

The English version is a translation of the original Japanese version. Please note that if there is any discrepancy, the Japanese version will take priority.

Summary of FY2023 1st Quarter Earnings Results

2023/7/31



The following contains statements that constitute forward-looking statements, plans for the future, management targets, etc. relating to the Company and/or the J-POWER group. These are based on current assumptions of future events, and there exist possibilities that such assumptions are objectively incorrect and actual results may differ from those in the statements as a result of various factors.

Furthermore, information and data other than those concerning the Company and its subsidiaries/affiliates are quoted from public information, and the Company has not verified and will not warrant its accuracy or appropriateness.

XDisplay of Figures

✓ All figures are consolidated unless stated otherwise.

✓Amounts less than 100 million yen and electric power sales volume less than 100 million kWh shown in the consolidated financial data have been rounded down. Consequently, the sum of the individual amounts may not necessarily agree with figures shown in total columns.

Initiatives to Achieve J-POWER "BLUE MISSION 2050"

- ✓ Expansion of Renewable Energy (Wind/Hydro/Geothermal/Solar) ▶ p.16, 17
- ✓ Enhancement of Power Networks (Construction of the New Sakuma Frequency Converter Station and others) ► p.26
- ✓ Upcycling of Existing Assets (NEXUS Sakuma & GENESIS Matsushima) ▶ p.18, 20
- ✓ Efforts to Realize Large-Scale CCS in Japan by 2030 ▶ p.21, 22

Strategic investments of 700 billion yen planned by 2030, including the above initiatives

Balancing Transition and Financial Value Enhancement



POWER



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(Linit: hillion yon)

Summary of FY2023 1st Quarter Earnings Results

Decreased revenue and increased profit

- Main reason for decrease in consolidated operating revenue
- Decreased due to lower electricity sales volume resulting from lower utilization of thermal power plants and lower electricity sales prices, etc.
- Main reasons for increase in consolidated operating profit and ordinary profit
- Decreased in facilities maintenance costs and other expenses
- Increased in profit of a subsidiary in Australia that owns coal mining interests

			(• • • • •	,,
Consolidated	FY2022 1st Quarter (AprJun.)	FY2023 1st Quarter (AprJun.)	Year-or char	n-year Ige
Operating Revenue	323.3	281.3	(41.9)	(13.0)%
Operating Profit	19.5	26.5	7.0	36.1 %
Ordinary Profit	21.4	27.4	5.9	27.7 %
Profit attributable to owners of parent	13.0	17.6	4.5	35.1 %
Non-consolidated	FY2022	FY2023	Year-or	n-year
	1st Quarter (AprJun.)	1st Quarter (AprJun.)	char	ige
Operating Revenue	1st Quarter (AprJun.) 228.0	1st Quarter (AprJun.) 163.9	char (64.0)	ige (28.1)%
Operating Revenue Operating Profit	1st Quarter (AprJun.) 228.0 (3.3)	1st Quarter (AprJun.) 163.9 (2.0)	char (64.0) 1.3	ige (28.1)% -
Operating Revenue Operating Profit Ordinary Profit	1st Quarter (AprJun.) 228.0 (3.3) 11.5	1st Quarter (AprJun.) 163.9 (2.0) 16.2	char (64.0) 1.3 4.6	nge (28.1)% - 40.5 %
Operating Revenue Operating Profit Ordinary Profit Profit	1st Quarter (AprJun.) 228.0 (3.3) 11.5 12.0	1st Quarter (AprJun.) 163.9 (2.0) 16.2 16.3	char (64.0) 1.3 4.6 4.2	nge (28.1)% - 40.5 % 35.4 %



Key Data (Electric Power Sales)

	FY2022 1st Quarter (AprJun.)	FY2023 Year 1st Quarter ch (AprJun.)		-year ge
Electric Power Sales (TWh)				
Electric Power Business	14.0	11.3	(2.7)	(19.7)%
Hydroelectric Power	2.5	2.7	0.1	7.5 %
Thermal Power	8.3	5.7	(2.5)	(30.9)%
Wind Power	0.2	0.2	0.0	10.9 %
Other ^{*1}	2.8	2.4	(0.4)	(13.9)%
Overseas Business ^{*2}	2.5	5.0	2.5	99.8 %
Water supply rate	91%	97%	6 points	
Load factor ^{*3}	47%	33%	(14) points	

[Domestic Hydroelectric Power]

Electric Power Sales for each Quarter



[Domestic Thermal Power]



- *1 Electric power sales volume of electricity procured from wholesale electricity market, etc.
- *2 Electric power sales volume of overseas consolidated subsidiaries (Electric power sales volume of equity method affiliated companies is not included)
- *3 Load factor of thermal power shows the results for non-consolidated only

Key Data (Operating Revenue)

