

Note: The following is an English translation of the Japanese-language original

March 28, 2022

Company Name: Japan Petroleum Exploration Co., Ltd. (JAPEX) Securities Code: 1662 (First Section of the Tokyo Stock Exchange)

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Formulation of the "JAPEX Management Plan 2022-2030"

Japan Petroleum Exploration Co., Ltd. (JAPEX) announced that it has formulated the "JAPEX Management Plan 2022-2030" (the "Plan"), a medium- to long-term growth strategy for JAPEX that extends through 2030.

Based on our Long-term Vision 2030 and Medium-term Business Plan 2018-2022 formulated in May 2018, we have been working to expand our business domain by promoting oil and natural gas E&P (*1) in and outside Japan, as well as launching commercial operation of the Fukushima Natural Gas Power Plant (*2), focusing on development of renewable energy, and participating in several feasibility studies for CCS/CCUS (*3) in and outside Japan. In addition, we have been working to optimize our business portfolio and improve our financial soundness through measures including terminating overseas projects that are difficult to promptly improve profitability.

Meanwhile, in light of further acceleration of global decarbonization, we lowered in March 2021 our medium- to long-term assumption of crude oil price (JCC (*4)) to US\$50 per barrel, and in May 2021, we compiled "JAPEX2050: Toward a Carbon-Neutral Society," which sets forth our direction toward 2050.

The Plan is a new management plan to respond quickly and flexibly to changes in the business environment, covering the nine years from FY2022 to FY2030. The basic policy of the Plan is to improve profitability and to build a business foundation for 2030 and beyond. The Plan outlines management goals including interim targets as of FY2026, basic policies for fund allocation and shareholder returns and, to achieve the targets, priority items in each business field comprising E&P, Infrastructure/Utility (I/U), and Carbon Neutral (CN). In order to promote steady progress of the Plan, we will also work to develop and utilize human resources, enhance organizational capabilities, and improve the efficiency and sophistication of operations by digital transformation (DX) and other measures.

Below is a summary of the Plan's management goals and priority items in each business field. For more details, please refer to the appendix.

[Management goals]

- Business profit(*5) target: 50 billion yen scale as of FY2030 (30 billion yen scale as of FY2026)
- ROE target: 8% as of FY2030 (5% as of FY2026)
- Profit composition target (E&P-to-non E&Ps): 5-to-5 as of FY2030 (6-to-4 as of FY2026)

[Fund Allocation and Shareholder Return Policies]

- Out of a total of 500 billion yen in cash inflows during the period of the Plan, allocate 450 billion yen in growth investments and 50 billion yen in shareholder returns.
 - -- Allocation of 450 billion yen for growth investment: 230 billion yen in E&P, 170 billion yen in I/U, and 50 billion yen in CN
- Adopt a consolidated dividend payout ratio as a basic policy for returning profits to shareholders and pay dividends in line with business results for each fiscal year, with a target payout ratio of 30%
 - -- Strive to maintain an annual dividend of 50 yen per share even in the event of a temporary downturn in business performance

[Priority Items by Business Field]

- E&P: continue to invest in acquisition of new interests and promote low-carbon operations
 - Japan: pursue potential including additional development and offshore exploration, reduce greenhouse gas (GHG) emissions from operations, collaboration with business examinations in other fields such as CCS/CCUS
 - -- Overseas: Acquire new interests
- I/U: expand the profit scale of renewable energy and other businesses.
 - -- Japan: take actions to diversify our gas supply method, add more projects on renewable energy development
 - -- Overseas: participate in projects of LNG supply infrastructure development, consider participating in projects on renewable energy development
- CN: launch CCS/CCUS prototype project by hub and cluster (*6) model utilizing our oil and gas fields, etc.
 - Japan: launch CCS/CCUS model projects, consider infrastructure to supply CO₂ and others such as hydrogen and ammonia
 - Overseas: participate in CCS/CCUS projects in systematically advanced areas such as North America and Europe, participate in feasibility studies on CCS/CCUS in emerging countries

Through the steady implementation of the Plan, we will continue to strive to contribute to the realization of carbon-neutral society by 2050, and further enhance our growth and corporate value as an integrated energy company.

(Note)

- *1: Exploration and Production: Exploration, development and production of oil and natural gas.
- *2: Natural gas power plant with a maximum output of 1.18 million kW in Soma Port, Fukushima Prefecture, operated by Fukushima Gas Power Co., Ltd. (our investment ratio is 33%).
- *3: Carbon dioxide Capture and Storage/Carbon dioxide Capture, Utilization, and Storage.
- *4: Japan Crude Cocktail (JCC): The average price of crude oil imported by Japan, determined in reference to cost, insurance and freight (CIF).
- *5: Operating income and equity in earnings of affiliates (including profits to be distributed under limited partnership and silent partnership agreements)
- *6: CCS/CCUS networks that link multiple CO2 emission sources and CO2 storage sites.

