SECOND PARTY OPINION

J-POWER GROUP
GREEN/TRANSITION FINANCE FRAMEWORK

Prepared by: DNV Business Assurance Japan K.K.

Location: Kobe, Japan

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Revision History

Revision Number	Date of Issue	Major changes
0	17 November 2022	First Edition
1	13 July 2023	• Reassessment of SPT ambition in the context of framework amendments due to raised domestic CO_2 emission reduction targets for 2030 • Reassessment of eligibility to reflect/update additional requirements due to the update of the SLLP and GLP in February 2023

Disclaimer

Our assessment relies on the premise that the data and information provided by the fundraiser to us as part of our review procedures have been provided in good faith. Because of the selected nature (sampling) and other inherent limitations of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organisation were applied as per scope of work. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Statement.

Statement of Competence and Independence

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct during the assessment and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of statements or data included in the Framework except for this Statement. DNV maintains complete impartiality towards the stakeholders interviewed during the assessment process.

Executive Summary

The J-POWER Group consists of Electric Power Development Co., Ltd. (hereinafter referred to as "J-POWER"), 72 subsidiaries and 107 affiliated companies (as of the end of March 2023) and is engaged in "Electric Power Business", "Electric Power-Related Business", "Overseas Business" and "Other Business". Having formulated the Green Bond Framework in December 2020, J-Power issued its first Green Bond in January 2021, which was the fourth Green Bond certified under the Climate Bond Initiative in Japan, and its second and third Green Bond in January and November 2022. J-POWER revised the Green Bond Framework and established the "J-POWER Group Green/Transition Finance Framework" (hereinafter referred to as "Framework") in response to further exploration of the carbon neutral strategy in the J-POWER Group and the development of various systems and policies related to transition finance. J-POWER also raised proceeds through the "Transition-Linked Loan" in February 2023, and revised the Framework by raising CO_2 emission reduction targets in May 2023.

In pursuing these initiatives, J-POWER has set ambitious goals as its medium- and long-term management goals (environmental targets) and upheld J-POWER "BLUE MISSION 2050" and aims to achieve carbon neutrality and a hydrogen society. J-POWER plans to allocate the proceeds from green/transition finance for the initiatives aimed at realizing these goals.

J-POWER has established the Framework for implementing green/transition finance in a manner that conforms to established international frameworks.

The Framework is structured as a comprehensive framework that incorporates the elements necessary to execute the following type of financing:

- Green Finance (Green bonds and loans)
- Transition Finance (Use of Proceeds/ General Corporate Purpose transition bonds and loans)

DNV Business Assurance Japan K.K. (hereinafter referred to as "DNV"), as an external reviewer, evaluated the eligibility of the Framework.

Specifically, DNV provided the eligibility assessment for the Framework by applying the frameworks (such as principles and guidelines) including the following:

- Climate Transition Finance Handbook (CTFH), International Capital Market Association (ICMA), 2020
- Basic Guidelines on Climate Transition Finance (CTFBG), Financial Services Agency, Ministry of Economy, Trade and Industry, Ministry of the Environment, 2021
- Green Bond Principles (GBP), International Capital Market Association (ICMA), 2021
- Green Bond Guidelines (GBGLs), Ministry of the Environment, 2022
- Green Loan Principles (GLP), Loan Market Association (LMA, et al)., 2023
- Green Loan Guidelines (GLGLs), Ministry of the Environment, 2022
- Sustainability-Linked Bond Principles (SLBP), International Capital Market Association (ICMA), 2020
- Sustainability Linked Bond Guidelines (SLBGLs), Ministry of the Environment, 2022
- Sustainability-Linked Loan Principles (SLLP), Loan Market Association (LMA) and others, 2023
- Sustainability Linked Loan Guidelines (SLLGLs), Ministry of the Environment, 2022

The following is a summary of the assessment results for each common element indicated in the above frameworks.

<CTF Eligibility Assessment Results>

DNV has confirmed the followings based on the documents and information provided by J-POWER. CTF-1 through CTF-4 below are the findings and DNV's opinions against the four common elements (disclosure elements) of the CTFH and CTFBG.

CTF-1. Fundraiser's Climate Transition Strategy and Governance:

The Fundraiser updated the transition strategy in May 2023, increased the target value and reviewed the pathway. This is aligned with the goals set forth in "The Sixth Strategic Energy Plan" and the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy. J-POWER plans to review the planned transition strategy in accordance with changes in social trends and the business environment. In terms of governance and disclosure related to the implementation of the Transition Finance, J-POWER has established an internal structure and information disclosure process based on TCFD*[1]. These are disclosed in the Framework and other documents and meet the disclosure element of CTF-1.

*1: Task Force on Climate-related Financial Disclosures

CTF-2. Business Model Environmental Materiality:

J-POWER has identified 5 issues as materiality in its business model. The materiality that is the most relevant to this Transition Finance is "response to climate change" and J-POWER has set the task to close the gap with the current situation in order to achieve the J-POWER "BLUE MISSION 2050". In J-POWER's transition strategy, the J-POWER Group's management strategy and ESG (Environment, Social, and Governance) initiatives are inseparable. In the J-POWER "BLUE MISSION 2050" and "Action Plan", specific initiatives are presented and the contribution to the SDGs, which will be discussed later, is also taken into consideration. These are disclosed in the Framework and other documents and meet the disclosure element of CTF-2.

CTF-3. Climate Transition Strategy to be 'Science-based' including Targets and Pathways:

J-POWER's transition strategy has been formulated based on science-based goals and pathways. Specifically, the medium- to long-term goals for Scope 1 of its domestic power generation business are measured by indicators and quantified while the process of achieving those goals is clarified based on the targets set forth in "The Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy and the targets and pathways set forth in the "Transition Roadmap for Power Sector " as described in CTF-1. These are disclosed in the Framework and other documents or this Second Party Opinion and meet the disclosure element of CTF-3.

CTF-4. Implementation Transparency:

J-Power has presented the basic investment plan including the amount to be invested to implement the transition strategy and outlined the results and impact of the implementation. J-POWER has announced that it will invest approximately 700 billion yen in renewable energy development, etc. in FY2023–2030. These are disclosed in the Framework and other documents or this Second Party Opinion and meet the disclosure element of CTF-4.

<GBP/GLP Eligibility Assessment Results>

DNV confirmed the following based on the materials and information provided by J-POWER. GBP/GLP-1 through GBP/GLP-4 described below are the findings and DNV's opinions against the four common elements of GBP/GLP (including *GBGLs/GLGLs).

GBP/GLP-1. Use of Proceeds:

J-POWER defines the eligibility criteria for the use of proceeds as projects that directly or indirectly contribute to the realisation of transition strategy and goals ("Green/Transition Projects"). Specifically, the eligibility criteria are presented together with the action plan items identified and classified in Table-1. The proceeds will be allocated to financing or refinancing these projects for capital expenditures, operating and administrative expenses, equity investments, R&D related expenses, demolition expenses or other related expenditures. DNV has confirmed that these transition projects are aligned with the elements of CTF-1 to 4. These projects have been evaluated by J-POWER as having clear and positive environmental impacts in line with the transition strategy and are expected to contribute directly and indirectly to the SDGs. These processes are consistent with GBP/GLP-1.

Table 1: J-POWER Green/Transition Finance Eligibility Criteria

Action Plan Items		Eligibility Criteria	Green*1	Transition*2	Relevant SDGs
CO_2 free hydrogen energy	Hydrogen power generation	Upcycling (adding gasifiers to existing facilities)		○	
		Upcycling (adding CO_2 separation and capture equipment to existing facilities)		○	
		CO_2 Free Hydrogen Generation Facilities	○	○	
	Fuel production (CO_2 free hydrogen)	CO_2 Free Hydrogen Production Facilities	○	○	
CO_2 free power generation	Renewable energy	Hydro, wind, geothermal and solar power	○	○	
	Nuclear power	Ohma Nuclear Power Plant		○	
Power network	Stabilisation	Distributed Energy Services	○	○	
	Enhancement	Expansion of facilities such as frequency converter stations		○	
		Network enhancement to accommodate renewable energy		○	
Domestic coal-fired thermal power		Shutdown and decommission of deteriorated/aged thermal power plants		○	
		Facilities for mixed/dedicated combustion for biomass and ammonia		○	

*1 Projects that have been identified as eligible as green projects can be incorporated as green projects when implementing green finance in the future. Green projects are also allowed in the CTFBG to be incorporated as part of transition finance implementation.

*2 Some of the projects currently classified as transition projects may become green projects by the application of technological innovations in the future (e.g. application of green fuel/manufacturing process and achievement of CO_2 emission standards that meets the criteria for green projects). The eligibility criteria with ○ for both green and transition are classified as either or both depending on the individual project.

GBP/GLP-2. Process for Project Evaluation and Selection:

J-POWER confirms that the projects meet the GBP/GLP-1 eligibility criteria and the standards required for the Green/Transition Projects and have clear environmental benefits. In addition, J-POWER confirms that the potential negative environmental/social impacts are appropriately taken into consideration and that the procedures such as certification of facilities/equipment, licensing, and environmental assessment in the regions where the projects are to be implemented are appropriate. Specifically, the department that oversees each business selects candidate projects based on the eligibility criteria described in the previous section, and then the Finance Department confirms that the candidates meet the eligibility criteria and makes a decision. These processes are consistent with GBP/GLP-2.

GBP/GLP-3. Management of Proceeds:

As for the entire amount of proceeds, the Finance Department will manage the balance of allocated and unallocated proceeds by using the J-POWER's internal system and forms such as the proceeds management table, and the fund management code assigned to each project. The total amount of eligible projects will be managed using an accounting system or the proceeds management table to ensure that the total amount does not fall below the Green/Transition Finance proceeds. The proceeds will be managed in cash or cash equivalents in an amount equal to the unallocated proceeds until the proceeds will be fully allocated.

GBP/GLP-4. Reporting:

J-POWER will report the allocation of the proceeds in its Integrated Report, on its website, or to the lenders (in the case of loans) until the proceeds will be fully allocated. This includes the allocated amount, the balance of unallocated proceeds, and the approximate amount (or the share) of the proceeds allocated for refinancing. In addition, the outline and the environmental benefits of the projects to which the proceeds have been allocated will be disclosed within the scope of confidentiality obligations and to the extent reasonably practicable. Any major changes in transition strategy, pathways, allocation plan or performance will be reported.

<SLBP/SLLP Eligibility Assessment Results>

Based on the documents and information provided by J-POWER, DNV has confirmed the following. SLBP/SLLP-1 through SLBP/SLLP-5 described below are the findings and DNV's opinions against the five elements of SLBP/SLLP (*including SLBGLs/SLLGLs).

SLBP/SLLP-1. Selection of Key Performance Indicators (KPIs):

One KPI (reduction of CO_2 emissions (domestic power generation business)) related to environmental sustainability (transition) set by J-POWER shown in Table-2 is an important indicator in a comprehensive transition strategy for the J-POWER "BLUE MISSION 2050" set forth by J-POWER as an energy company. The selection of KPIs has gone through a rational process, and KPIs are considered to be clearly defined, measurable and verifiable, and have robustness and reliability in accordance with SLBP/SLLP.

SLBP/SLLP-2. Calibration of Sustainability Performance Targets (SPTs):

J-POWER's SPTs (CO_2 emission reduction amount (domestic power generation business)/ CO_2 emission reduction rate (domestic power generation business)) shown in Table-2 are meaningful for J-POWER's sustainability (transition) and business strategy required as an energy company, closely relevant, and show significant improvements according to the pre-set timeline. The SPTs shown in Table-2 consist of two items: reduction of CO_2 emissions (domestic power generation business) and CO_2 emission reduction rate (domestic power generation business). Each SPT has been set based on the benchmarks of J-POWER's most recent performance level and the GHG emission reduction target for FY2030 set forth by the Agency for Natural Resources and Energy. Regarding the ambitiousness of each SPT, DNV has confirmed that J-POWER's substantive contribution to reducing CO_2 emissions is consistent with the ambitious target of 46% set forth in "The Sixth Strategic Energy Plan" and confirmed that the contribution to future CO_2 reduction will exceed "Business as Usual" and is consistent with the ambitious national target. Through the review, DNV has confirmed that J-POWER's plan is feasible for the achievement of the SPT in FY2025/FY2030. The following SPTs are not set for each year due to the fact that the amount of electricity generated by power supply and demand conditions cause fluctuations in the amount of electricity generated by power supply and demand, and that initiatives need to be implemented with due consideration from the perspective of ensuring electricity supply capacity.