- Electric Power Business
- Decreased due to lower electricity sales volume resulting from lower utilization of thermal power plants and lower electricity sales prices, etc.
- Overseas Business
- The revenue increased due to increasing electricity sales volume in Jackson Generation Power Plant in North America
 and Thailand projects
- Other Business
- The sales increased due to soaring coal prices at a subsidiary in Australia that owns coal mining interests

	FY2022 1st Quarter (AprJun.)	FY2023 1st Quarter (AprJun.)	Year-on-year change
Operating Revenue (Billion yen)	323.3	281.3	(41.9) (13.0)%
Electric Power Business	237.2	177.6	(59.5) (25.1)%
Electric Power Sales	223.3	164.8	(58.5) (26.2)%
Renewables ^{*1}	35.5	37.3	1.7 4.9 %
Transmission / Transformation	12.2	11.9	(0.3) (2.8)%
Overseas Business ^{*2}	58.5	73.6	15.1 25.9 %
Other Business ^{*3}	27.6	30.0	2.4 9.0 %

		FY2022	FY2023
		1st Quarter (AprJun.)	1st Quarter (AprJun.)
Foreign exchan	ge rate		
(Yen/USD)	at the end of March	122.39	133.53
(Yen/THB)	at the end of March	3.68	3.91
(Yen/AUD)	at the end of March	92.00	89.69
(THB/USD)	at the end of March	33.30	34.10

*1 Hydroelectric, wind and geothermal power

*2 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.)

*3 "Other Business" is composed of "Electric Power-Related Business" segment and "Other Business" segment. See Appendix <u>p.33</u> for details.



FY2023 1st Quarter Earnings Results (Main Factors for Change)

(Unit: billion yen)



Breakdown of Increase / Decrease Factors of Consolidated Ordinary Profit

(Unit: billion yen)

(Year on Year)

VPOWER

 1.Gross margin of electric power business (Domestic) (7.5) Decrease in gross profit from JEPX sales due to lower JEPX prices Increase in revenue of renewable energy 	 5.Share of profi Overseas± Domestic(0) 	t of entities accounter using equi 0.0 0.5)	<u>ed for</u> ity method (0.5)	
 <u>2.Other expenses +9.5</u> Decrease in facilities maintenance costs+6.0 				
Decrease in other expenses+3.5	• Q1 2022+3.0 \rightarrow Q1 2023+3.0 O1 Foreign exchange rate (THB/USD)			
3.Profit of overseas business subsidiaries (1.0)		At the end of December of	$\frac{10}{10}$ (At the end of March) ^{*2}	
Power generation projects in Thailand		the previous year	TQ (At the end of March) ²	
Scheduled decrease in fixed revenue	FY2022	33.42	33.30	
Jackson Generation Power Plant in North America	FY2023	34.56	34.10	
*Started commercial operation in Q2 FY2022	*1 Foreign exchange valuation gains and losses mainly on US dollar-denominated debt in power generation projects in Thailand and US dollar-denominated loan in overseas businesses			
4.Profit of other subsidiaries /	*2 The fiscal year of ov	verseas subsidiaries is from Jan	uary to December	
consolidated adjustment, etc. +6.0	Q1 Foreign excl	nange rate (JPY/USD)		
Increase in profit from a subsidiary in Australia that owns		At the end of March	1Q (At the end of June)	
coal mining interests due to soaring coal prices	FY2022	122.39	136.68	
	FY2023	133.53	144.99	



Consolidated: Revenue / Expenditure Comparison

				(Unit: billion yen)
	FY2022 1st Quarter	FY2023 1st Quarter	Year-on-year change	Main factors for change
	(AprJun.)	(AprJun.)		
Operating Revenue	323.3	281.3	(41.9)	
Electric power business	237.2	177.6	(59.5)	
Overseas business	58.5	73.6	15.1	
Other business	27.6	30.0	2.4	
Operating Expenses	303.8	254.8	(48.9)	Electric power business(62.0),
				Overseas business+16.4, Other business(3.4)
Operating Profit	19.5	26.5	7.0	
Non-operating Revenue	8.6	9.6	0.9	
Share of profit of entities accounted for using equity method	3.4	2.7	(0.6)	
Foreign exchange gains	2.9	3.1	0.1	
Other	2.2	3.8	1.5	
Non-operating Expenses	6.6	8.7	2.0	
Interest expenses	5.7	7.5	1.8	
Other	0.9	1.2	0.2	
Ordinary Profit	21.4	27.4	5.9	Electric power business+1.1,
				Overseas business(2.2), Other business+5.2
Total income taxes	6.1	8.5	2.3	
Profit attributable to owners of parent	13.0	17.6	4.5	