<Reference Links>

- Formulation of "JAPEX2050" for the Realization of a Carbon-Neutral Society in 2050, a material disclosed by JAPEX on May 13, 2021.
 - https://www.japex.co.jp/en/news/detail/20210513_05/
- Change in Dividends Policy, a material disclosed by JAPEX on March 28, 2022. https://www.japex.co.jp/en/news/detail/20220328_02/

<Appendix>

- JAPEX Business Plan 2022-2030: Improving Profitability and Building Medium to Long-term Business Foundation with Focus on Contributing to Realization of Carbon-neutral Society

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JAPEX Management Plan 2022-2030

Improving Profitability and Building Medium-to Long -Term Business Foundation with Focus on Contributing to Realization of Carbon-neutral Society

March 28, 2022

Japan Petroleum Exploration Co., Ltd. (Security Code: 1662)

Introduction: Review of Current Vision and Business Plan

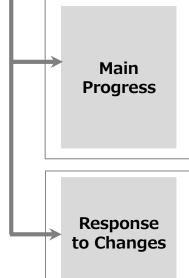
Progress in the past 4 years, but significant changes in business environment

Formulated in May 2018

Long-term Vision 2030: Growth strategy towards FY2030

Growth to the Comprehensive Energy Company Utilizing our Oil and Gas E&P*1 and its Supply Basis

Medium-term Business Plan 2018-2022: Business direction and priority initiatives for 5 Years Improve profitability to ROE≥5%, Optimize business portfolio and improve financial soundness, materialize new projects



- ✓ **Proceeded with additional development in E&P projects**, acquired new E&P projects overseas
- ✓ **Expanded non-E&P business field**, including commercial operation of Fukushima Natural Gas Power Plant*² and launched activities of renewable energy development
- ✓ Started **feasibility studies for CCS/CCUS***3 **projects** in and outside Japan
- ✓ Improved financial soundness **by optimizing business portfolio**, mainly projects in Canada
- ✓ Expanded shareholder returns by share buybacks
- ✓ Irreversible changes in energy supply-demand structure due to movement toward decarbonization
 - > Lowered crude oil price assumption for medium-to-long term to 50USD/bbl in March 2021
- ✓ Accelerated movement towards decarbonization in light of "Realizing Carbon-Neutral Society in 2050" initiative by the government in 2020
 - > Formulated "JAPEX 2050" which sets forth JAPEX's direction towards 2050 in May 2021
- *1: Exploration, development, and Production of oil and gas
- *2: FGP=Fukushima Gas Power Co., Ltd. (33% of JAPEX shareholds), a company that operates Fukushima Natural Gas Power Plant
- *3: CCS=Carbon dioxide Capture and Storage, CCUS=Carbon dioxide Capture, Utilization, and Storage



Assumption of Formulation and Basic Policy

Formulated as Medium- to Long-term Management Plan for FY2022-2030

- Assumption: New management plan to respond to business environment quickly and flexibly
 - Changes in our balance sheet (decrease in business assets and interest-bearing debt)
 - > Long-term vision for transition of business structure based on "JAPEX 2050"
- Basic Policy: Improve profitability and build business foundation for 2030 and beyond

E&P

Contribute to early expansion of profit scale and respond to low-carbonization

Continue to invest in acquisition of new interests and promote low-carbon operations

Business Fields

I/U*1

Transform business structure to withstand market changes and oil price volatility

Expand the profit scale of renewable energy and other businesses

CN*2

Contribute to smooth transition to 2050 CN society

Launch CCS/CCUS hub and cluster*3 model business utilizing existing oil and gas fields and others

Achieve profit levels appropriate to capital costs and enhance shareholder returns

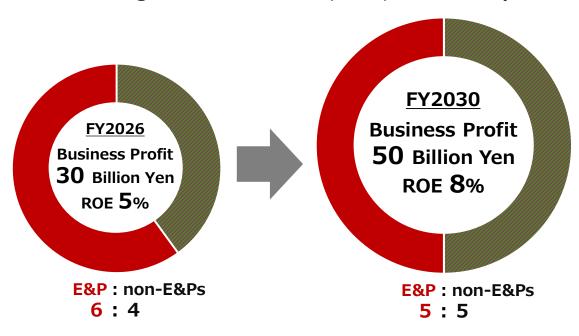
^{*1:} Infrastructure & Utility *2: CN = Carbon Neutral

^{*3:} CCS/CCUS network that connects multiple CO₂ emitter and CO₂ storage sites

Management Goals

Long-term Target for FY2030 and Mid-term Target for FY2026

Quantitative target: Business Profit, ROE, Profit Composition



♦ Elements of Business Profit

- Operating profit
- Profit of entities accounted for using equity method and others*1

*Total of business profit of each business fields (P.7-9), excluding head office administrative expenses

♦ Contents of non-E&Ps

- I/U (Domestic gas sales, electricity sales, renewable energy, consignment revenue etc.)
- CN (Overseas CN projects)
- * Assumption Oil price (JCC)=50USD/bbl

Carbon-Neutral Related Targets

- ◆ Launch CCS/CCUS prototype projects by hub and cluster model in our domestic oil and gas fields
 - Prospect for realization by FY2026, launch as model business by FY2030
- ♦ Reduce GHG emission intensity of JAPEX by 40% compared to FY2019
 - > Start pilot trial at domestic oil and gas field by FY2026, and achieve target in FY2030