SLBP/SLLP-3. Finance characteristics:

The financial characteristics of the Transition-Linked Finance based on the Framework will be impacted by the performance of the KPIs defined by the SPT. This impact is due to the fact that the bond or loan is linked to changes in bond issuance rates, loan interest rates, or other financial incentives (for example, donations to organisations that conduct activities closely related to the set KPI). DNV has confirmed that these will be stipulated in formal documents related to the bond or loan at each financing execution by a specific trigger event (SPT achievement status) within a defined period/due date based on the Framework. Changes in the characteristics of the bond/loan may be foregone if there are reasonable grounds for a temporary non-achievement of the SPT due to transient changes in domestic electricity supply capacity.

SLBP/SLLP-4. Reporting:

The reporting is planned to include the information required in the SLBP/SLLP and the Framework stipulates that the reporting is to be made publicly available or disclosed to the lenders (in the case of loans) at an appropriate frequency.

SLBP/SLLP-5. Verification:

J-POWER intends to have the data relating to the KPIs independently verified annually by an external evaluation agency.

Table-2: J-POWER Transition-Linked Finance KPIs and SPTs

(One or more of the following KPIs and SPTs are selected for specific transition-linked finance).

KPIs	SPTs
KPI 1: CO_2 emissions Reduction (J-POWER Group domestic power generation business)	SPT1: Reduction of 9.2 million tons in FY2025 (compared to the performance for FY2013)
	SPT2: 46%*/22.5 million tons reduction in FY2030 (compared to the performance for FY2013)
Description of KPIs	**Description of SPTs**
The KPIs are set with items that are closely related to J-POWER's Medium-Term Management Plan. KPI 1: Reduction of CO_2 emissions This is a core KPI for J-POWER's "Expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero emissions of power sources" and "Power network" on the supply side and it is quantifiable and continuously measurable based on the GHG Protocol.	Each SPT refers to the target figures in the roadmap, and the figures are linked to the transition strategy of J-POWER. SPT1: CO_2 emission reduction amount SPT2: CO_2 emission reduction amount and CO_2 emission reduction rate The substantive contribution to CO_2 emission reduction is consistent with the ambitious target of 46% set forth in "The Sixth Strategic Energy Plan" and it can be evaluated that its future contribution to CO_2 emission reduction will exceed "Business as Usual" and that it is consistent with the ambitious national target. The SPT trigger events may be set by linear interpolation between the actual emission for the base year of FY2013 and targets by FY2025 and/or FY2030, or may be set individually when future detailed plans are drawn up.

Based on the assessment of the Framework and other relevant documents and information provided by J-POWER, DNV has confirmed that the Framework established by J-POWER meets the standards required by the relevant frameworks, namely, CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs, SLBP/SLBGLs, and SLLP/SLLGLs and thus is eligible as transition finance.

I. Introduction

i. About the Fundraiser

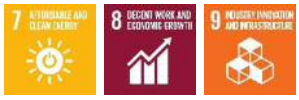
The J-POWER Group consists of Electric Power Development Co., Ltd. (hereinafter referred to as "J-POWER"), 72 subsidiaries and 107 affiliated companies (as of the end of March 2023). The J-POWER Group engages in "Electric Power Business", "Electric Power-Related Business", "Overseas Business", and "Other Business".

ii. Fundraiser's Initiatives for ESG/SDGs

Under a Corporate Philosophy of "We will meet people's needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world," the J-POWER Group has worked to improve its corporate value by contributing to the achievement of an affluent society through its business activities. In July 2021, The J-POWER Group identified five issues as materiality among social issues of importance to the J-POWER Group, taking into consideration the factors including the interests of its stakeholders, their relevance to its corporate philosophy, and their impact on its business. The J-POWER Group also aims to contribute to the achievement of the SDGs through their internal penetration, integration into its business strategies, the formulation of goals and KPIs for each issue, and initiatives to address them.

Among these, the materiality primarily relevant to the Green/Transition Finance is "response to climate change".

Figure-1 Materiality for increasing corporate value and the SDGs to which they contribute

Materiality	Initiatives	Contribution to the SDGs
Supply of energy	■ Stable operation of electric facilities ■ Preparation for/and response to natural disasters ■ Strengthening of cyber security	
Response to climate change	■ **Reduction of greenhouse gases (GHG)** ■ **Development of renewable energy** ■ **Pursuit of the possibility of CO_2-free hydrogen** ■ **Steady promotion of the Ohma Nuclear Power Plant Project, with safety as a major prerequisite**	
Respect for people	■ Respect for human rights ■ Human resources development ■ Assurance of occupational health and safety ■ Promotion of diversity	
Engagement with local communities	■ Preservation of the local environment ■ Creation of relationships of trust with local communities	
Enhancement of our business foundation	■ Enforcement of corporate governance ■ Enforcement of compliance ■ Strengthening of our profit and financial bases	

iii. Fundraiser's Environmental Initiatives

J-POWER has set ambitious medium- to long-term management goals (environmental goals) for the J-POWER Group and has been working to promote low-carbon power sources and electrification by utilising renewable energy and nuclear power in order to realise a low-carbon and sustainable society. In addition, in February 2021, J-POWER formulated the J-POWER "BLUE MISSION 2050" and declared its commitment to the challenge of achieving carbon neutrality.

Furthermore, in April 2021, J-POWER formulated the "Action Plan" which incorporates specific action plans within the "J-POWER Medium-Term Management Plan for FY2021-FY2023" in order to increase corporate value while tackling the challenge of transitioning to carbon neutrality by 2050. J-POWER also raised CO_2 emission reduction targets in May 2023.

In line with these plans, the J-POWER Group will strive to increase its corporate value by taking on multifaceted challenges to transition to carbon neutrality, especially toward de-carbonisation of energy supply.

Table-2: J-POWER's Participation in External Initiatives and Efforts

External Initiatives	J-POWER's Efforts Initiatives
Task Force on Climate-related Financial Disclosures (TCFD)	The J-POWER Group endorsed the TCFD in May 2019 and has been working to contribute to the sustainable development of Japan and the world through strengthening its ESG-related initiatives, aiming at harmonising energy supply and environment.
United Nations Global Compact (UNGC)	The J-POWER Group signed the UNGC in April 2021 and has been working to contribute to the sustainable development of Japan and the world through clearly stating its corporate stance on ESG and strengthening its initiatives.
Sustainable Development Goals (SDGs)	J-POWER identified materiality as key management issues in July 2021, clarified their relevance to the SDGs and has been working to realise its management vision.
Challenge Zero	"Challenge Zero" is an initiative launched by Keidanren in cooperation with the Japanese government to realise a "decarbonised society", the goal of the Paris Agreement. Participating companies and organisations declare their commitment to innovation challenges toward the decarbonised society, as well as concrete actions they intend to take. The followings are the five innovation challenges J-Power registered. ・ Realisation of next-generation thermal power generation (oxygen-blown IGCC) suitable for CO_2 capture ・ Development of the ultimate next-generation thermal power generation (oxygen-blown IGFC) ・ Production of CO_2-free hydrogen by brown coal gasification ・ Development of carbon recycling fuel/chemical production technology using marine microalgae ・ Development of coal ash weight block material with blue carbon promoting effect

GX League	"GX League" is an industry-government-academia system formed by the Ministry of Economy, Trade and Industry (METI) to take on the challenge of quickly transitioning to a carbon-neutral society from the perspective of creating a virtuous cycle between the economy and the environment, with a view to achieving carbon neutrality by 2050. J-POWER officially joined the "GX League" in time for its full-scale operation in 2023.

iv. About the Green/Transition Finance Framework

In pursuing the J-POWER "BLUE MISSION 2050" and the "Action Plan", J-POWER has set targets for CO_2 emission reduction in alignment with its contribution to the greenhouse gas emission reduction targets set forth in "The Sixth Strategic Energy Plan" and the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy.

J-POWER intends to procure the funds necessary for achieving the CO_2 emission reduction targets and for conducting transition activities through the Green/Transition Finance and aims to expand the foundation of the Green/Transition Finance while enhancing the ability to disseminate its strategy by expanding the link with finance.

J-POWER has established the J-POWER Group Green/Transition Finance Framework (hereinafter referred to as "Framework") to ensure that the Green/Transition Finance is carried out in conformity with the established international frameworks. The criteria to which this Framework specifically referred are listed in Section II, (3) below.

v. Fundraiser's Transition Strategy for Decarbonisation

(1) Strategies by Sector (Industry) at the International/National/Regional Level

Figure-2 shows the scenario for decarbonisation in the electric power sector as set forth in the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy.

"The Sixth Strategic Energy Plan" formulated in October 2021 and the "Transition Roadmap for Power Sector" formulated in February 2022 by the Agency for Natural Resources and Energy consist of initiatives to achieve carbon neutrality by 2050 and efforts to be made by 2030 in anticipation of the achievement by 2050. In the electric power sector, the main pillar of the plan and the roadmap is the emission reduction utilizing various technologies, including the following: expansion of non-fossil energy introduction through electrification and hydrogenation in light of decarbonisation on the supply side; initiatives to make renewable energy the main power source; optimal use of nuclear and thermal power generation; and reinforcement and sophistication of the power transmission and distribution network.

The plan and the roadmap have set a target by FY2030 to reduce greenhouse gas emissions by 46% compared to FY2013 as an indicator corresponding to the short- to medium-term goals based on "The Sixth Strategic Energy Plan" shown in Figure-3. As an even more ambitious target, they set a target of 50% reduction (compared to FY 2013).

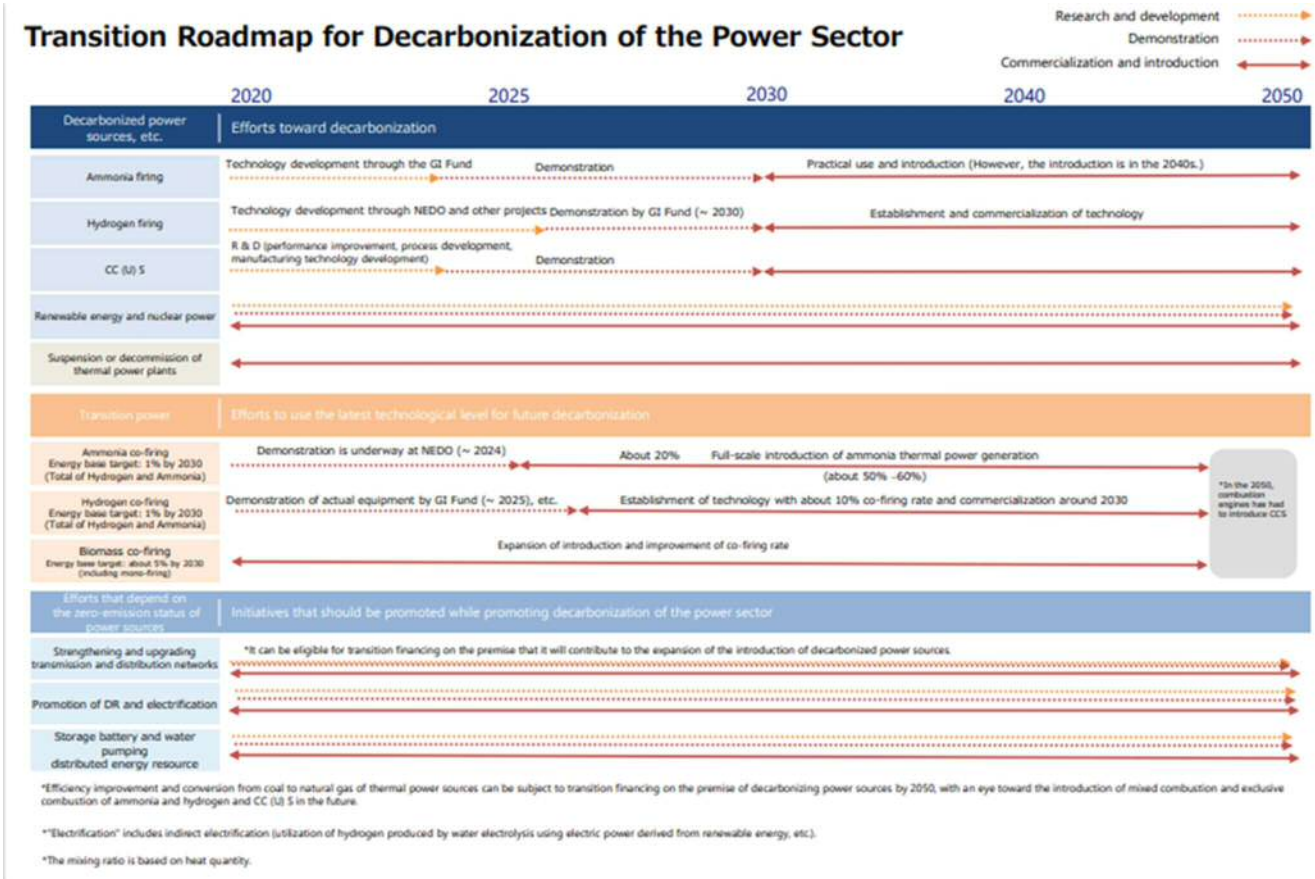


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Figure-2: Transition Roadmap for Decarbonizing Power Sector

(Transition Roadmap for Power Sector, Agency for Natural Resources and Energy, February 2022)
In addition, they have set a goal of achieving carbon neutrality by 2050 as an indicator corresponding to the long-term goal. J-POWER aims to simultaneously ensure the stable supply of energy as its mission and appropriate responses to climate change issues based on the reduction targets and policies necessary for Japan to achieve carbon neutrality by 2050 and the targets of the Paris Agreement.