Consolidated: Balance Sheet

				(Unit: billion yen)
	FY2022 End of FY	FY2023 End of 1Q	Change from prior year end	Main factors for change
Non-current Assets	2,701.3	2,703.5	2.1	
Electric utility plant and equipment	1,065.5	1,067.0	1.5	
Overseas business facilities	447.2	451.3	4.1	
Other non-current assets	89.2	88.6	(0.5)	
Construction in progress	572.1	563.2	(8.8)	
Nuclear fuel	76.2	76.2	0.0	
Investments and other assets	451.0	456.8	5.7	Long-term investments +8.9
				(Includes impact of foreign exchange revaluation+6.8)
Current Assets	661.3	690.1	28.8	
Total Assets	3,362.6	3,393.6	30.9	
Interest-bearing debt	1,885.8	1,903.3	17.5	Non-consolidated +16.1, Subsidiaries and others +1.3
Other	284.1	283.5	(0.5)	
Total Liabilities	2,169.9	2,186.9	16.9	
Shareholders' equity	977.8	986.2	8.4	
Accumulated other comprehensive income	106.8	112.3	5.4	
Non-controlling interests	108.0	108.1	0.0	
Total Net Assets	1,192.7	1,206.7	13.9	
D/E ratio (x)	1.7	1.7		
Shareholders' equity ratio	32.3%	32.4%		



Summary of FY2023 Earnings Forecast

 \checkmark We do not change the earnings forecast released on May 10, 2023.

			(Unit. D	mon yen)
Consolidated	FY2022 Result	FY2023 Forecast	Compariso FY2022 F	on with Result
Operating Revenue	1,841.9	1,513.0	(328.9)	(17.9)%
Operating Profit	183.8	111.0	(72.8)	(39.6)%
Ordinary Profit	170.7	110.0	(60.7)	(35.6)%
Profit attributable to owners of parent	113.6	76.0	(37.6)	(33.2)%
Non-consolidated	FY2022 Result	FY2023 Forecast	Compariso FY2022 F	on with Result
Non-consolidated Operating Revenue	FY2022 Result 1,370.7	FY2023 Forecast 1,048.0	Compariso FY2022 F (322.7)	on with Result (23.5)%
Non-consolidated Operating Revenue Operating Profit	FY2022 Result 1,370.7 46.5	FY2023 Forecast 1,048.0 32.0	Compariso FY2022 F (322.7) (14.5)	on with Result (23.5)% (31.3)%
Non-consolidated Operating Revenue Operating Profit Ordinary Profit	FY2022 Result 1,370.7 46.5 75.3	FY2023 Forecast 1,048.0 32.0 62.0	Compariso FY2022 F (322.7) (14.5) (13.3)	on with Result (23.5)% (31.3)% (17.7)%

	Cash dividends per share				
	Interim	Year end	Annual		
FY2022	40 yen	50 yen	90 yen		
FY2023 (forecast)	45 yen	45 yen	90 yen		



Appendix

Triton Knoll Offshore Wind Power Project, UK

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Appendix

- 1. Main Flow of Domestic Electricity Business
- 2. Expansion of Renewable Energy
- Renewable Energy Development Projects (Wind)
- 4. Renewable Energy Development Projects (Hydro, Geothermal, Solar)
- Upcycling to next-generation hydropower plants NEXUS Sakuma
- 6. Ohma Nuclear Power Project
- 7. Hydrogen production and use in existing thermal power plants GENESIS Matsushima
- 8. Establishment of joint venture for CCS in Japan
- 9. Feasibility Study for Large-scale CCS in •••22 Japan

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1. Main Flow of Domestic Electricity Business

Coal Mines (Australia and other countries)

Coal Procurement





2. Expansion of Renewable Energy



3. Renewable Energy Development Projects (Wind)

Projects *Excluding domestic outside port and port area offshore wind power

*1 Presents only phase 1 construction. Total plan amounts up to 120.4MW *2 Total plan amounts up to 40.8MW *3 Conducted iointly with Genex Power Limited.

The owned capacity includes 7.7% stake in Genex, in addition to the 50% stake held by the Company under the development funding agreement.

Conducted jointly with Kyuden Mirai Energy Company,Incorporated, Hokutaku Co., LTD, Saibu Gas Co. Ltd. and Kyudenko Corp.

Domestic Offshore

Kitakyushyu-Hibikinada*4

Start of Construction :March 2023 Start of operation :FY2025(planned) Port area Max.approx.220MW (Rated power output 9.6MW*25units) Owned capacity 40% =Max.approx.88MW

Project area

Overseas Offshore

Triton Knoll Start of commercial operation :April 2022 UK 857MW Ownership 25% Owned Capacity 214MW *We will consider and respond to each location for open tendering toward the realization of offshore wind power in outside port area.