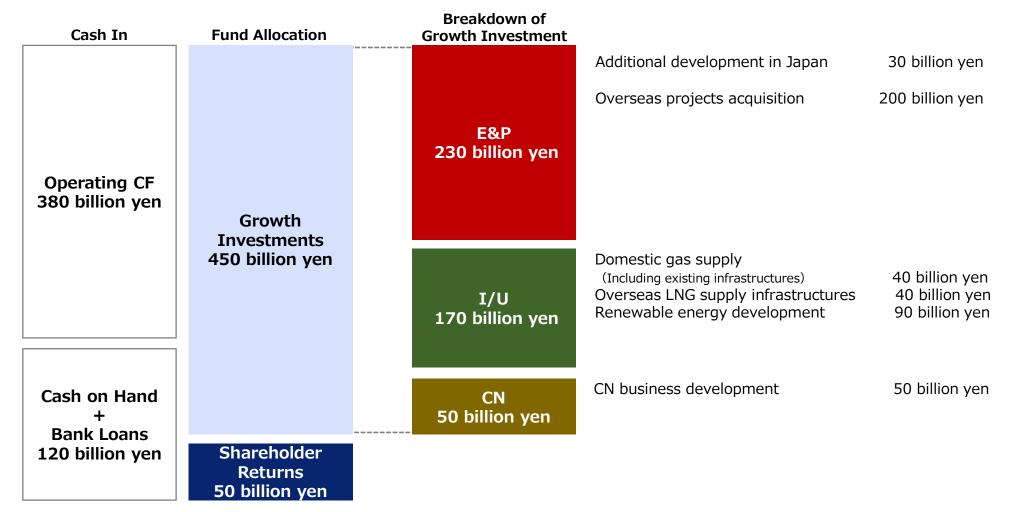


^{*1:}Including profits to be distributed under limited liability investment partnership and silent partnership agreements

Fund Allocation

Allocate 500 billion yen to growth investments and shareholder returns

Outlook of fund allocation (Cumulative of 9 years)

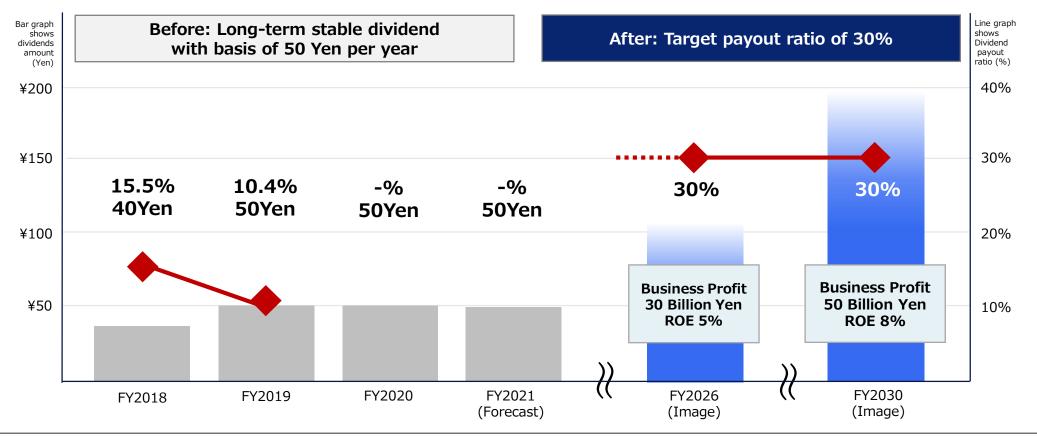


Shareholder Returns

Adopt a consolidated dividends payout ratio to enhance shareholder returns

Change in Basic policy

- > Pay dividends in line with financial results each fiscal year with a target payout ratio of 30% from FY2022
- > Strive to maintain annual dividends of ¥50 per share even in a temporary downturn in business performance



Priority Items by Business Field

Invest to Grow and Promote Existing Projects in Each Business Field

* New initiati	ves are <u>underlined</u>	Japan	Overseas
	E&P	 Stable production in existing oil and gas fields Additional development in and around existing oil and gas fields Reduce GHG emission from operations 	 Promote existing projects Acquire new interests
	Gas Supply	Maintain and expand gas supply volumes	 Participate in projects of LNG supply infrastructure development
I/U	Gas Power Generation	 Continue stable operation of FGP power plant 	
	Renewable Energy	 Steady progress in projects under development Add more projects 	Consider participation in projects
CN	CO₂ Storage	 Launch CCS/CCUS prototype projects by hub and cluster model utilizing existing oil and gas fields, etc. Examine CO₂ storage capacity in existing oil and gas fields etc. 	 Participate in CCS projects in systematically advanced areas Participate in feasibility studies on CCS/CCUS in emerging countries
	Others	 Consider next generation energy supply infrastructure etc. 	