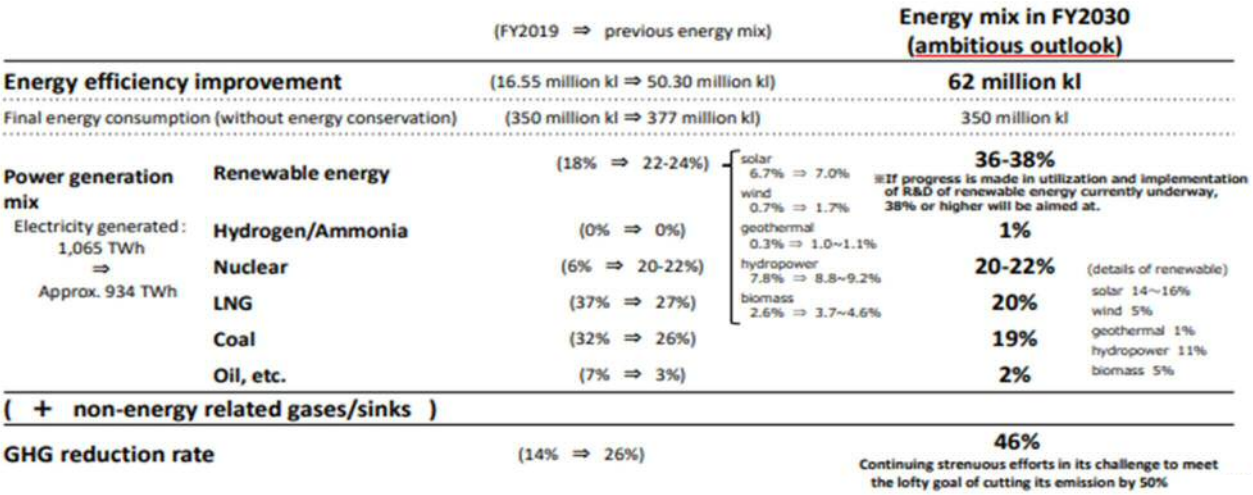

Figure-3: The Sixth Strategic Energy Plan,
Point (1) of Outlook for Energy Supply and Demand in FY2030
(Transition Roadmap for Power Sector, Agency for Natural Resources and Energy, February 2022)

(2) Fundraiser's Transition Strategy

J-POWER positions the following activities as "transition strategy": activities that contribute to the greenhouse gas emission reduction targets that are aligned with "The Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy; and activities to realise the J-POWER "BLUE MISSION 2050" formulated by J-POWER.

J-POWER revised its transition strategy in May 2023. Table-3 shows J-POWER's long-term and medium-term goals and Figure-4 shows the J-POWER "BLUE MISSION 2050" Roadmap. J-Power's targets for reducing Scope 1 emissions from its domestic power generation business which emits the largest amount of CO_2 in the J-POWER group are as follows: net zero emissions by 2050; a reduction of 46% (compared to the actual emissions for FY2013) or a reduction of 22.5 million tons by FY2030; and a reduction of 9.2 million tons by FY2025. J-POWER is working to achieve these targets as shown in Figure-4. These domestic reductions have been confirmed to be aligned with the greenhouse gas emission reduction set forth in "The Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy. In addition, regarding renewable energy, J-POWER is steadily working towards carbon neutrality, setting a target of a development of 1,500 MW or more new renewable energy capacity globally and an increase of 300 million kWh/year in hydroelectric power generation (both compared to FY2017) by FY2025.

It is clearly stated that this roadmap will be updated and detailed as needed based on government policy conditions and the progress of industry development on which it is predicated, and that the contents will be reviewed as prerequisites change. J-POWER has confirmed its corporate intention to consider changing its initiatives to an even more ambitious ones towards the global net zero emissions by 2050.

J-POWER has also presented the investment plan for "expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero-emission power sources", and "power network", all of which are set forth to realise the J-POWER “BLUE MISSION 2050”. (Table-5: Investment Plan to Achieve the Roadmap)

Table-3: Long-term and medium-term goals based on the Roadmap

Item	Target value
J-POWER Group domestic power generation business CO_2 emissions	Target for FY2025: Reduction of 9.2 million tons* Target for FY2030: Reduction of 46%/22.5 million tons* *Compared to FY2013 Target for 2050: Net zero emissions
Renewable energy (hydro, wind, geothermal, solar)	Target for FY2025: - New development of 1,500 MW or more globally (compared to FY2017) - Increase in hydroelectric power generation by 300 million kWh/year (compared to FY2017)

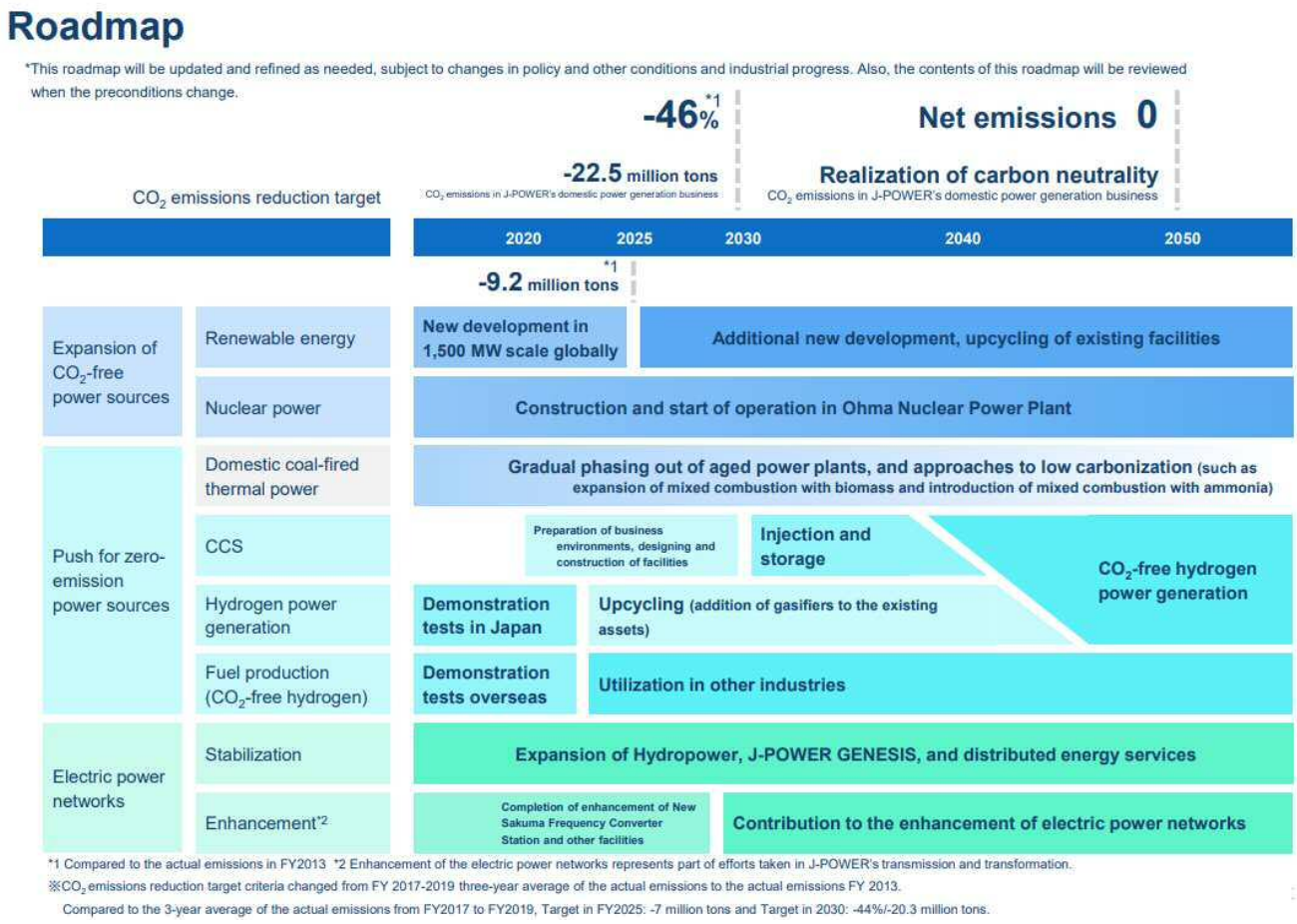

Figure-4: J-POWER "BLUE MISSION 2050" Roadmap

Table-4: J-POWER Group Greenhouse Gas Emissions (Scope 1-3)

Item	FY 2019	FY2020	FY2021
Scope1	53.97 million t-CO_2	53.58 million t-CO_2	47.95 million t-CO_2
Scope2	0.11 million t-CO_2	0.13 million t-CO_2	0.14 million t-CO_2
Scope3	22.22 million t-CO_2	15.27 million t-CO_2	13.60 million t-CO_2
Total	76.31 million t-CO_2	68.98 million t-CO_2	61.68 million t-CO_2

The data show emissions by J-POWER and its domestic and overseas consolidated subsidiaries, reported in the J-POWER Integrated Report 2022 Supplementary Material <Environment> (taking into account of the investment ratio).

Table-5: Investment Plan to Achieve the Roadmap

Roadmap Items	investment plan
Expansion of CO_2-free power sources	-New development of renewable energy (1,500 MW) -Construction and start of operation of nuclear power sources (Ohma Nuclear Power Station (1.38 million kW))
Zero-emission power sources	-Domestic coal-fired thermal power (phase-out of deteriorated/aged power plants and shift to low carbon (mixed combustion with biomass and mixed combustion with ammonia) -Upcycling for Hydrogen Power Generation (GENESIS Matsushima) -Production of hydrogen fuel (with demonstration tests overseas)
Power network	-Stabilisation (Hydroelectric power generation with excellent output adjustment capabilities, hydrogen power generation through coal gasification, and distributed energy services) -Enhancements (construction of new Sakuma Frequency Converter Station and reinforcement/reconstruction of related transmission lines)

(3) Fundraiser's Governance (Structure for Environmental Initiatives)

J-POWER has established sustainability promotion structures led by the President and Chief Executive Officer (ESG Oversight) in order to ensure the realisation of the J-POWER "BLUE MISSION 2050" and tackle overall ESG (Environmental, Social and Governance) issues. Furthermore, to promote sustainability including environmental initiatives, J-POWER has established the meeting bodies called "Sustainability Promotion Board" and the group-wide "J-POWER Group Sustainability Promotion Conference".