(As of June 30,2023)

4. Renewable Energy Development Projects (Hydro, Geothermal, Solar)

(As of June 30,2023)

	Project	Capacity	Ownership	Owned capacity	Note
	Ogamigo Repowering	20.0MW→21.3MW	100%	20.0MW→21.3MW	Start of operation : FY2024 (planned)
	Suezawa Repowering	1.5MW→2.2MW	100%	1.5MW→2.2MW	Start of operation : FY2024 (planned)
Hydro	Nagayama Repowering	37.0MW→39.5MW	100%	37.0MW→39.5MW	Start of operation : After FY2025 (planned)
	Onabara	1.0MW	100%	1.0MW	Start of operation : FY2026 (planned)
	K2 Hydro (Australia, Pumped hydro)	250MW	7.7%	19.3MW	Start of operation : 2024 (planned)
	Bulanog Batang Hydro (Ph	nilippines) 33.5MW	40%	13.4MW	Start of operation : 2029 (planned)
0	Project	Capacity	Ownership	Owned capacity	Note
Geo- thermal	Аррі	14.9MW	15%	2.2MW	Start of operation : April 2024 (planned)
uleimai	Takahinatayama-area	-	-	-	Under research for development
	Project	Capacity	Ownership	Owned capacity	Note
	Kitakyushushi Hibikinada	30.0MW	100%	30.0MW	Start of operation : FY2024 (planned)
	Himejishi Oshio	2.0MW	100%	2.0MW	Start of operation : FY2024 (planned)
Solar	Refugio (USA)	400.0MW	25%	100.0MW	Start of operation : After 2023 (planned)
	Rooftop solar (Thailand, 7 projects)	total 9.6MW	60%	5.8MW	Start of operation : After 2023 (planned)
	Bulli Creek ^{*1} (Australia)	2,000MW	53.9%* ²	1,077MW	Scheduled to be developed in phases

^{*1}Plans to develop up to 2,000 MW of solar power and batteries combined.

^{*2}J-POWER owns 50% stake of the project, and with its 7.7% stake in Genex Power Limited, J-POWER's overall stake is 53.9%.

5. Upcycling to next-generation hydropower plants NEXUS Sakuma

- Under the NEXUS Sakuma project, we are proceeding with design of main electric facilities and buildings and preliminary preparation construction for the start of construction.
- By focusing on not only repowering for aged facilities, but also hydropower generation / areas and basins / people, we keep challenging to realize next-generation hydropower plants.

[Accomplishment schematic view]

It depicts a circulation image of hydropower generation / areas and basins / people in conjunction with each other around a power plant based on an infinity symbol and the circulation flow of atmospheric air and water.

"Next-generation hydropower plants" that bring new values and energy

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Hydropower generation

By applying modern technologies to renovate aged facilities, we aim to further increase both output and amount in electricity to be generated, as well as to drastically solve issues in the existing facilities.

Areas and basins

To deploy our sustainable hydropower business under the understanding and cooperation by those who are living in the involving areas, we live together with them in the basins around our facilities and take efforts to create together new values.

People

With a fusion of the local employees' force (people) and digital technologies, we realize highly-advanced, highly-efficient maintenance services, as well as we create time and motivation for new challenges.

Sakuma power plant (present)

350MW

Approx. 1.4 billion kWh

4,156.5km

Total water storage capacity

326.85 million m³

Power supply to both 50 and 60 Hz areas

Shizuoka Tenryugawa river system

6. Ohma Nuclear Power Project

- In December 2014, J-POWER submitted to NRA* an application for permission for alteration of reactor installment license and an application for construction plan approval in order to undertake review of compliance with the new safety standards
- Standard seismic motion and standard tsunami is under review by NRA*
- Once the review has been passed, we will begin construction on facility safety reinforcement in the latter half of 2024 based on the review findings, with the aim of completion in the latter half of 2029
- Sincerely respond to compliance reviews and steadily implement safety measures based on the latest reviews result as for constantly pursuit of further safety improvements
- Strive for more polite information communication so that we can gain the understanding and trust of the community

* Nuclear Regulation Authority

Overview of the Project							
Location	Ohma-machi, Shimokita-gun, Aomori Prefecture						
Capacity	1,383MW						
Type of nuclear reactor	Advanced Boiling Water Reactor (ABWR)						
Fuel	Enriched uranium and uranium-plutonium mixed oxide (MOX)						
Commencement of operations	To be determined						
Process (Results)	Application for review of						
Construction commenced in May	Construction resumed in October standards in December						
(Year) 2008 > 2009 > 2	2010 $ angle$ 2011 $ angle$ 2012 $ angle$ 2013 $ angle$ 2014 $ angle$ 2015-						
Obtained permission to in nuclear reactor in Apri	Install Suspension of construction work due to Great East Japan Earthquake Disaster in March						

Status of construction (as of June 30, 2023)

7. Hydrogen production and use in existing thermal power plants GENESIS Matsushima

- First step toward CO₂-free hydrogen power generation by commercializing the technology demonstrated in Osaki CoolGen Project.
- Upcycling by adding a gasification system to the existing facility of Matsushima thermal power plant. Enabling production and generation of electricity from gas containing hydrogen
- Received notification of "GENESIS Matsushima Environmental Impact Assessment Methodology" from Minister of METI on February 24,

8. Establishment of joint venture for CCS in Japan

- J-POWER, ENEOS Corporation, and JX Nippon Oil & Gas Exploration Corporation are jointly working on the possibility of starting a CCS project to capture, transport, and store CO₂ from J-POWER's thermal power plants and ENEOS' refineries in western Japan by FY2030.
- In February 2023, the three companies have established "West Japan Carbon dioxide Storage Survey Co., Ltd. " to promote preparations for commercialization, including exploration and evaluation for the selection of candidate sites for CO² storage.
- In June 2023, the CCS project plan proposed by the above three companies was selected by JOGMEC as a candidate for the FY2023 "Study on Implementation of Japan's Advanced CCS Project".

