Soma LNG Terminal March 2018 April 2020 Commenced commercial operation of the Fukushima Natural Gas Power Plant Changed the listing market on Tokyo Stock Exchange April 2022 🖒 (to the Prime Market) October 2022 Abashiri Biomass 2nd Power Plant commenced commercial operation(its 3rd Power Plant commenced commercial operation in March 2023) May 2023 Participated in exploration and development projects in offshore blocks of Norway June 2024 \diamondsuit Participated in the Freeport LNG Project in United States.

•



riangle JAPEX foundation ceremony





🛆 Aga-oki Platform



riangle Niigata-Sendai Gas Pipeline



riangle Soma LNG Terminal first cargo

https://www.japex.co.jp/en/