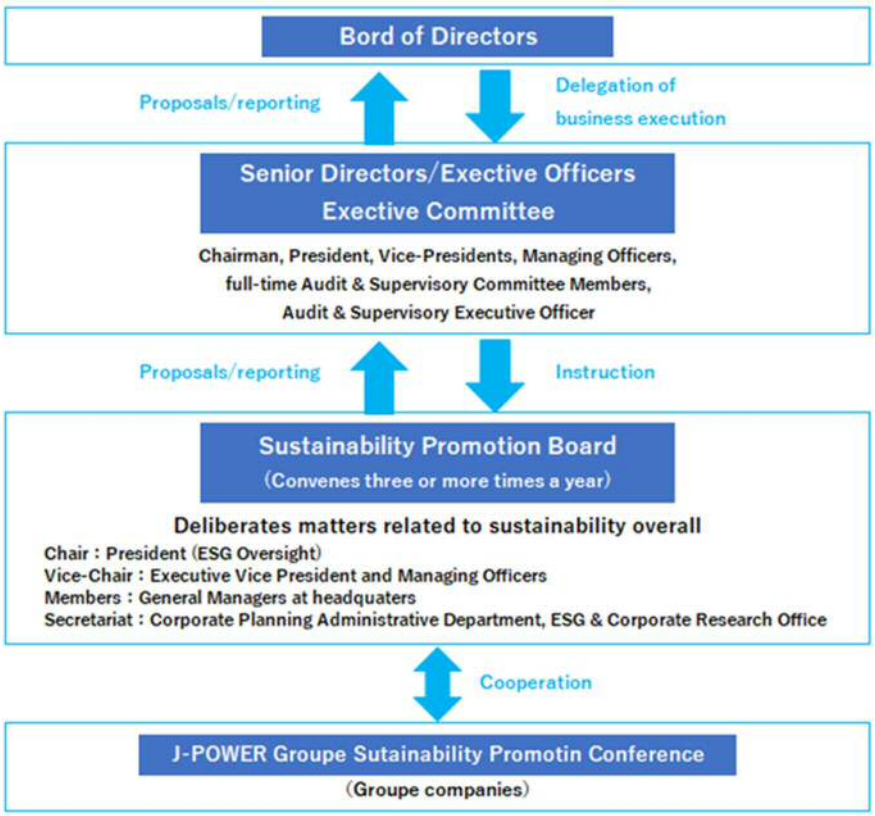

Figure-5: Sustainability Promotion Structures

In addition, J-POWER revised J-POWER Group Environmental Basic Policy in August 2021 and clearly state that it will work on realising carbon neutrality.

Figure-6: J-POWER Group Environmental Basic Policy

Name of Fundraiser: The Electric Power Development Co., Ltd. ("J-POWER")

Framework Name: J-POWER Group Green/Transition Finance Framework

Name of External Reviewer: DNV Business Assurance Japan K.K.

Date of Report: 13 July 2023

II. Scope and Objectives

DNV has been commissioned by J-POWER to provide a pre-funding assessment of the Framework. The objective of the pre-funding assessment by DNV is to implement an assessment on whether J-Power's initiatives meet the criteria established in CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs, SLBP･SLBGLs, and SLLP/SLLGLs described below and provide a Second Party Opinion on the eligibility of the Framework.

DNV, as an independent external reviewer, has identified no real or perceived conflicts of interest associated with the delivery of this Second Party Opinion for J-POWER.

In this report, no assurance is provided regarding the financial performance of, the value of any investments in, or the long-term environmental benefits of, J-POWER's Green/Transition Finance.

Green Finance and Use of Proceeds Transition Finance Instruments

*Although the following items are based on GBP, they may be replaced with the loan-specific items as appropriate.

(1) Scope of Review*

The review assessed the following elements and confirmed their alignment with the gist of the four core elements of GBP/GLP:

☒	Use of Proceeds	☒	Process for Project Evaluation and Selection
☒	Management of Proceeds	☒	Reporting

＊The scope of the review is applied as the evaluation of Use of Proceeds transition finance instruments.
＊The four disclosure elements of CTFH and CTFBG are also included in the scope of the review.

(2) Role(s) of Review Provider (Use of Proceeds Transition Finance)

☒	Second Party Opinion	☐	Certification
☐	Verification	☐	Rating
☐	Other:		

General Corporate Purpose Transition Finance Instruments

*Although the following items are based on SLBP, they may be replaced with the loan-specific items as appropriate.

(1) Structure of Bonds at the Time of Issue

☒	A step-up structure	☒	A variable redemption structure

*Any of the above or other structures set individually based on the fundraiser's internal processes at the time of financing execution.

(2) Scope of Review*

The review assessed the following elements and confirmed their alignment with the gist of the five core elements of the SLBP/SLLP.

☒	Assessed all the following elements (complete review)	☐	Assessed some elements only (partial review)
☒	Selection of KPIs	☒	Bond characteristics
☒	Calibration of SPTs	☒	Reporting
☒	Verification		
☒	In addition, confirmed their alignment with the SLBP		

*The scope of the review is applied as the evaluation of General Corporate Purpose transition finance instruments.

*The four disclosure elements of CTFH and CTFBG are also included in the scope of the review.

(3)Role of the Review Provider

☒	Second Party Opinion	☐	Certification
☐	Verification	☐	Rating

Standards/Guidelines Applied

No.	Standards/Guidelines	Scheme Owner
1.	Climate Transition Finance Handbook (CTFH)*1	International Capital Market Association (ICMA), 2020
2.	Basic Guidelines on Climate Transition Finance (CTFBG)*1	Financial Services Agency, Ministry of Economy, Trade and Industry, Ministry of the Environment, 2021
3.	Green Bond Principles (GBP)*2 3	International Capital Market Association (ICMA), 2021
4.	Green Bond Guidelines (GBGLs)*2 3	Ministry of the Environment, 2022
5.	Green Loan Principles (GLP)*2 3	Loan Market Association (LMA) et al., 2023
6.	Green Loan Guidelines (GLGLs)*2 3	Ministry of the Environment, 2022
7.	Sustainability-Linked Bond Principles (SLBP)*4	International Capital Markets Association (ICMA), 2020
8.	Sustainability Linked Bond Guidelines (SLBGLs)*4	Ministry of the Environment, 2022
9.	Sustainability-Linked Loan Principles (SLLP)*4	Loan Market Association (LMA) and others, 2023
10.	Sustainability Linked Loan Guidelines (SLLGLs) *4	Ministry of the Environment, 2022

*1 Climate transition: The concept of climate transition focuses principally on the credibility of an fundraiser's climate change-related commitments and practices. (Quote from CTFH and CTFBG)

*2 Applied to confirm that the Transition Finance is consistent with the four core elements (i.e., Use of proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting) that should be met when executing Use of Proceeds bonds or loans that meet the four elements of transition. (Edited quote from CTFBG)

*3 Regarding green projects, DNV conducted the eligibility assessment by using the technical standards that can be referenced among the Climate Bonds Standards established by the Climate Bond Initiative.

*4 Sustainability-Linked loan: Sustainability-linked loans are any types of loan instruments and/or contingent facilities (such as bonding lines, guarantee lines or letters of credit) which incentivise the borrower's achievement of ambitious, predetermined sustainability performance objectives. (Quoted from SLLP. *The evaluation for SLBP is conducted based on a similar definition.

III. Responsibilities of J-POWER and DNV

J-POWER has provided the information and data used by DNV during the delivery of this review. DNV's Second Party Opinion represents an independent opinion and is intended to inform J-POWER and the stakeholders of the Transition Finance whether the established criteria have been met based on the information provided to us. In our work, we have relied on the information and the facts provided to us by J-POWER. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by J-POWER's management used as a basis for this assessment were not correct or complete.

IV. Basis of DNV's Opinion

To provide a protocol as flexible as possible for the Fundraiser, DNV has developed the Green/Transition Finance Eligibility Assessment Protocol (hereinafter referred to as "Protocol") which incorporates the requirements of CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs, SLBP/SLBGLs, and SLLP/SLLGLs. Please refer to Schedules 2 and below. This Protocol is applicable to green/transition finance and transition-linked finance based on CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs, SLBP/SLBGLs, and SLLP/SLLGLs.

DNV provides the Second Party Opinion according to the Protocol as an independent external reviewer.

Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principles behind green/transition finance and transition-linked finance which form the basis for the opinion are as follows:

- "Enable capital-raising and investment for new or existing projects with environmental benefits"
- "Provide the investment opportunities necessary for climate transition finance to be executed with transparency and credibility."
- "Through KPIs and SPTs, encourage the achievement of the fundraiser's ESG (regarding climate transition) that are material (for climate transition), quantifiable, predetermined, ambitious, regularly monitored and externally verifiable."

According to DNV's Protocol, the criteria against which this Green/Transition Finance and Transition-Linked Finance has been reviewed are grouped into common elements below, as set forth in CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs, SLBP/SLBGLs, and SLLP/SLLGLs.

(1) Four Common Elements of CTFH and CTFBG (Disclosure Elements)

Principle One: Fundraiser's Climate Transition Strategy and Governance

The financing purpose should be for enabling the fundraiser's climate change strategy.

Principle Two: Business Model Environmental Materiality

The planned climate transition trajectory should be relevant to the environmentally-material parts of the fundraiser's business model.

Principle Three: Climate Transition Strategy to be 'Science-based' including Targets and Pathways

Fundraiser's climate strategy should reference science-based targets and transition pathways.

Principle Four: Implementation Transparency

Market communication in connection with the offer of a financing instrument which has the aim of funding the fundraiser's climate transition strategy should also provide transparency of the underlying investment program.

(2) Four Common Elements of GBP/GBGLs and GLP/GLGLS

Principle One: Use of Proceeds

The Use of Proceeds criteria are defined by the requirement that the fundraiser raising funds through green finance and transition finance in the format of Use of Proceeds instruments should use the proceeds from green/transition finance for eligible projects. The eligible projects are those that provide clear environmental benefits.

Principle Two: Process for Project Evaluation and Selection

The Project Evaluation and Selection criteria are defined by the requirements that the fundraiser raising funds through green/transition finance should outline (1) the process it follows when determining the eligibility of an investment for which the proceeds from green/transition finance will be used and (2) how it takes into consideration the impact the project will make on its objectives.

Principle Three: Management of Proceeds

The Management of Proceeds criteria are defined by the requirements that the fundraiser should (1) track the green/transition finance, (2) develop separate portfolios if necessary, and (3) announce how unallocated funds will be managed.

Principle Four: Reporting

The Reporting criteria are defined by the recommendation that the fundraiser should report to the bond investors or loan lenders at least on how the proceeds have been allocated and provide a sustainability report using qualitative and appropriate performance indicators and, where feasible, quantitative performance measures.

(3) Five Elements of SLBP/SLBGLs and SLLP/SLLGLs*1

＊ “Sustainability” may be replaced with “transition” as necessary.

Principle One: Selection of Key Performance Indicator (KPIs)

The fundraiser of a sustainability-linked finance should clearly communicate (to lenders) its overarching sustainability objectives as set forth in its sustainability strategy and how these relate to its proposed SPTs. The KPI should be reliable, material to the fundraiser’s core sustainability and business strategy, address relevant ESG challenges of the industry sector, and be under management control.

Principle Two: Calibration of Sustainability Performance Targets (SPTs)

The SPTs should be ambitious, meaningful and realistic. SPTs should be set in good faith and based on sustainability improvements in relation to a predetermined performance target benchmark.

Principle Three: Financial Characteristics

The finance should include a financial and/or structural characteristics of selected KPI(s) depending on whether the selected KPIs reach (or not) the predefined SPT(s). The finance documentation is required to include the definitions of the KPI(s) and SPT(s) and the potential variation of the SLB’s and SLL’s financial and/or structural characteristics. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner, should be explained.

Principle Four: Reporting

Fundraisers should publish and keep readily available and easily accessible up to date information on the performance of the selected KPI(s), as well as a verification assurance report (see Principle 5) outlining the performance against the SPTs and the related impact and timing of such impact on the loan’s financial and/or structural characteristics. Such information should be disclosed to investors or lenders at least annually during their participation in financing.

Principle Five: Verification

Fundraisers should seek independent and external verification of their performance level against each SPT by a qualified external reviewer with relevant expertise at least once a year. The verification of the performance against the SPTs should be made publicly available.

*1: The Sustainability-Linked Finance DNV Assessment Protocol consists of five requirements set under SLBP (2020)/SLLP (2023) and includes SLBGLs/SLLGLs.