Storage point

J-POWER and ENEOS Holdings are implementing the following initiatives

✓ Overview of	f joint venture for CCS in Japan 🛛 🗸 Power	D
Name	West Japan Carbon dioxide Storage Survey Co., Ltd.	
Established	Feb.2023	
Capital	150 million yen	
Location	Chiyoda ward, Tokyo	

✓ Overview of selected CCS project plan

Proposer	J-POWER, ENEOS Corporation, JX Nippon Oil & Gas Exploration Corporation
Emission Sources	J-POWER thermal power plants and ENEOS refineries in western Japan
Transport Method	Vessels and pipelines
Candidate sites for CO₂ storage	Off the northern to western in Kyushu (offshore saline aquifers)
Storage Volume	3 million tons/year
Feature of the project	Promoting a large-scale CO ₂ storage project in the sea for a wide area of western Japan, including the Setouchi Sea.

9. Feasibility Study for Large-scale CCS in Japan

- It will take nearly 10 years—from the investigation of candidate sites to the start of press-in (injection) and storage—for surveys, design, and construction.
- By starting as early as possible, we will contribute to CO_2 reduction in Japan from FY2030.
- To achieve an early resolution of our goals, we will coordinate and collaborate with all stakeholders to resolve issues, such as business environment improvement, CCS chain formation, and reducing costs.

10. Global Business Expansion by Leveraging Our Strengths

- The J-POWER group is expanding its overseas business based on and combining its unique strengths in (1)project development, (2) project promotion, and (3) portfolio management (profitability improvement and risk management)
- J-POWER group as a developer acquires wide knowledge and earns profits through development of Green-Field projects, steady progress of construction projects, and stable operation. As change of business situation, we revise our portfolio such as rebalancing investments for ensuring profitability and business sustainability.
- Based on valuable knowledge and revenue from our existing projects, J-POWER group continues development of new projects mainly renewable power project. Through these new projects, J-POWER continues global business expansion and contribution to achieve carbon neutrality.

11. Overview of Overseas Projects under Development (As of June 30, 2023)

Project	Overview
Refugio (USA) Capacity:400MW Type:Solar Ownership: 25% Status: Under development Start of operation (planned) : After 2023	 The joint project with AP Solar (local developer for solar power generation in Texas) Refugio is located close to Houston, a high power demand area Development issues such as procedures for land acquisition, permits have been largely resolved
Kidston Stage-3 Wind (Australia Capacity: 258MW Type: Onshore wind Ownership: 53.9%* Status: Under development Start of operation (planned) : 2026	 First renewable project in Australia for J-POWER J-POWER executes Joint Development Agreement with Genex Power Limited for New Wind Project in May 2022 Leveraging J-POWER's domestic and international wind energy expertise and Genex's renewable energy development capabilities in Australia
Bulli Creek (Australia) Capacity: 2,000MW (maximum) Type: Solar power and batteries Ownership: 53.9%* Status: Under development	 Plans to develop up to 2,000 MW of solar power and batteries in phases with Genex at Buli Creek site in southern Queensland Signed a Joint Development Agreement with Genex to acquire a 50% interest in the business

11. Overview of Overseas Projects under Development (As of June 30, 2023)

Project	Overview	
EGCO Cogen power plant replacement project (Thailand)	 J-POWER participated in a replacement project for the EGCO Cogeneration Company Limited ("EGCO Cogen") that is invested jointly with Electricity Generating Public Company Limited ("EGCO") 	
Type : Gas combined cycle Output : Electricity 74MW Ownership: 20% Schedule : Under construction Commercial operation (planned); January 2024	 J-POWER's first contribution to replacing a power plant in Thailand. Sells electricity and steam to Electricity Generating Authority of Thailand (EGAT) and neighboring industrial users By introducing the latest technology, energy utilization efficiency will improve. As well, greenhouse gas emissions will be reduced, helping to achieve low carbonization goals 	
Rooftop solar (7 projects, Thailand) Capacity: total 9.6MW Type: Solar Ownership: 60% Status: Under development and construction Start of operation: Each project will commence commercial operation after 2023	 Utilizing the business foundation formed by large-scale gas-fired development Work for decentralized power sources to accommodate growing requirements of customers for decarbonization Aiming to supply CO₂-free energy by installing solar photovoltaic systems on customers' factory roofs 	
Hydroelectric power generation projects on Mindanao (Philippines)	 J-POWER will acquire a portion of the shares of subsidiaries of Markham Resources Corporation (MRC), a power generation company in the Republic of the Philippines, in order to participate in hydroelectric power generation projects, on 	Philippines
Bulanog Batang Hydro Capacity: 33.5MW Type: Hydro (run-of-river system) Ownership: 40% Status: Under development Start of operation (planned) : 2029	 Mindanao Island, the Philippines. Mindanao has many undeveloped hydropower sites. The development of these sites is expected to help shift the island's electricity supply from fossil fuel-derived power sources, currently the major contributor, to carbon-free power sources. Both projects will play a role in this shift. Lake Mainit Hydro has started commercial operation on March 2023. 	Manila Cebu Lake Mainit Hydr 24.9MW Bulanog Batang Hydr 33.5MW
Biomass Business Development (Vietnam)	 J-POWER signed a memorandum of understanding (MoU) with Vietnam Forestry Corporation examine the development of the biomass business in Vietnam, including power genera J-POWER intends to enter and expand the biomass power generation business in Vietnam knowledge of the sustainable use of biomass fuels through a broad involvement in the sustainable set. 	oration (Vinafor) to jointly tion and fuel production nam and will strive to gain supply chain for biomass fuels