Priority Item-1: E&P

Contribute to early profit scale expansion and respond to low-carbonization

<u>Japan</u>

- Continue to seek potentials
 - Additional development in existing fields and surroundings including offshore exploration
- Reduce GHG emissions from operations
 - Consider underground storage of associated CO₂ generated in domestic E&P field operation
- Collaborate with consideration in other business fields
 - Considerations of CCUS in existing oil and gas fields etc.
- Steady operation of existing oil and gas fields

Overseas

- Acquire new interests
 - Consider mainly in North America and North Sea with experiences from existing projects
 - Prioritize projects with early profit contribution
- Diversify business risks
 - Continuously acquire assets with a certain scale, own various type assets, use price hedging
- Pursue carbon-neutral measure
 - Prefer to acquire natural gas assets, collaborate with CCS/CCUS etc.
- Contribution to steady operation of Existing projects including projects in development phase

E&P Profit Target: FY2026 23 Billion Yen \rightarrow FY2030 27 Billion Yen

Priority Item-2: I/U (Infrastructure/Utility)

Transform business structure to withstand market and oil price volatility

<u>Japan</u>

- Response to gas supply diversification
 - Provide energy services collaborating with city gas suppliers and others
- Renewable energy
 - Add new projects: mainly biomass other candidates such as offshore wind, photovoltaic, and geothermal energies
 - > Steadily progress projects under development
- Stable gas supply and increase its volume by maintaining domestic supply network
- Contribute to profit in electricity sales by FGP power plant
- Competitive LNG Procurement and sales

Overseas

- LNG supply infrastructure development
 - Launch ongoing projects and add new projects
 - Mainly target Southeast Asia with strong gas demands
- Renewable energy
 - Consider to participate in overseas projects

Our gas supply infrastructure applicable in overseas



LNG facilities construction and operation including LNG terminals



High pressure gas pipelines construction and operation



Various LNG satellite supply method such as LNG tank trucks and railways

I/U Profit Target: FY2026 1 Billion Yen \rightarrow FY2030 2 Billion Yen

Priority Item-3: CN (Carbon Neutral)

Contribute to a smooth transition for a Carbon-neutral Society in 2050

<u>Japan</u>

- Launch CCS/CCUS prototype projects by hub & cluster model
 - Mainly collaborate with existing oil and gas fields and business entities emitting/utilizing CO2
 - Consider next-gen energy supply infrastructure such as CO₂, hydrogen, and ammonia
- Examine CO₂ storage capacity in existing oil and gas fields etc.

Ongoing Feasibility Studies

- Yufutsu Oil and Gas Field: Carbon recycling project with the sector-coupling in Tomakomai
- Higashi-Niigata Gas Field: Collaborate with methanol production using emitted CO2 at an adjacent plant (Injection of their surplus CO2 into the gas field)

Overseas

- Participate in CCS/CCUS projects for early profit earning and knowledge acquisition
 - Mainly in systematically advanced areas including North America and Europe
- Participate in CCS/CCUS feasibility studies in emerging countries
 - Consider mainly Southeast Asia, where demand is expected to grow

Ongoing Feasibility Studies

- CCUS joint feasibility study at Sukowati Oil Field in Indonesia with Pertamina and LEMIGAS
- CCS joint feasibility study in Malaysia with Petronas

CN Profit Target: FY2026 1 Billion Yen \rightarrow FY2030 2 Billion Yen



Positioning of the Plan toward 2050

Contribute to CN-Society by oil & gas supply, renewable energy, and CCS/CCUS

- Future image from the Plan toward 2050 based on "JAPEX2050"
 - > Recognize that oil & gas will play a major role now and future: aim for both its stable supply and CN Society realization, not de-escalation
 - > FY2030: Expand I/U field businesses including renewable energy, prospect for realization of various energy supply by establishment of CCS/CCUS business
 - > CN Society in 2050: As a comprehensive energy company, play a center role by CO₂ storage in collaboration with other business operators for capture, transportation, and utilization

Priority items of the Plan and contributing fields in JAPEX2050 promotion

Management Plan JAPEX2050: our direction and responsibility toward 2050 2022-2030 **Interest Acquisition and Development** ■ Pursue potentials to development > Recognize that oil and natural gas will remain as one of the major energy in domestic oil and gas fields Stable Acquire new overseas interests > Focus on the acquisition of oil and gas interests, as well as its E&P Supply of development and production continuously Inject associated CO2 generated Oil and **Natural Gas Use Promotion** in domestic E&P field operation Natural Gas Respond to the demand for fuel switching from other fossil fuel such as coal and heavy oil > Enforce our responses for meeting various future demands to LNG ◆ Renewable energy: add more projects in Japan and overseas CCS/CCUS I/U Participate in overseas LNG > Realize and commercialize CCS/CCUS technologies CCS/CCUS supply infrastructure projects > Enter the business areas related to CCS/CCUS, such as blue hydrogen, methanation, and natural gas-fired and other power plants with CCS net-zero Renewable Energy solutions Hub & cluster model CCS/CCUS > <u>BECCS</u> (Biomass power generation with CCS/CCUS that enables negative emissions) prototype projects Offshore wind power generation to leverage our E&P experience and expertise • Examine CO₂ storage capacity in Scope1+2 existing oil and gas fields etc. > Reduce by 40% in FY2030 compared to FY2019 of CO2 emission intensity of the JAPEX group's GHG CN Participate in overseas CCS/CCUS operations emission projects > Achieve the net-zero CO2 emission of our group's operation in 2050 reduction Next-gen energy transportation Scope3 target and supply infrastructure, etc. > Contribute to establish new technologies and energy supply with low environmental impact, for achieving the net-zero CO2 emission in our supply chain