V. Work Undertaken

Our work constitutes a comprehensive review of the available information, based on the understanding that the information was provided to us by J-POWER in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

i. Pre-funding Assessment (Green/Transition Finance Framework)

- Creation of the J-POWER-specific assessment protocol for the purpose of application to J-POWER Green/Transition Finance with respect to the above and Schedules 2 and below, which contribute to this assessment.
- Assessment of documentary evidence provided by J-POWER on the Green/Transition Finance and supplemental assessment by a comprehensive desktop research. These checks refer to the latest best practices in assessments as well as standard methodologies.
- Discussions with J-POWER and reviews of relevant documentation.
- Documentation of findings against each element of the criteria.

ii. Post-funding Assessment (**not included in this report*)

- Interviews with the management of J-POWER and evaluation (or verification) of the relevant document control.
- On-site visits and inspections (if necessary).
- Documentation of post-funding assessment results.

VI. Findings and DNV's Opinion

The summary of DNV's findings and opinion are as described in (1) to (3) below.

CTF-1 through 4 under (1) are the findings and DNV's opinions against the disclosure elements of CTFH/CTFBG applied to the Green/Transition Finance. See Schedule-3 for details.

GBP/GLP-1 through 4 under (2) are the findings and DNV's opinions against the four common elements of GBP/GBGLs and GLP/GLGLs. Please see Schedule-4 details.

SLBP/SLLP-1 through 5 under (3) are the findings and DNV's opinions against the requirements of SLBP/SLBGLs and SLLP/SLLGLs regarding Sustainability (Transition)-Linked Finance[*1] applied in sustainable finance. Please see Schedule-5 for details.

*1: A Bond or Loan with potential variation of financial and/or structural characteristics that is linked to the achievement status of future transition goals.

(1) Findings and DNV's Opinions against the Four Common Elements (Disclosure Elements) of CTFH/CTFBG

CTF-1. Fundraiser's Climate Transition Strategy and Governance

- In February 2021, J-POWER formulated the J-POWER "BLUE MISSION 2050". The J-POWER Group's management strategy and ESG (environment, social, and governance) initiatives are inseparable, and the strategies presented in the "J-POWER Medium-Term Management Plan for FY 2021- FY2023" and the "Action Plan" are both linked to ESG. In addition, the J-POWER "BLUE MISSION 2050" Roadmap shows the medium- to long-term goals by FY2030 and by 2050 as well as the transition strategy and pathways/trajectories. J-POWER revised its transition strategy in May 2023, raised the target value and reviewed the pathway.
- DNV has reviewed and confirmed that the science-based goals quantified by J-POWER are aligned with the goals of the Paris Agreement[*2] with respect to their scope (Scope 1 for domestic power generation business).

  *2: The FY2030 target set by J-POWER (46%/22.5 million tons reduction, compared to FY2013) is a reduction rate that is consistent with the WB2°C (Well Below 2°C) target of the Paris Agreement as well as the Sixth Strategic Energy Plan.
- J-Power's transition strategy incorporates the results obtained from the TCFD scenario analysis and the reduction targets and policies necessary to achieve Japan's 2050 carbon neutrality and the goals of the Paris Agreement.
- J-POWER has established a system and structure to promote the transition strategy at the management level.
- J-POWER has made it clear that it will contribute to ESG and SDGs while minimizing the negative impact (negative external effects) on society through its business activities.

- Based on the assessment of the Framework, the J-POWER "BLUE MISSION 2050" and the "Action Plan", DNV confirmed that they are well aligned with J-POWER's transition strategy. DNV confirmed that the implementation plan based on the transition strategy is credible, ambitious, and achievable.

CTF-2. Business Model Environmental Materiality (Level of Importance)

- While J-POWER's initiatives for transition aim only to reduce emissions from its own operations (Scope 1), they also include activities that contribute directly and indirectly to Scope 2 and Scope 3 reductions. These are important initiatives in Japan's various decarbonisation plans and strategies and contribute to the realisation of carbon neutrality on both the supply and demand sides. In other words, J-POWER's initiatives for transition will directly support the transition of the whole society, including J-POWER itself, as an energy company taking on the challenge to achieve carbon neutrality by 2050.
- J-POWER's roadmap has reached a level that is consistent with "The Sixth Strategic Energy Plan" and the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy in terms of domestic initiatives. Their specific action plans and goals are set and quantified in absolute terms that they must enable optimal solutions and further improvements.
- DNV confirmed that J-POWER's plan to implement its transition strategy is closely linked to the activities of its core businesses and to the activities that contribute to the reduction of CO_2 in the whole society, thus contributing to the overall environment and supporting J-POWER to advance its businesses. J-POWER's planned transition strategy and transition pathways are associated with the issues that J-POWER has identified as materiality by utilizing standards such as ISO26000 and the GRI standards[*3] and will contribute to a significant environmental benefit (impact) from both qualitative and quantitative perspectives.

*3: An international standard providing ESG-related reporting, management and analysis methods established by Global Reporting Initiative.

CTF-3. Climate Transition Strategy to be Science-based including Targets and Pathways

- For Scope 1 which relates to the domestic power generation business that emits the largest amount of CO_2 in the J-POWER group, J-POWER has set a science-based transition plan that aligns with the Paris Agreement and a transition trajectory that aligns with the goals of the Agency for Natural Resources and Energy.

- DNV confirmed that J-POWER's transition strategy was quantified as an absolute value or the share based on a consistent measurement method based on prescribed assumptions.
- DNV confirmed that J-POWER's transition strategy was established with medium-term goals (FY2030) and long-term goals (2050), which are aligned with the goals of the Agency for Natural Resources and Energy, as milestones.

Item	Target value
J-POWER Group domestic power generation business CO_2 emissions	Target for FY2025: Reduction of 9.2 million tons* Target for FY2030: Reduction of 46%/22.5 million tons* *Compared to FY2013 Target for 2050: Net zero emissions
Renewable energy (hydro, wind, geothermal, solar)	Target for FY2025: New development of 1,500 MW or more globally (compared to FY2017) and increase in hydroelectric power generation by 300 million kWh/year (compared to FY2017)

CTF-4. Implementation Transparency

- DNV confirmed that the investment and deployment plans related to J-POWER's transition strategy include consensus on future investments and expenditures. As a specific example, DNV confirmed that J-POWER has developed an investment plan for the four years (FY2022-FY2025) for the eleven green/transition eligibility criteria, including candidate projects for which the proceeds are to be used. J-POWER has announced that it will invest approximately 700 billion yen in FY2023-FY2030 in renewable energy development, etc. DNV confirmed that J-POWER plans to consider disclosing the overall investment plan (investment amount) to the extent practicable, from the perspective of ensuring transparency.
- DNV also reviewed the Framework as well as the J-POWER "BLUE MISSION 2050" and confirmed high transparency in their implementation. In addition, DNV received an explanation from J-POWER on the validity of their implementation and confirmed that there is a consensus for implementation.

(2) Findings and DNV's opinions against the Four Common Elements of GBP/GBGLs and GLP/GLGLs

*The four elements are the criteria for green finance and transition finance in the format of Use of Proceeds instruments and the term Green Bonds in some parts below can be read as transition finance instruments (bonds and loans).

GBP/GLP-1. Use of Proceeds

J-POWER has defined the eligibility criteria for the use of proceeds as green/transition projects which are consistent with the transition strategy and meet the requirements of the related frameworks (CTFH/CTFBG, GBP/GBGLs and GLP/GLGLs).

Table-6 shows the eligibility criteria categories for the Transition Finance.

Table-6: J-POWER Green/Transition Finance Eligibility Criteria

Action Plan Items		Eligibility Criteria	Green*1	Transition*2
CO_2 free hydrogen energy	Hydrogen power generation	Upcycling (adding gasifiers to existing facilities)		○
		Upcycling (adding CO_2 separation and capture equipment to existing facilities)		○
		CO_2 Free Hydrogen Generation Facilities	○	○
	Fuel production (CO_2 free hydrogen)	CO_2 Free Hydrogen Production Facilities	○	○
CO_2 free power generation	Renewable energy	Hydro, wind, geothermal and solar power	○	○
	Nuclear power*	Ohma Nuclear Power Plant		○
Power network	Stabilisation	Distributed Energy Services	○	○
	Enhancement	Expansion of facilities such as frequency converter stations		○
		Network enhancement to accommodate renewable energy		○
Domestic coal-fired thermal power		Shutdown and decommission of deteriorated/aged thermal power plants		○
		Facilities for mixed/dedicated combustion for biomass and ammonia		○

*1 Projects that have been identified as eligible as green projects can be incorporated as green projects when implementing green finance in the future. Green projects are also allowed in the CTFBG to be incorporated as part of transition finance implementation.

*2 Some of the projects currently classified as transition projects may become green projects by the application of technological innovations in the future (e.g. application of green fuel/manufacturing process and achievement of CO_2 emission standards that meets the criteria for green projects). The eligibility criteria with ○ for both green and transition are classified as either or both depending on the individual project.

DNV has confirmed that J-POWER plans to allocate all the net proceeds from the Green/Transition Finance to finance new expenditures or refinancing existing expenditures such as capital expenditures, operating and administrative expenses, equity investments, R&D related expenses, demolition expenses or other related expenditures of eligible green/transition projects which are consistent with J-POWER's investment plan for implementation of its transition strategy.

These are projects that directly or indirectly support projects that would result in significant greenhouse gas reductions as exemplified by CTFH/CTFBG, GBP/GBGLs, and GLP/GLGLs, projects that aims to achieve carbon neutrality that contribute to business transformation, and projects that align with the “Transition Roadmap for Power Sector” by the Agency for Natural Resources and Energy and contribute to achieving its goals. These projects are expected to contribute to the SDGs because they have been evaluated as meeting the criteria required for green/transition projects and as having a clear environmental benefit that contributes to the transition strategy. These processes are consistent with GBP/GLP-1.

GBP/GLP-2. Process for Project Evaluation and Selection

J-POWER confirms that its green/transition projects are projects which meet the criteria required for a green/transition project and contribute to the achievement of its transition strategy. In addition, J-POWER confirms that it will work on the items shown below to reduce the environmental and social risks identified in advance in the Framework. (Please see <Reduction of Environmental and Social Risks> below.) Specifically, it is confirmed that the projects are evaluated and selected by the Finance Department and the relevant departments of the Fundraiser through the appropriate prescribed process.

These processes have been established in internal documents of J-POWER and DNV has confirmed that the plan will be implemented in accordance with the appropriate processes.

DNV also confirmed that the green/transition projects implemented by J-POWER are consistent with “Response to climate change” which is one of the Fundraiser’s materiality and "Addressing Climate Change" in the Environmental Basic Policy of the J-POWER Group, and that they are aligned with the transition strategy, goals, and pathways as well.

<Reduction of Environmental and Social Risks>

<Environmental Impact Assessment>
J-POWER will conduct an environmental impact assessment (environmental assessment) prior to the new construction or expansion of power plants in accordance with relevant laws and regulations. J-POWER will take appropriate environmental conservation measures based on the opinions of local residents, continue monitoring after the start of plant operation in accordance with the agreements, such as environmental conservation agreements, entered into with related local governments, and will confirm the effectiveness of the environmental conservation measures it has taken.

<Preservation of Aquatic Environments>
"Preservation of aquatic environments" has been designated as one of J-POWER Group Environmental Targets. At each business site, J-POWER works to preserve aquatic environments based on the specific regional environments by undertaking environmental preservation measures for surrounding rivers and seas and by conducting drills assuming incidents such as oil leaks. In addition, near hydroelectric power stations, J-POWER takes measures concerning water quality and the accumulation of silt in dam lakes and downstream areas, while near thermal power stations, J-POWER manages effluent emitted into nearby seas in accordance with applicable laws and regulations.

＜Preservation of Biodiversity>
At the planning and design stages of power generation facilities, based on the findings of the environmental impact assessment, J-POWER will take environmental preservation measures in consideration of the impact on the habitat and growth environment and ecosystems of animals and plants in the surrounding area. In addition, at its power plants that are in operation, J-POWER will work on the preservation of habitats of animals and plants including rare species that inhabit and grow in the surrounding area.