12. Contributing to the enhancement of power networks

- Pursue business opportunities that contribute to the augmentation of power networks to support massive introduction of renewable energy
- Promote efforts to strengthen resilience in light of the increasing severity of natural disasters

Transmission and transformation facilities

J-POWER Transmission owns and operates critical transmission and transformation facilities throughout Japan, including the cross-regional interconnection facilities that interconnect the grids of different electric power companies.

Construction of the New Sakuma Frequency Converter Station and others

J-POWER will steadily promote the replacement/expansion of the New Sakuma Frequency Converter Station and related transmission lines to meet consumers' expectations for enhancing the capability to interchange electric power between 50Hz in eastern Japan and 60Hz in western Japan. J-POWER will continue to pursue business opportunities contributing to strengthening power networks.

Today's most pressing issues also include the need to sophisticate maintenance due to overaging deterioration and strengthen resilience against intensifying natural disasters. J-POWER will continue to contribute to a stable power supply through these efforts.

Construction of the New Sakuma Frequency Converter Station and others

- New Sakuma Frequency Converter Station 300мw

- Sakuma East Trunk Line etc.

Approx. 141km

Start of construction in April 2022 Operation scheduled to start in FY2027

13. Actions Taken towards HVDC Transmission System

- Japanese government has announced "Master Plan" (reinforcement of the national grids) considering the future power development on March 29, 2023.
- Three assumed scenarios for demand based on changes in load factors such as EVs, heat pumps, and location of renewable energy demand were published.
- Suitable places for renewable power generation such as off-shore, on-shore, solar power generation are mainly located in Kyushu, Hokkaido, and Tohoku area. Because of this utilization of renewable power requires long-distance transmission of massive power to the point of consumption. Therefore, the introduction of HVDC transmission system, which has benefits from the viewpoint of cost, efficiency flexibility of the operation and stability of the grids, is being studied.

14. Investments for Transition

Investment result and forecast Investment Cash Flow Renewable energy. Renewable energy, Nuclear power, Nuclear power, Towards a carbon-neutral society, three initiaves in BLUE MISSION 2050 **Power network Power network, CCS** 36 % 49 % Renewable energy **Expansion of CO₂ free** FY2023 power sources FY2022 Nuclear power Forecast CO₂-free hydrogen power generation Push for zero-emission Approx. Approx. power sources 160.0bn yen 160.0bn yen CO₂-free hydrogen production **Electric power network** *The above figures are current estimates and may change depending on future conditions.

*The above graphs do not include the recovery of investments and loans in the investment CF.

Efforts for improvements in capital efficiency

We are working to improve capital efficiency by not only holding assets for the long term, but also replacing our business portfolio as appropriate, for example by selling assets and reinvesting in new projects using the proceeds from the sale. Furthermore, we have started studying of introducing Return on Invested Capital (ROIC) for improving capital efficiency.

Development and Operation→ Withdrawal

Three domestic thermal power projects (Ichihara, Shinkou and Itoigawa) etc.

✓ Withdrew through the transfer of assets to a third party, taking into account the age and competitiveness of the facilities.

15. J-POWER Group's Green/Transition Finance Framework

Potential Funding Objectives of Green/Transition Finance (Use of Proceeds instruments)

J-POWER"BLUE MISSION 2050"'s Initiatives		Potential Funding Objectives			
		Upcycling (adding gasifier to existing assets)			
CO ₂ -free	Hydrogen power generation	Upcycling (CO ₂ separation and capture units)			
Hydrogen energy		CO ₂ -free hydrogen Power generation facilities*			
	Fuel production (CO ₂ -free hydrogen)	CO ₂ -free hydrogen Power generation facilities*			
CO ₂ -free	Renewable energy	Hydro, wind, geothermal, solar*			
power generation	Nuclear power	The Ohma Nuclear Power Plant			
	Stabilization	Distributed energy service*			
Power network	Enhancoment	Frequency Converter Station, etc.			
	Enhancement	Network for renewable energy			
		Gradual phasing out of aging plants			
Domestic coal-fired power plants		Power generation facilities for mixed / mono combustion with biomass, ammonia, etc.			