Promote decarbonization

of oil & gas fields'

operation

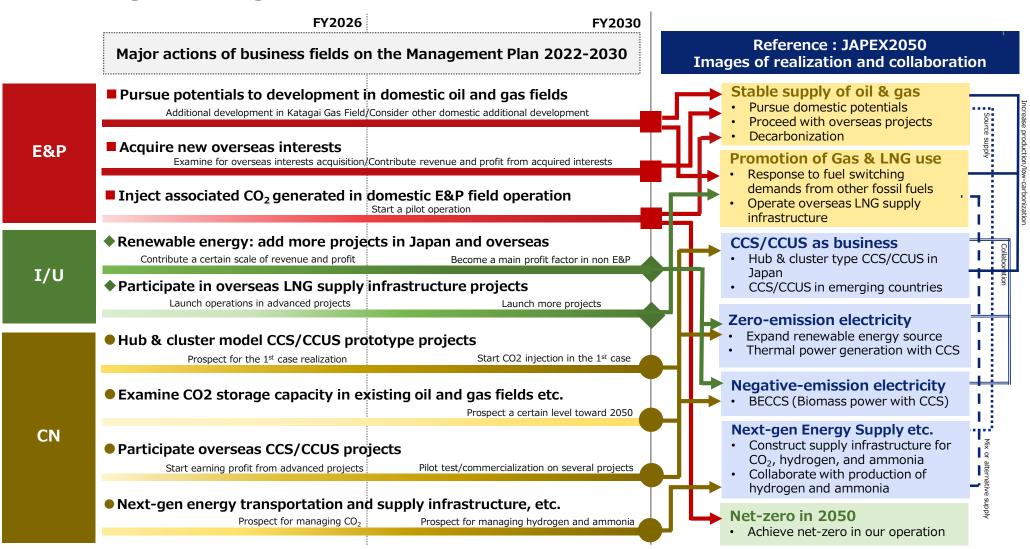
Promote natural gas use

as lower environmental

impact energy source

Timeline on each business field by FY2030

Aiming to strengthen E&P and I/U as well as to launch CCS/CCUS in CN



Measures for Human Resource and Organization

HR management and organization for new business structure and fields

Enhance human capital management

- Secure and assign human resources following business changes
 - ✓ Secure human resources with skills required in new business fields, and reassign to growth areas
- Develop human resources for new fields
 - ✓ Encourage each autonomous career development
 - > Introduce career consulting, expand internal personnel recruitment system, etc.
 - ✓ Reskilling program
 - Enable to develop and deploy human resources for various business fields
- Utilize human resources considering their improvement in engagement
 - ✓ Based on the Diversity, Equity & Inclusion (DE&I) policy
 - Promotion of women, youngers, and seniors

Organization changes as of April 1, 2022

- Reorganize business units to promote new management plan
 - ✓ Reorganize Overseas Project Divisions
 - > Two division structures to develop new projects and promote existing projects, etc.
 - √ Reorganize in Technical division
 - Establish Carbon Neutral Technology Office
 - Reorganize Research Center
 - ✓ Reorganize Gas Supply and Facilities Division
 - Consolidate functions of operations and management of surface facilities in our business
- Strengthen company-wide support for business deal execution and management
 - ✓ Establish Deal Execution/PMI Support Dept.
 - Centralize corporate departments' expertise
 - Support new investment cases both engagement procedures and investment value realization

Secure and develop human resources for DX

Promote DX based on business issues

DX (Digital transformation) Measures



Addressing Climate Change

Link business and other contributions to management responsibility

Our commitment under "JAPEX2050"

Contribute to the CN society realization through our business

Under the consideration that transition to a CN society is our business opportunity, aim to contribute to its realization by promoting our business

[Priority action items]

- > Expansion of renewable energy sources
- Early realization of CCS/CCUS

Reduce GHG emissions from business ourselves

Reduce 40% of CO₂ emission intensity in FY2030 (compared to FY2019 of Scope1+2)

[Priority action items]

- Consider CO₂ injection emitting from our oil and gas fields
- Consider using zero-emission electricity at head office





Reflect annual results of our climate change response to executive compensation

Add the achievement level of company-wide climate change response objectives to an annual evaluation items of executive officers from FY2022



Appendix

- P15 ① Current plan: Progress status of targets and indicators
- P16 ② Current plan: Progress status of business profit
- P17 ③ Management targets as of FY2026/2030 and sensitivity
- P18 4 Fund allocation breakdown as of FY2026/2030
- P19 5 Business overview: Our oil and gas E&P sites
- P20 6 Business overview: I/U Gas supply
- P21 7 Business overview: I/U Electricity
- P22 ® Business overview: CN CCS/CCUS
- P24 ⁽¹⁾ Our capabilities and possibilities in CCS/CCUS
- P25 (1) Diversity, Equity & Inclusion (DE&I) Policy



Current plan: Progress status of targets and indicators

Targets and Indicators toward FY2022 and progress in FY2018-2021

Target items	FY2022 Targets	FY2018	FY2019	FY2020	FY2021 Forecast ^{*1}	Estimates at FY2021 end
ROE	5% or more	3.5	6.5	(0.7)	N/A	Unachieved
Domestic gas transaction volume	1.60 million tons	1.13	1.20	1.48	1.40	Unachieved
Electricity sales volume	2.8 billion kWh	0	0	3.0	3.0	Achieved
Interest-bearing debt	Reduce by 100~120 billion yen	151.7	140.8	118.7	5.7	Achieved
Debt-to-EBITDA ratio	Less than 2.0 times	3.6	2.4	3.2	0.1	Achieved
Reserve Replacement Ratio*2	(Long-term target) Exceeded by 1	4.9	(0.1)	(0.7)	N/A	-