Evaluation and Selection

- ☒ The project is consistent with the Fundraiser's achievement of environmental contribution goals
- ☒ The project is eligible for the use of proceeds from green finance and the transparency is ensured.
- ☒ The project is evaluated and selected based on the gist of published standard summary (green projects for which referenceable criteria exist)
- ☒ The project is evaluated and selected based on a documented process showing that the project fit into the defined eligibility categories
- ☒ The project is evaluated and selected based on a documented process showing that potential ESG risks associated with project implementation are identified and managed.
- ☐ Other (Please specify):

Information and Responsibilities and Accountability

- ☒ Evaluation/selection criteria based on external advice or verification
- ☐ Other (please specify):
- ☒ Internal assessment

GBP/GLP-3. Management of Proceeds

DNV confirmed how J-POWER will track and manage proceeds during the period from bond issuance to redemption. With respect to the proceeds from the Green/Transition Finance, based on J-POWER's internal control procedures, the Finance Department will manage the expenditure for eligible projects and track the allocated and unallocated amounts of the proceeds by using the fund management code assigned to each project using the internal system and forms such as the proceeds management table. The total amount of eligible projects will be managed so that it does not fall below the proceeds from the Green/Transition Finance. Unallocated proceeds, if any, will be managed in cash or cash equivalents.

Tracking and Management of Proceeds:

- ☒ Some or all the proceeds from green finance that are planned to be allocated are systematically distinguished or tracked by the Fundraiser.
- ☐ The type and schedule of temporary investment of unallocated proceeds are disclosed.
- ☒ Other (please specify): Unallocated proceeds are managed in cash or cash equivalents.

Additional Disclosure Information:

- ☐ Allocation to new investments only
- ☒ Allocation to both existing and new investments
- ☒ Allocation to individual (project) disbursements
- ☐ Allocation to a portfolio of disbursements
- ☐ Disclosure of portfolio balance of unallocated proceeds
- ☐ Other (please specify):

GBP/GLP-4. Reporting

Within the scope of confidentiality obligations and so far as is reasonably practicable, DNV confirmed that J-POWER plans to disclose annually in its Integrated Report, on its website, or disclose to the lenders (in the case of loans) about the allocation status of the proceeds and the details of environmental benefits set forth by J-POWER until the full amount of the proceeds from the Green/Transition Finance is allocated. In addition, DNV confirmed that J-POWER plans to disclose any material changes in the allocation status or impacts in its Integrated Report or on its website or disclose to the lenders (in the case of loans) until the completion of the redemption or repayment.

<Reporting on Allocation Status>

- Amount of allocated proceeds
- Balance of unallocated proceeds
- Approximate amount (or the share) of the proceeds allocated to refinancing

<Environmental Benefits: Impact Reporting>

- Project outline and its progress
- Amount of CO_2 emission reduction (t-CO_2 /y) (t/year)

*Any or all the indicators above will be disclosed.

*The amount of CO_2 emission reduction is calculated by multiplying the theoretical value of the amount of electric power generated through eligible projects (installed capacity x 24 hours x 365 days x estimated facility utilisation rate) by the CO_2 emissions factors published by Japan Electric Power Exchange.

Reporting on Allocation Status

☐ On a project-by-project basis
☒ On a project portfolio basis
☐ On an individual related bond basis
☐ Other (please specify):

Information Reported:

☒ Amount of allocated proceeds
☐ Share of total investment amount allocated by proceeds from Green Finance
☐ Other (please specify):

Frequency:

☒ Annual
☐ Semi-annual
☐ Other (please specify):

Impact Reporting (Environmental Benefits):

☐ On a project-by-project basis
☒ On a project portfolio basis
☐ On an individual related bond basis
☐ Other (please specify):

Frequency:

☒ Annual
☐ Semi-annual
☐ Other (please specify):

Information Reported (Expected/Post-funding Impact):

☒ GHG emissions/reduction
☐ Energy reduction
☒ Other ESG evaluation items (please specify): Project outline, project progress

Means of Disclosure

☒ Included in the financial report (integrated report)
☐ Included in the sustainability report
☐ Included in the extraordinary report
☒ Other (specify): disclosed on website
☐ Included in the reviewed report (please specify the report items subject to external review).

(3) Findings and DNV's Opinion against Five Requirements[*1]

*1 : including SLBGLs/SLLGLs

SLBP/SLLP-1 Selection of Key Performance Indicators (KPIs)

- DNV reviewed J-POWER's KPIs related to sustainability and confirmed that the selected KPIs are material and relevant to J-POWER's core transition strategy and sustainability management.
- One KPI (Reduction of CO_2 emissions (domestic power generation business)) for environmental sustainability (transition) set by J-POWER shown in the "Table-2: KPIs and SPTs for J-POWER's Transition-Linked Finance" is an important indicator in the overarching transition (sustainability) strategy towards J-POWER "BLUE MISSION 2050" set forth by J-POWER as an energy company.
- An important KPI for J-POWER is the reduction of CO_2 emissions towards the J-POWER "BLUE MISSION 2050". As approximately 80% of GHG emissions are Scope 1 emissions, it is appropriate enough for J-POWER to choose reduction of CO_2 emission in domestic power generation business as a KPI. This is positioned as a core KPI for "expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero-emission power sources" and "power network" as set forth in the J-POWER "BLUE MISSION 2050".
- DNV confirmed that the KPI selected by J-POWER are consistent with "The Sixth Strategic Energy Plan" and the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy, and that the KPIs are appropriately set as comparable indicators.
- From the perspective of business strategies of J-POWER as an energy company, J-POWER works on to address the KPIs closely related to "expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero-emission power sources" and "power network" set forth in J-POWER "BLUE MISSION 2050" towards realisation of carbon neutrality. DNV believes that such initiatives will contribute to J-POWER's aim to "improve corporate value by taking on the challenge of transitioning based on various approaches to achieve carbon neutrality aiming at the decarbonisation of the energy supply". In addition, DNV believes that the KPIs will contribute to the realisation of the J-POWER "BLUE MISSION 2050" and simultaneous pursuit of goals related to sustainability management and J-POWER's business strategies.
- DNV concludes that the reduction of CO_2 emissions as a KPI is measurable based on a consistent methodology (GHG Protocol), externally verifiable and can be benchmarked against external references. DNV concludes that supply chain GHG emissions are a robust and reliable indicator.
- The Sixth Strategic Energy Plan formulated by the Agency for Natural Resources and Energy states that domestic GHG emissions shall be reduced by 46% by FY2030 compared to the base year of FY 2013 towards achieving

carbon neutrality by 2050. These GHG emission reduction targets can be used as external references to assess the ambition of J-POWER because, the substantive contribution to reducing CO_2 emissions is consistent with the ambitious target of 46% set forth in "The Sixth Strategic Energy Plan".

- DNV confirmed that the KPI selected by J-POWER provide a clear scope of assessment and calculation methodology. Please see Schedule-2 for details.

List of Selected KPIs

List of Selected KPIs

✓ KPI1 : Reduction of CO_2 emissions(domestic power generation business)

Definition, Scope and Parameters

☒	Clear definition of each selected KPI	☒	Clear calculation methodology
☐	Other (Please specify):		

Relevance, Robustness and Reliability of the Selected KPIs

☒	Demonstrated that the selected KPIs are relevant, core and material to the fundraiser's sustainability and business strategy	☒	Evidence that the KPIs are externally verifiable
☒	Demonstrated that KPIs are measurable or quantifiable on a consistent methodological basis	☒	Evidence that the KPIs can be benchmarked
		☐	Other (Please specify):

SLBP/SLLP-2 Calibration of Sustainability Performance Targets (SPTs)

- DNV confirmed that the substantive contribution of J-POWER to the reduction of CO_2 emissions is consistent with the ambitious target of 46% set in "The Sixth Strategic Energy Plan", based on the perspective that the SPTs shown in Table-2 support the reduction of CO_2 emissions set in "Expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero emissions of power sources" and "Power network" set forth in J-POWER "Blue MISSION 2050". DNV also confirmed that there is a more concrete plan internally and these SPTs are ambitious, realistic and meaningful. In addition, DNV confirmed that the achievement of SPTs is consistent with J-POWER's initiatives towards the realisation of carbon neutrality.
- Based on the J-POWER "BLUE MISSION 2050" and information provided by J-POWER to DNV, DNV has concluded that the SPTs are realistic, the plan is feasible, and the SPT targets outlined in the Framework are likely to be met.
- Regarding the targets set by J-POWER to reduce CO_2 emissions (domestic power generation business) by 9.2 million tons by FY2025 (SPT1) and by 46%/22.5 million tons by FY2030 (SPT2) compared to the actual emission for FY2013, the substantive contribution to reducing CO_2 emissions is consistent with the ambitious target of 46% set in "The Sixth Strategic Energy Plan".
- DNV confirmed that the SPTs set by J-Power are linked to the improvement of KPIs. J-POWER's efforts to achieve KPIs/SPTs are expected to be the driving force behind the implementation of J-POWER's the transition (sustainability) strategy.
- DNV confirmed that the process to set the SPTs is based on an appropriate combination of benchmarking approaches.
    - The Framework provides the process for the target setting up to FY2030 as a guideline, with KPI information based on appropriate data based on J-POWER's actual emission for FY2013.
    - Regarding the outlined SPTs, the substantive contribution to reducing CO_2 emissions is at the level that is consistent with the ambitious target of 46% set forth in "The Sixth Strategic Energy Plan", which is consistent with the method calculated from the GHG emission reduction protocol used by the Agency for Natural Resources and Energy.
    - In addition, the SPT target setting is evaluated as ambitious as an item closely related to GHG emission reduction, based on the most recent performance level of J-POWER.
    - DNV concludes that the SPTs are appropriately linked to the GHG emission reduction targets set by the Agency for Natural Resources and Energy. The Framework should also be consistent with national guidelines which are consistent with the goals of the Paris Agreement.

J-POWER will be supported by KPIs/SPTs and respective action plans for the realisation of J-POWER "BLUE MISSION 2050" which include targets set by the Agency for Natural Resources and Energy, Best Available Technology, or other similar technologies.

- DNV confirmed that SPT target setting has been adequately disclosed as follows.
    - The timeline for achieving the SPT is set up until FY2030. For the interim process leading up to the determination of the trigger event, the SPTs have been set based on SPTs calculated by linear interpolation between the actual emission for the base year of FY2013 and targets by FY2030.
    - The base year for the SPTs concerning the reduction of CO_2 emissions is the actual emission for FY2013, which is consistent with the base year (2013) set by the Agency for Natural Resources and Energy.
    - Through the Framework, Action Plan and Roadmap towards carbon neutrality by 2050, the progress of the CO_2 emission reduction has been detailed in terms of how it will be achieved.

- DNV confirmed the validity of the fact that the following SPTs are not set every year, due to the fact that the amount of electricity generated by power supply development fluctuates according to the electricity supply and demand situation, and that it is necessary to implement initiatives with due consideration from the perspective of ensuring electricity supply capacity.

Table-2(Reposted): J-POWER Transition-Linked Finance KPIs and SPTs

(One or more of the following KPIs and SPTs are selected for specific transition-linked finance).

KPIs	SPTs
KPI 1: Reduction of CO_2 emissions (J-POWER Group domestic power generation business)	SPT1: Reduction of 9.2 million tons in FY2025 (compared to the performance for FY2013)
	SPT2: Reduction of 46%/22.5 million tons by FY2030 (compared to the performance for FY2013)
Description of KPIs	**Description of SPTs**
The KPIs are set with items that are closely related to J-POWER's Medium-Term Management Plan. KPI 1: Reduction of CO_2 emissions This is a core KPI for 'Expansion of CO_2 free power sources', 'CO_2 free hydrogen energy and zero emissions of power sources' and 'Power network' on the supply side of J-POWER and it is quantifiable and continuously measurable based on the GHG Protocol.	Each SPT refers to the target figures in the roadmap, and the figures are linked to the transition strategy of J-POWER. SPT1: CO_2 emission reduction amount SPT2: CO_2 emission reduction amount and CO_2 emission reduction rate The substantive contribution to CO_2 emission reduction is consistent with the ambitious target of 46% set forth in "The Sixth Strategic Energy Plan" and it can be evaluated that its future contribution to CO_2 emission reduction will exceed "Business as Usual" and that it is consistent with the ambitious national target. The SPT trigger events may be set by linear interpolation between the actual emission for the base year of FY2013 and targets by FY2025 and/or FY2030, or may be set individually when future detailed plans are drawn up.