*Potential Funding Objectives of Green Finance % The use of funds is defined on a case-by-case basis, undecided at this time.

15. J-POWER Group's Green/Transition Finance Framework

Possible candidates for Sustainability Targets of Transition Finance (General Corporate Purpose instruments)

KPI: Key Performance Indicator	SPT: Sustainability Performance Target
CO ₂ emissions reduction from J-POWER Group's domestic power generation business	 FY2025: -9.2million tons (Compared to the actual emissions in FY2013) FY2030: -46%/-22.5 million tons (Compared to the actual emissions in FY2013)

*SPT (Either or both 1. and 2.) and Various conditions, including changes in interest rate terms based on achievement of goals are determined on individual occasions *Assessed for eligibility to various green finance, transition finance, and sustainability-linked finance standards by DNV BUSINESS ASSURANCE JAPAN K.K. as third-party evaluator

Examples of Transition-Linked Loan Financing				
Borrowing Amount	30 billion yen			
Borrowing period	5 years			
Borrowing date	February 28, 2023			
Lender	Domestic financial institutions (syndicated loans)			
Third-party evaluator	DNV BUSINESS ASSURANCE JAPAN K.K.			

Consolidated: Revenues and Expenses

					(Unit:	100 million yen)
	FY2019	FY2020	FY2021	FY2022	FY2022 1Q	FY2023 1Q
Operating revenue	9,137	9,091	10,846	18,419	3,233	2,813
Electric utility operating revenue	6,841	7,313	8,764	14,179	2,372	1,776
Overseas business operating revenue	1,790	1,380	1,451	2,775	585	736
Other business operating revenue	505	397	630	1,464	276	300
Operating expenses	8,301	8,313	9,976	16,580	3,038	2,548
Operating profit	836	777	869	1,838	195	265
Non-operating income	265	112	225	247	86	96
Share of profit of entities accounted for using equity method	113	27	142	91	34	27
Foreign exchange gains	74	6	-	-	29	31
Other	77	77	82	156	22	38
Non-operating expenses	320	280	366	378	66	87
Interest expenses	262	237	224	273	57	75
Foreign exchange losses	-	-	75	11	-	-
Other	57	43	66	93	9	12
Ordinary profit	780	609	728	1,707	214	274
Extraordinary income	-	94	-	-	-	-
Extraordinary losses	124	57	-	-	-	-
Profit attributable to owners of parent	422	223	696	1,136	130	176

Non-consolidated: Operating Revenues & Expenses

					(Unit:	100 million yen)
	FY2019	FY2020	FY2021	FY2022	FY2022 1Q	FY2023 1Q
Operating revenue	5,712	5,899	7,900	13,707	2,280	1,639
Electric power business	5,638	5,838	7,810	13,533	2,212	1,624
Sold power to retailers	-	-	6	11	2	1
Sold power to other suppliers	5,104	5,660	7,672	13,373	2,172	1,591
Other [*]	533	177	132	149	37	30
Incidental business	74	61	89	173	67	15
Operating expenses	5,464	5,120	7,721	13,241	2,313	1,659
Electric power business	5,397	5,065	7,637	13,075	2,249	1,645
Personnel expense	358	318	201	206	52	61
Amortization of the actuarial difference in retirement benefits	24	28	(70)	(75)	(18)	(9)
Fuel cost	2,332	1,937	2,985	7,621	1,028	788
Repair and maintenance cost	666	441	515	419	110	53
Depreciation	527	552	559	589	145	146
Other	1,512	1,814	3,375	4,238	911	596
Incidental business	66	55	84	166	64	14
Operating profit	248	778	178	465	(33)	(20)

* "Other" shows transmission revenue and other electricity revenue. Due to the split of transmission business in April, 2020, "Other" for FY2020 shows only other electricity revenue

Consolidated: Segment Information

							(L	Init: 100 million yen)
		FY2019	FY2020	FY2021	FY2022	FY2022 1Q	FY2023 1Q	YoY
Electric power	Sales	6,860	7,334	8,788	14,202	2,377	1,782	(595)
	Ordinary profit	274	190	266	545	24	36	11
Electric nower-related	Sales	4,005	3,741	2,439	3,217	540	559	19
	Ordinary profit	185	122	258	928	113	168	55
Oversees	Sales	1,790	1,380	1,451	2,775	585	736	151
Uvel seas	Ordinary profit	339	308	220	226	92	70	(22)
Other	Sales	221	184	210	293	92	36	(55)
	Ordinary profit	5	10	12	18	4	1	(3)
Subtotal	Sales	12,878	12,641	12,889	20,489	3,595	3,115	(479)
Subtotal	Ordinary profit	805	633	757	1,719	234	277	42
Elimination*	Sales	(3,740)	(3,550)	(2,043)	(2,069)	(361)	(301)	60
	Ordinary profit	(24)	(24)	(29)	(11)	(19)	(2)	17
Concollidated	Sales	9,137	9,091	10,846	18,419	3,233	2,813	(419)
Consonualeu	Ordinary profit	780	609	728	1,707	214	274	59

"Electric Power Business"

Mainly J-POWER group's electric power generation business and transmission/ transformation business. The majority of consolidated revenue is derived from this segment.