Progress on funding allocation for FY2019-2022 (4 years)

(billion yen)

Items	Allocated amount	FY2019	FY2020	FY2021 Forecast ¹	Estimated Cumulative total for 3 years
Improve profitability of existing projects	Approx.60 billion yen	7.0	13.4	12.0	32.5
Reduce interest-bearing debt	Approx.55 billion yen	11.0	9.3	60.5	81.0
Growth investments	Approx.65 billion yen	1.0	8.8	15.6	25.4
Shareholder returns	Approx.9 billion yen or more	3.1	2.8	6.8	12.8

^{*1:} Figures are based on business forecasts as of February 9, 2022 with recent performance-based adjustments.



^{*2:} The ratio of growth in volume of proved reserves against production volume in a single fiscal year or other specific period of time.

Current plan: Progress status of business profit

Business Profit by business field (FY2019 onwards*1)

(billion yen)

Business field	FY2019	FY2020	FY2021 Forecast *2
E&P	37.1	3.8	35.1
Infrastructure/Utility	(5.1)	11.9	1.6
Others	(5.7)	(5.7)	(6.9)
Total	26.2	10.0	29.8

Business Profit by segment

(billion yen)

Segment	FY2018	FY2019	FY2020	FY2021 Forecast *2
Japan	19.5	18.9	21.6	22.2
North America	(9.7)	3.4	(9.3)	1.7
Europe	(0.1)	(0.1)	(0.1)	(0.1)
Middle East	0.9	0.6	0.1	1.7
Others	12.3	11.8	6.1	13.6
Adjustments and Eliminations	(8.0)	(8.4)	(8.4)	(9.3)
Total	14.8	26.2	10.0	29.8

Reference: Crude Oil Price Trend

(USD/bbl)

Item	FY2018	FY2019	FY2020	FY2021 Forecast *2
Crude Oil Price (JCC)	71.95	68.11	42.91	70.21

^{*1:} Disclosures began in FY 2019. *2: Figures are based on the earnings forecast as of February 9, 2022.



Management targets for FY2026/2030 and sensitivity

 Management targets Business profit: billion yen (Operating profit + equity in earnings of affiliates and other*2) 		FY2021 Forecast*1	FY2026 targets	FY2030 targets	
		29.8	30.0	50.0	
(Breakdown)	E&P	35.1	23.0	27.0	
	I/U	1.6	12.0	27.0	
	CN	-	1.0	2.0	
	Others*3	(6.9)	(6.0)	(6.0)	
ROE	ROE		Approx.5%	Approx.8%	
Profit com	position ratio (E&P : Non-E&Ps)	9:1	6:4	5:5	
Assumption of	f crude oil price (JCC: USD/bbl)	70.21	50.00	50.00	
Exchange rate assumption (JPY/USD)		109.97	110.00	110.00	
• Oil price	sensitivity in business profit target		Business profit as of FY2026	Business profit as of FY2030	
Impact of a 1	USD/bbl change in oil price : billion yen	-	0.7	0.9	

^{*1:} Figures are based on earnings forecast as of February 9, 2022.

^{*2:} Including profits to be distributed under limited partnership and silent partnership agreements

^{*3:} Other revenue (contract service and oil products sales, etc.) less head office administrative expenses

Fund allocation breakdown as of FY2026/2030

ash-in assum	ption (bil	lion yen)	Cumulative total for FY2022-2026 (5 years)	Cumulative total for FY2022-2030 (9 years)
Operating cash flow			200.0	380.0
Cash on hand + Bank loans Cash-in total		100.0	120.0	
		300.0	500.0	
ash-out assur	nption (billion yen)	Cumulative total for FY2022-2026 (5 years)	Cumulative total for FY2022-2030 (9 years)
Growth investment	E0.D	Japan -Additional development etc.	25.0	30.0
mvestment	E&P	Overseas- new project acquisitions	120.0	200.0
		Domestic gas supply (including existing facilities)	20.0	40.0
	I/U	Overseas LNG supply infrastructure development	30.0	40.0
		Renewable energy development	60.0	90.0
	CN	CN business development	20.0	50.0
		total	275.0	450.0
Shareholder r	eturns		25.0	50.0
		Cash-out total	300.0	500.0

Business overview: Our oil and gas E&P sites



[4] Russia · Sakhalin 1 Project*



development and production site

Included in our sales profit

[1] Iraq: Garraf Project*



O&

[A] Japan: Domestic oil and gas fields* (10 sites in Hokkaido, Akita, Yamagata, and Niigata)

[5] United States: Tight Oil Development*

OIL

[2] Indonesia · Kangean Project



Our affiliated oil and gas development and production base

Japan

10 fields

Overseas

5 projects

Our oil and gas E&P fields/projects (as of March 2022)