(SPTs') Rationale and level of ambition

- ☒ Evidence that the SPTs represent a material improvement
- ☒ Evidence that SPTs are consistent with the Fundraiser's sustainability and business strategy
- ☒ Demonstrated relevance and reliability of selected benchmarks and standards
- ☒ Demonstrated SPTs have been set in a predefined timeline
- ☐ Other (Please specify):

Benchmarking approach

- ☒ Fundraiser's own performance
- ☒ Reference to scientific evidence
- ☒ Fundraiser's industry peers
- ☒ Other (Please specify) : GHG emission reduction targets set by the Agency for Natural Resources and Energy

Additional disclosure

- ☒ Explanation of possible recalculations or adjustments
- ☒ Identification of key factors that may affect the achievement of SPTs
- ☒ Explanation of the Fundraiser's strategy for achievement
- ☐ Other (Please specify);

SLBP/SLLP-3 Bond/Loan Characteristics

Regarding the Transition-Linked Finance (Bond or Loan) executed under the Framework,

DNV confirmed that the observation timing of specific SPTs and the trigger events with performance requirements and the extent of their impact would be linked to the achievement of targets and interest rates of bonds, terms and conditions of loan or other financial incentives (such as donations to organisations that engage in activities closely related to the set KPIs).

- DNV confirmed that J-POWER considered the appropriate fallback mechanisms and, as a result, decided not to set up another SPT or calculation method at this time since the risks of not being able to calculate or observe were extremely small.
- J-POWER has explained that changes may be made to KPIs and SPTs after discussion at internal meetings when there are reasonable grounds, such as changes in business environment, business structure, KPIs, etc., regardless of whether such events are due to external factors or the result of J-POWER's management decision.
- J-POWER confirmed that it intends to disclose any changes to KPIs and SPTs in loan agreement documents.
- J-POWER explained that changes in the characteristics of the bond/loan may be foregone if there are reasonable grounds for a temporary non-achievement of the SPT due to transient changes in domestic electricity supply capacity.

Financial impact

☒ Variation in interest rates

☒ Other (Please specify) : Financial incentives such as donations

Structural characteristics

☒ Other (Please specify) : The conditions for trigger event determination (determination date and SPTs) will be set according to the term of each bond or loan and will be specified in legal disclosure documents (or other methods of public disclosure) or contract documents.

SLBP/SLLP-4 Reporting

- DNV confirmed that the necessary information will be disclosed to the public in a timely manner for the following details required by the SLBP/SLLP.
  - KPIs' performance against SPTs will be verified by an external agency at least once a year until the completion of redemption or repayment after the execution of Transition-Linked Finance and disclosed in the Integrated Report or on the website or disclosed to the lenders (in the case of loan only).
  - SPTs' achievement status will be verified annually by an independent third-party organisation and used for determination of the financial characteristics (such as bond interest rate and terms and conditions of loan) or other financial incentives.
  - If the targets set by the Agency for Natural Resources and Energy were changed, the level of ambition for J-POWER's SPTs may be changed after discussions with DNV, if necessary.

Information reported

☒	Performance of the selected KPIs	☒	Verification assurance report
☒	Level of ambition of the SPTs	☒	Other (Please specify) : Other (please specify): Information on the financial impact when implementing trigger event determination (information of interest rate and donation). Validity of the adjustment and recalculation result of KPIs and SPTs, if necessary.

Frequency

☒	Annual	☐	Semi-annual
☐	Other (Please specify)		

Means of disclosure

☐	Information published in financial report	☐	Information published in sustainability report
☐	Information published in ad hoc documents	☒	Other (Please specify) : disclosed on fundraiser's website or to the lender (in the case of loan only)
☐	Reporting externally reviewed		

Level of assurance on reporting

☒	Limited assurance	☐	Reasonable assurance
		☐	Other (Please specify) :

SLBP/SLLP-5 Verification

- DNV confirmed that J-POWER planned to undergo independent verification of KPI-related data at least once a year by qualified external assessment agency.

Information reported

☒	Limited assurance	☐	Reasonable assurance
		☐	Other (Please specify) :

Frequency

☒	Annual	☐	Semi-annual
☐	Other (Please specify)		

Material changes

☒	Perimeter	☐	KPI methodology
☐	SPTs calibration		

VII. Assessment Conclusion

On the basis of the information provided by J-POWER and the work undertaken, it is DNV's opinion that the J-POWER Group Green/Transition Finance Framework meets the requirements established in the Protocol and that, with CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs, SLBP/SLBGLs and SLLP/SLLGLs as the criteria for expressing our opinion, it is aligned with the following definitions and purposes of green/transition finance and transition-linked finance that specify the use of proceeds.

- "Enable capital-raising and investment for new or existing projects with environmental benefits"
- "Provide an investment opportunity necessary for climate transition finance to be executed with transparency and credibility."
- "Through KPIs and SPTs, encourage the achievement of the fundraiser's ESG (regarding climate transition) that are material (for climate transition), quantifiable, predetermined, ambitious, regularly monitored, and externally verifiable."

DNV Business Assurance Japan K.K.

13 July 2023

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About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight.
With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

Disclaimer

Responsibilities of the Management of the Fundraiser and the Second-Party Opinion Providers, DNV: The management of Fundraiser has provided the information and data used by DNV during the delivery of this review. Our statement represents an independent opinion and is intended to inform the Fundraiser management and other interested stakeholders in the Bond as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by the Fundraiser. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by the Fundraiser's management and used as a basis for this assessment were not correct or complete.

Schedule-1 Green/Transition Finance Project Candidate List

The projects listed in the table are the candidate projects that have been evaluated for eligibility at the time of pre-issue eligibility assessment (as of June 2023). In the future, for green/transition finance instruments issued under the J-POWER Green/Transition Finance Framework, one or more of the eligible criteria (candidate eligible projects) listed in Schedule-1 will be selected, and the use of the proceeds will be reported in a pre-financing or post-financing report. If additional green/transition projects are included, the eligibility of such projects will be evaluated in advance by J-POWER in accordance with the process based on the Framework and, if necessary, DNV will evaluate them in a timely manner.

Action Plan Items		Eligibility Criteria	Green*1	Transition*2
CO_2 free hydrogen energy	Hydrogen power generation	Upcycling (adding gasifiers to existing facilities)		○
		Upcycling (adding CO_2 separation and capture equipment to existing facilities)		○
		CO_2 Free Hydrogen Generation Facilities	○	○
	Fuel production (CO_2 free hydrogen)	CO_2 Free Hydrogen Production Facilities	○	○
CO_2 free power generation	Renewable energy	Hydro, wind, geothermal and solar power	○	○
	Nuclear power	Ohma Nuclear Power Plant		○
Power network	Stabilisation	Distributed Energy Services	○	○
	Enhancement	Expansion of facilities such as frequency converter stations		○
		Network enhancement to accommodate renewable energy		○
Domestic coal-fired thermal power		Shutdown and decommission of deteriorated/aged thermal power plants		○
		Facilities for mixed/dedicated combustion for biomass and ammonia		○

*1 Projects that have been identified as eligible as green projects can be incorporated as green projects when implementing green finance in the future. Green projects are also allowed in the CTFBG to be incorporated as part of transition finance implementation.

*2 Some of the projects currently classified as transition projects may become green projects by the application of technological innovations in the future (e.g. application of green fuel/manufacturing process and achievement of CO_2 emission standards that meets the criteria for green projects). The eligibility criteria with ○ for both green and transition are classified as either or both depending on the individual project.

Schedule-2 Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs)

KPIs Key Performance Indicators

KPIs	Description
KPI1 : Reduction of CO_2 emissions (J-POWER Group domestic power generation business)	J-POWER has selected "Reduction of CO_2 emissions (J-POWER Group domestic power generation business)" as a KPI. The selected KPI are set with items that are closely related to the materiality of J-POWER. KPI1 is a core KPI for J-POWER's "Expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero emissions of power sources" and "Power network" on the supply side and it is quantifiable and continuously measurable based on the GHG Protocol.

SPTs Sustainability Performance Targets

SPTs	Description
SPT1 : **Reduction of 9.2 million tons in FY2025*** **SPT2 :** **Reduction of 46%/22.5 million tons* in FY2030** ***Compared to the performance for FY2013**	Each SPT refers to the target figures in the Roadmap, and the figures are linked to the transition strategy of J-POWER. Regarding SPT1(reduction amount of CO_2 emissions) and SPT2(reduction amount of CO_2 emissions and reduction rate of CO_2 emissions), the substantive contribution to CO_2 emission reduction is consistent with the ambitious target of 46% set forth in "The Sixth Strategic Energy Plan" and it can be evaluated that its future contribution to CO_2 emission reduction will exceed "Business as Usual" and that it is consistent with the ambitious national target. The SPT trigger events may be set by linear interpolation between the actual emission for the base year of FY2013 and targets by FY2025 and/or FY2030, or may be set individually when future detailed plans are drawn up.

Schedule-3 Green/Transition Finance Framework Eligibility Assessment Protocol

The following checklists (1 through 4) are the DNV assessment protocol created for the eligibility assessment of the Use of Proceeds Green/Transition Finance under the J-POWER Green/Transition Finance Framework based on the disclosure requirements of the CTFH and CTFBG.

The "Confirmed documents" in "Work Undertaken" column include public or non-public documents (internal document of the Issuer) and are provided to DNV by J-POWER as evidence for determining the eligibility.

*In the following disclosure requirements and other items, the terms "issuer" and "investor" may be read as "borrower" and "lender" respectively, as appropriate.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1	Issuer's Climate Transition Strategy and Governance	The financing purpose should be for enabling an issuer's climate change strategy. A 'transition' label applied to a debt financing instrument should serve to communicate the implementation of an issuer's corporate strategy to transform the business model in a way which effectively addresses climate-related risks and contributes to alignment with the goals of the Paris Agreement. <Suggested information and indicators> • A long-term target to align with the goals of the Paris Agreement (e.g., the objective of limiting global warming ideally to 1.5℃ and, at the very least, to well below 2℃); • Relevant interim targets on the trajectory towards the long-term goal; • Disclosure on the issuer's levers towards decarbonisation, and strategic planning towards a long-term target to align with the goals of the Paris Agreement; • Clear oversight and governance of transition strategy; and, • Evidence of a broader sustainability strategy to mitigate relevant	Confirmed documents: - Framework - The Sixth Strategic Energy Plan - Transition Roadmap for Power Sector - J-POWER Group Integrated Report 2022 - J-POWER Group ESG Data Collection - J-POWER "BLUE MISSION 2050" - Project List Interviews with the Issuer	J-POWER has established its Framework and has also introduced various plans and initiatives to manage and enhance the organisation's environmental sustainability and related performance in line with J-POWER's wide range of environmental strategies. Based on the J-POWER "BLUE MISSION 2050" which is a science-based long-term goal quantified by J-POWER, DNV conducted a review and confirmed that achieving J-POWER's goals regarding the scope of its target (Scope 1 of the domestic power generation business) is equivalent to achieving the goals set forth in the Paris Agreement. Based on risk and opportunity identification and scenario analysis using the TCFD guidance, J-POWER has set environmental corporate strategies that are important to its business model. In February 2021, J-POWER formulated the J-POWER "BLUE MISSION 2050" and set forth a roadmap to achieve carbon neutrality (hereinafter referred to as "J-POWER Roadmap"). In J-POWER "BLUE MISSION 2050", J-POWER sets a long-term goal of carbon neutrality by 2050 which is aligned with the goal of the Paris Agreement and establishes medium-term goals for achieving it. With the J-POWER Roadmap, J-POWER discloses a strategic plan to achieve the transition to carbon neutrality. Specifically, J-POWER's Transition Strategy incorporates the reduction targets and policies necessary to achieve Japan's carbon neutrality by 2050 and the goals of the Paris Agreement. J-POWER reviewed its initiatives in May 2023 and raised CO_2 emission reduction targets. Furthermore, if the need arises to revise its initiatives to realise