"Electric Power-Related business"

These focus on peripheral business essential for the operation of power plants and transmission facilities, such as designing, executing, inspecting and maintaining power facilities and importing and transporting coal. Intra-group transactions account for a large portion of this segment, such as Company's power plant maintenance, coal transportation activities.

"Overseas business"

Overseas power generation business, overseas engineering and consulting business

"Other business"

Diversified business such as telecommunication, environmental and the sale of coal

* Elimination includes elimination of intersegment sales

Consolidated: Cash Flow

	FY2019	FY2020	FY2021	FY2022	FY2022 1Q	FY2023 1Q
Operating activities	1,592	1,679	1,283	1,558	(755)	365
Profit before income taxes	655	646	728	1,707	214	274
Depreciation	830	964	969	1,076	252	261
Share of (profit) loss of entities accounted for using equity method	(113)	(27)	(142)	(91)	(34)	(27)
Investing activities	(1,617)	(1,432)	(1,788)	(1,508)	(313)	(103)
Purchase of non-current assets	(1,495)	(1,592)	(1,352)	(1,448)	(245)	(186)
Investments and loan advances	(109)	(25)	(497)	(78)	(10)	(2)
Free cash flow	(24)	246	(504)	49	(1,069)	261

Consolidated: Key Ratios and Key Data

	-					(Unit:	100 million yen)
		FY2019	FY2020	FY2021	FY2022	FY2022 1Q	FY2023 1Q
(PL)	Operating revenue	9,137	9,091	10,846	18,419	3,233	2,813
	Operating profit	836	777	869	1,838	195	265
	Ordinary profit	780	609	728	1,707	214	274
	Profit attributable to owners of parent	422	223	696	1,136	130	176
(BS)	Total assets	28,053	28,419	30,661	33,626	32,652	33,936
	Construction in progress	6,471	5,882	6,765	5,721	6,897	5,632
	Shareholders' equity	8,077	8,091	9,160	10,846	9,735	10,985
	Net assets	8,573	8,536	9,641	11,927	10,287	12,067
	Interest-bearing debt	16,484	16,646	17,864	18,858	19,059	19,033
(CF)	Investing activities	(1,617)	(1,432)	(1,788)	(1,508)	(313)	(103)
	Free cash flow	(24)	246	(504)	49	(1,069)	261
	(Ref) CAPEX* ¹	(1,626)	(1,715)	(1,321)	(1,218)	(242)	(131)
	(Ref) Depreciation	830	964	969	1,076	252	261
ROA	(%)	2.8	2.2	2.5	5.3	-	-
ROA	(ROA excl. Construction in progress) (%)	3.6	2.8	3.1	6.6	-	-
ROE	(%)	5.3	2.8	8.1	11.4	-	-
EPS	(¥)	230.96	121.85	380.70	621.50	71.22	96.31
BPS	(¥)	4,412.84	4,420.39	5,004.31	5,931.68	5,318.28	6,007.64
Shareholders' equity ratio (%)		28.8	28.5	29.9	32.3	29.8	32.4
D/E r	atio (x)	2.0	2.1	2.0	1.7	2.0	1.7
Numb	per of shares issued ^{*2} (thousand)	183,048	183,048	183,048	182,861	183,048	182,865

*1 Capital expenditure: Increase in tangible and intangible non-current assets

*2 Number of shares issued at the end of the fiscal year (excluding treasury stock)

Monthly Electricity Sales: Domestic Power Generation Business (Thermal Power)

* Load factor of thermal power shows the results for non-consolidated only.

* Proportion of equity holding is not taken into account.

Monthly Electricity Sales: Domestic Power Generation Business (Hydroelectric Power)

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Monthly Electricity Sales: Domestic Power Generation Business (Wind Power)

- ▶ Apr. 2022 Jun. 2022 Results (cumulative) \Rightarrow 0.23 TWh
- ▶ Apr. 2023 Jun. 2023 Results (cumulative) \Rightarrow 0.26 TWh

^{*} Proportion of equity holding is not taken into account.

Change in Monthly Electricity Sales: Domestic Power Generation Business

- ▶ Apr. 2022 Jun. 2022 Total Results (cumulative) \Rightarrow 14.0 TWh
- ► Apr. 2023 Jun. 2023 Total Results (cumulative) ⇒ 11.3 TWh

* Total volume includes electricity sales volume of hydro, thermal, wind and electricity procured from wholesale electricity market, etc.

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