No.	Oil and gas field/Project title (operator)	Interest (JAPEX net)	production type	Status	Gross Production volume*1
А	Japan: Domestic oil and gas fields (Total of 10 locations in Hokkaido, Akita, Yamagata, and Niigata)	Differ by interest	Crude oil / natural gas	Production/ Additional Development	Undisclosed
1	Iraq: Garraff Project (PETRONAS Carigali Iraq Holding B.V.)	30% (16.5%)	Crude oil	Production/ Additional Development	80,000bbl/d
2	Indonesia: Kangean Project (Kangean Energy Indonesia Ltd.)	100% (25%)	Natural gas	Production	4,560,000m³ (28,000boed)
3	UK North Sea: Seagull Project (Neptune E&P UK Limited)	15% (15%)	Crude oil / natural gas	Development	-
4	Russia: Sakhalin 1 Project (Exxon Neftegas Ltd.*2)	30% (4.59%)	Crude oil	Production/ Development	Undisclosed
5	North America: Tight Oil Development (Marathon Oil Corporation and several other interests)	Differ by interest	Crude oil	Production/ Development	Undisclosed

^{*1:}Average daily production for FY2021 (Jan-Dec 2021 for overseas projects). *2: On March 1, 2022 (local time) Exxon Mobil, parent company of operator Exxon Neftegas Limited, announced its exit policy.

Business overview: I/U - Gas supply

Features of JAPEX's domestic gas supply network

High-pressure gas pipeline network over 800 km total

2 LNG terminals for ocean-going carriers

Capable to supply from Sea of Japan and Pacific Ocean

Domestic gas supply

- Domestic produced gas and regasified LNG supply via pipelines
- Receive, storage, regasify, and deliver LNG
- LNG satellite system: tank trucks, tank containers on rail, domestic vessels)
- > Third-party or consignment use of our gas pipelines and LNG terminals etc.

Respond to diversification of domestic gas supply

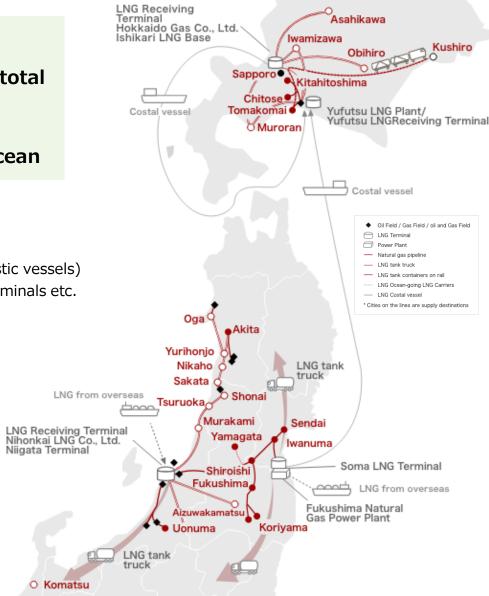
- Support fuel switching to natural gas from other fossil fuels
- Propose and provide energy services in cooperation with gas suppliers

LNG procurement

Procure competitive LNG with a combination of term and spot contracts

Overseas LNG supply infrastructure

- Launch new projects or other process mainly in Southeast Asia with stronger demands for gas
 - ✓ Ongoing feasibility study: Northern Vietnam LNG terminal project





Business overview: I/U - Electricity

Total 6 sites
(Renewable energy 5 sites

Total output **1,339,550**kW

Renewable energy 159,550kW)

[1] Abashiri Biomass Power Plant No.2&3



[2] Mega solar power generation at JAPEX Hokkaido District Office*



[3] Yufutsu Solar Power Plant





Power plants in development and operation (as of March 2022)

No.	Power plant	Location	Туре	Capacity (kW)	Share	Status
Α	Fukushima Natural Gas Power Plant	Shinchi Town, Fukushima	Natural gas (LNG)	1,180,00 0	33%	In operation
1	Abashiri Biomass Power Plant No.2&3	Abashiri City, Hokkaido	Biomass (wood chip)	19,800	94.3%	In development
2	Mega solar power generation at Japex Hokkaido District Office	Tomakomai City, Hokkaido	PV	1,800	100%	In operation
3	Yufutsu Solar Power Plant	Tomakomai City, Hokkaido	PV	13,000	20%	In operation
4	Ozu Biomass Power Plant	Ozu City, Ehime	Biomass (wood pellet)	50,000	35%	Development Decided
5	Chofu Biomass Power Plant	Shimonoseki City, Yamaguchi	Biomass (wood pellet)	74,950	39.9%	Development Decided

[A] Fukushima Natural Gas Power Plant





Other renewable energy project

PHOTON Sustainable Solar Investment Limited Partnership (funding up to 10 billion yen in PV generation projects including non-FIT projects; 50% of our investment ratio)

[4] Ozu Biomass Power Plant

вю

BIO

[5] Chofu Biomass Power Plant

Gas power plant

R

Renewable power plant

* Included in our sales profit

Business overview: CN - CCS/CCUS

Required factors to realize a hub & cluster CCS/CCUS

Verification and Establishment of Technology

- ➤ Survey of suitable sites for CO₂ storage and amounts that can be stored
- ➤ CO₂ capture and transportation technology
- ➤ CO₂ indention and storage technology
 - Including stored CO₂ monitoring

Inter-company and Cross-industry Collaboration

- ➤ Collection of CO₂ from emitting sites
- > CO₂ transportation network construction
 - Transportation to utilization destinations and collection surpluses
- ➤ Underground storage of surplus CO₂

<u>Legal Systems</u>, etc.

- ➤ Legal system for CO₂ underground storage
- Appropriate system of CO₂ transportation infrastructures with publicness
- CO2 trading system
 - Including collaboration with overseas CO₂ trading

Ongoing CCS/CCUS initiatives to promote/participate in (as of March 2022)

Japan

Realize hub & cluster model by FY2030

- Consideration in JAPEX
 - ✓ Examination of CO₂ storage capacity in our oil and gas fields, etc.
 - ✓ Study of re-injection of associated CO₂ from our oil and gas field operations
- Feasibility study with companies/cross-industry
 - ✓ Feasibility study on carbon recycling business utilizing interindustry collaboration in the Tomakomai area with Deloitte Tohmatsu Consulting as a NEDO-commissioned project
 - ✓ Feasibility study of a business in the Niigata area that makes effective use of CO2 with Mitsubishi Gas Chemical

Overseas

Early profit earning in advanced countries & consideration in emerging countries

- > Consideration in JAPEX
 - ✓ Consideration for participation in CCS/CCUS projects in North America, Europe and other systematically advanced areas
- > Feasibility study on companies/cross-industry
 - ✓ Joint feasibility study of a CCUS project in Indonesia's Sukowati oil field utilizing bilateral credits with Pertamina Group and Remigas
 - ✓ Joint CCS study in Malaysia including a survey of suitable sites and technical studies with a view to implementing CO₂ underground storage with PETRONAS



- > Technical and other related study
 - ✓ Study on technical issues of energy transportation infrastructure for the realization of a CN society with JFE Engineering

Corporate structure for CN business promotion

- Establish CN Business Promotion Committee on April 1, by the executives of related divisions
 - Promote company-wide initiatives for CN-related businesses with a focus on CO2 underground storage-related businesses, including renewable energy



Our capabilities and possibilities in CCS/CCUS

Subsurface investigation (Geophysical Exploration)







Select candidate locations for CCS/CCUS, and execute CO₂ injection, storage, and monitoring

- ✓ <u>Technical capabilities to complete all elements in the JAPEX group for realization</u> including exploration, drilling, and monitoring
- ✓ Utilize the data concerning deep saline aquifers*, acquired by our investigations and explorations in Japan





Capture CO2

Transport CO2

Utilize CO2

Inject and Store CO2







Transport separated and captured CO₂

✓ Establish CO₂ transportation infrastructures leveraging our expertize in natural gas and LNG supply



Such as high-pressure gas pipeline and coastal vessels



Collaborate and Enter Carbon-Neutral Business

- ✓ **Apply CCS/CCUS to power generation** by gas and biomass
- ✓ Consider to enter blue hydrogen and methanation business

Focus on gas-fired and biomass plant, including facility owned by other companies



[Blue Hydrogen] Discompose natural gas, and capture CO₂ after production



[Methanation] Produce
Methane (CH₄)
from H₂
and CO₂

Note) * Sandstone layer in deep underground that includes ancient sea water (salt water) which are not suitable for drinking. Its geographical distributions are broader compared to oil and natural gas reservoirs, and CO₂ storage capacity is anticipated.

Diversity, Equity & Inclusion (DE&I) Policy

Basic Policy (Established in December 2021)

> JAPEX diversity policy established in 2016 revised to incorporate the concepts of equity and inclusion

JAPEX Diversity, Equity & Inclusion (DE&I) Policy (Established in December 2021)

In order to respond to changes in the business environment and achieve further growth as a comprehensive energy company, we regard the promotion of diversity, equity and inclusion (DE&I) as an important management issue, and aim to strengthen our corporate competitiveness and achieve sustainable development. To this end, we enable our diverse employees to create new value by encouraging each and every one to play their active role and grow their careers through fully demonstrating their inherent capabilities.

By respecting diversity in terms of gender, nationality, age, disability, career, personality, and values, and by correcting social imbalances caused by these characteristics and differences, we will realize an organizational culture in which all employees can be productive and active.

- ♦ Foster an organizational culture that makes the most of diversity

 We seek to improve productivity and create innovation by fostering an organizational culture to make the most of their individual characteristics and qualities of all employees, with positively accepting diversity and respecting differences.
- ◆ Promote the activities of diverse human resources

 By securing outstanding talents regardless of gender, nationality, age, etc., and by providing timely and appropriate placement and training as well as providing support for career and skill development tailored to each employee, we put in place a system that allows all human resources to demonstrate their capabilities and play their active role as self-directed professionals, thereby increasing individual engagement.
- ◆ Create an environment that respects diversity

 We promote the development of a work environment that allows employees to exert themselves to the fullest in all situations, taking into consideration the circumstances and characteristics of each individual, including childcare, nursing care, disabilities, and LGBTQ+.

Targets under the DE&I Policy

Promotion of women

- Number of female managers:25 or more by the end of FY2025
- Ratio of female new graduates : 30% or more each year

Career recruitment

- Ratio of mid-career hires in management positions: maintain 20% or more until FY2025
- > Ratio of mid-career hires to total hires : 50% or more each year

Ratio of childcare leave

Ratio of male employees taking childcare leave : 80% or more by FY2025



Essential Energies for Essential Needs



Japan Petroleum Exploration Co., Ltd.