<table>
<tr><th>Ref.</th><th>Criteria</th><th>Requirements</th><th>Work Undertaken</th><th>DNV Findings</th></tr>
<tr><td></td><td></td><td>environmental and social externalities and contribute to the UN Sustainable Development Goals.</td><td></td><td>continuous future emission reduction, J-POWER plans to make appropriate revisions in light of the progress in the development of each technology and according to the timeline.
J-POWER considers the response to climate change including the implementation of transition strategy to be one of its most important management issues, and has established a system and structure to promote at the management level the initiatives set forth in the J-POWER “BLUE MISSION 2050” and in J-POWER Roadmap.
On the basis of the evaluation of the implementation plans provided by J-POWER based on the Framework, the J-POWER “BLUE MISSION 2050” and the J-POWER Roadmap, DNV confirmed that they are well aligned with J-POWER’s transition strategy. Through the evaluation, DNV confirmed that the implementation plans based on the transition strategy are credible, ambitious, and achievable.</td></tr>
<tr><td>2</td><td>Business model environmental materiality</td><td>The planned climate transition trajectory should be relevant to the environmentally material parts of the issuer’s business model, taking into account potential future scenarios which may impact on current determinations concerning materiality.</td><td>Confirmed documents:
- Framework
- The Sixth Strategic Energy Plan
- Transition Roadmap for Power Sector
- J-POWER Group Integrated Report 2022
- J-POWER Group ESG Data Collection
- J-POWER “BLUE MISSION 2050”
- Project List
Interviews with the Issuer</td><td>DNV assessed whether the key activities related to J-POWER’s business corresponded to the contribution to the environment and J-POWER’s transition strategy which was evaluated.
The greenhouse gas emissions of the J-POWER Group (FY2019-FY2021) are as follows.
<table>
<tr><th>Item</th><th>FY2019</th><th>FY2020</th><th>FY2021</th></tr>
<tr><td>Scope1</td><td>53.97 million t-CO_2</td><td>53.58 million t-CO_2</td><td>47.95 million t-CO_2</td></tr>
<tr><td>Scope2</td><td>0.11 million t-CO_2</td><td>0.13 million t-CO_2</td><td>0.14 million t-CO_2</td></tr>
<tr><td>Scope3</td><td>22.22 million t-CO_2</td><td>15.27 million t-CO_2</td><td>13.60 million t-CO_2</td></tr>
<tr><td>Total</td><td>76.31 million t-CO_2</td><td>68.98 million t-CO_2</td><td>61.68 million t-CO_2</td></tr>
</table>
While J-POWER’s initiatives for transition aim only to reduce emissions from its own operations (Scope 1), they also include activities that contribute directly and indirectly to Scope 2 and Scope 3 reductions. These are important initiatives set forth in Japan’s various decarbonisation plans and strategies and contribute to the realisation</td></tr>
</table>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				of carbon neutrality on the supply side. In other words, J-POWER's initiatives for transition will directly support the transition of the whole society, including J-POWER itself, as an energy company taking on the challenge to achieve carbon neutrality in 2050. J-POWER's Roadmap has reached a level consistent with the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy; Their specific action plans and goals are set and quantified in absolute terms that they must enable optimal solutions and further improvements. DNV confirmed that J-POWER's plan to implement its transition strategy is closely linked to the activities of its core business and to the activities that contribute to the reduction of CO_2 in the whole society, thus contributing to the overall environment and supporting J-POWER to advance its business. J-POWER's planned transition strategy and transition pathways are associated with the materiality that J-POWER has identified by utilizing standards such as ISO26000 and the GRI standards[*1] and will contribute to a significant environmental benefit (impact) from both qualitative and quantitative perspectives. *1: Global Reporting Initiative (an international standard that provides ESG-related reporting, management and analytical methods)
3	Climate transition strategy to be science-based including targets and pathways	Issuer's climate strategy should reference science-based targets and transition pathways. The planned transition trajectory should: • be quantitatively measurable (based on a measurement methodology which is consistent over time); • be aligned with, benchmarked or otherwise referenced to recognised, science-based trajectories where such trajectories exist;	Confirmed documents: - Framework - The Sixth Strategic Energy Plan - Transition Roadmap for Power Sector - J-POWER Group Integrated Report 2022 - J-POWER Group ESG Data Collection	For Scope 1 which relates to the domestic power generation business that emits the largest amount of CO_2 in the J-POWER group, J-POWER has set a science-based transition plan that aligns with the Paris Agreement and a transition trajectory that aligns with the goals set forth by the Agency for Natural Resources and Energy. This plan sets out realistic achievements and pathways for absolute CO_2 emission reduction and aims to reduce absolute (total) amount of CO_2 emissions to maintain defined emission levels in the future. DNV confirmed that J-POWER's transition strategy was quantified as an absolute value or the share based on a consistent measurement method based on prescribed assumptions.

<table>
<tr><th>Ref.</th><th>Criteria</th><th>Requirements</th><th>Work Undertaken</th><th>DNV Findings</th></tr>
<tr>
<td></td>
<td></td>
<td>• be publicly disclosed (ideally in mainstream financing filings), include interim milestones, and;
• be supported by independent assurance or verification

< Suggested information and indicators>

• Short, medium, and long-term greenhouse gas reduction targets aligned with Paris Agreement;
• Baseline
• Scenario utilised, and methodology applied (e.g. ACT, SBTi, etc.)
• Greenhouse gas objectives covering all scopes (Scope 1, 2 and 311); and,
• Targets formulated both in intensity and absolute terms</td>
<td>- J-POWER “BLUE MISSION 2050”
- Project List

Interviews with the Issuer</td>
<td>Transition targets are set on a voluntary basis based on initiatives utilizing TCFD, etc. for sustainable CO_2 emission reduction. They are also aligned with the policy of the Agency for Natural Resources and Energy, which serves as a benchmark.
Specifically, J-POWER has established the following transition targets.
<table>
<tr><th>Item</th><th>Target value</th></tr>
<tr><td>J-POWER Group domestic power generation business CO_2 Emissions</td><td>Target for FY2025: Reduction of 9.2 million tons*.
Target for FY2030: Reduction of 46%/22.5 million tons*
*Compared to FY2013
Target for 2050: Net zero emissions</td></tr>
<tr><td>Renewable energy (hydro, wind, geothermal, solar)</td><td>Target for FY2025: New development of 1,500 MW or more globally (compared to FY2017) and increase in hydroelectric power generation by 300 million kWh/year (compared to FY2017)</td></tr>
</table>
While J-POWER’s initiatives for transition aim only to reduce emissions from its own operations (Scope 1), they also include activities that contribute directly and indirectly to Scope 2 and Scope 3 reductions. These are important initiatives set forth in Japan’s various decarbonisation plans and strategies and contribute to the realisation of carbon neutrality on the supply side. In other words, J-POWER’s initiatives for transition will directly support the transition of the whole society, including J-POWER itself, as an energy company taking on the challenge to achieve carbon neutrality in 2050.
Transition initiatives and respective scope emissions are disclosed in documents such as “J-POWER Group Integrated Report” and “J-POWER Group ESG Data Collection”.</td>
</tr>
<tr>
<td>4</td>
<td>Implementation Transparency</td>
<td>Market communication in connection with the offer of a financing instrument which has the</td>
<td>Confirmed documents:
- Framework</td>
<td>DNV confirmed that the investment and deployment plans related to J-POWER’s transition strategy include consensus on future investments</td>
</tr>
</table>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		aim of funding the issuer's climate transition strategy should also provide transparency to the extent practicable, of the underlying investment program including capital and operational expenditure. This may include R&D-related expenditure where relevant, and details of where any such operating expenditure is deemed 'non-Business as Usual', as well as other relevant information indicating how this program supports implementation of the transition strategy, including details of any divestments, governance and process changes. <Suggested information and indicators> • Disclosure on the percentage of assets/revenues/expenditures/divestments aligned to the various levers outlined in Element 1 above; • Capex roll-out plans consistent with the overall strategy and climate science	- The Sixth Strategic Energy Plan - Transition Roadmap for Power Sector - J-POWER Group Integrated Report 2022 - J-POWER Group ESG Data Collection - J-POWER "BLUE MISSION 2050" - Project List Interviews with the Issuer	and expenditures. As a specific example, DNV confirmed that J-POWER has developed an investment plan for the four years (FY2022-FY2025) for the eleven green/transition eligibility criteria, including candidate projects for which the proceeds are to be used. J-POWER has announced that it will invest approximately 700 billion yen in FY2023-FY2030 in renewable energy development, etc. DNV confirmed that J-POWER plans to consider disclosing the overall investment plan (investment amount) to the extent practicable from the perspective of ensuring transparency. This includes projects to be implemented with green/transition finance. Regarding the overall future investment plan (investment amount), DNV confirmed J-POWER's plan to make the investments required to implement its transition strategy taking CTF-1 through CTF-3 into account based on the internal control system and processes and in accordance with an appropriate timeline. DNV confirmed that J-POWER also plans to allocate the proceeds to capital expenditures, operating and administrative expenses, equity investments, R&D related expenses, demolition expenses or other related expenditures of the eligible transition finance project candidates listed in Schedule-1.

Schedule-4 Green Finance (or use of proceeds Transition finance) Eligibility Assessment Protocol

The following checklists (GBP/GLP-1 through GBP/GLP-4) are DNV assessment protocol created for the J-POWER Green/Transition Finance (use of proceeds transition finance) Eligibility Assessment based on the requirements of GBP/GBGLs and GLP/GLGLs. “Confirmed documents” in the “Work Undertaken” column includes internal documents of the Fundraiser provided to DNV by J-POWER as evidence for determining the eligibility.
Please note that, although the terms GBP or GLP are used in Schedule-3 in accordance with the practice, this schedule contains the criteria and requirements that are referred to in the case of transition finance which specifies the use of proceeds, such as transition projects, based on CTFH and CTFBG. Therefore, the following checklists should be read in the context of transition finance as appropriate.

GBP/GLP-1 Use of proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	Types of funds	The types of green/transition finance are classified into one of the following types defined by GBP. • (Standard) Green/transition Bond and Loan • Green/transition Revenue Bond and Loan • Green/transition Project Bond and Loan • Other	Confirmed documents: - Framework Interviews with the Fundraiser	Through the evaluation work, DNV confirmed that the Green/Transition Finance falls into the following category: ・(Standard) Green/Transition Bond and Loan
1b	Transition Project Classification	The key to a green/transition bond is that the proceeds will be used for a green project, which should be properly stated in the legal documents relating to the security.	Confirmed documents: - Framework - Project List - Amended Shelf Registration Statement Interviews with the Fundraiser	DNV confirmed that the Green/Transition Finance aims to fund a wide range of green/transition projects focused on J-POWER’s environmental goals and transition strategy, as described in the Framework and Schedule-1. Specifically, all the transition finance categories and J-POWER’s Green/Transition Finance project candidates listed in the table below and Schedule-1 are evaluated as being consistent with the transition strategy. J-POWER plans to allocate the proceeds from the Green/Transition Finance to finance one or more of the Green/Transition Finance project candidates. If a green/transition project is selected prior to the execution of financing, this will be disclosed in legal documents.

<table>
<tr><th>Ref.</th><th>Criteria</th><th>Requirements</th><th>Work Undertaken</th><th>DNV Findings</th></tr>
<tr><td></td><td></td><td></td><td></td><td>
Based on the assessment, DNV concludes that the Green/Transition Finance project candidates will bring concrete and actual environmental benefits.

Table: J-POWER Green/Transition Finance Eligibility Criteria
<table>
<tr><th colspan="2">Action Plan Items</th><th>Eligibility Criteria</th><th>Green</th><th>Transition</th></tr>
<tr><td rowspan="3">CO_2 free hydrogen energy</td><td rowspan="2">Hydrogen power generation</td><td>Upcycling (adding gasifiers to existing facilities)</td><td></td><td>○</td></tr>
<tr><td>Upcycling (adding CO_2 separation and capture equipment to existing facilities)</td><td></td><td>○</td></tr>
<tr><td>CO_2 Free Hydrogen Generation Facilities</td><td>○</td><td>○</td></tr>
<tr><td>Fuel production (CO_2 free hydrogen)</td><td>CO_2 Free Hydrogen Production Facilities</td><td>○</td><td>○</td></tr>
<tr><td rowspan="2">CO_2 free power generation</td><td>Renewable energy</td><td>Hydro, wind, geothermal and solar power</td><td>○</td><td>○</td></tr>
<tr><td>Nuclear power</td><td>Ohma Nuclear Power Plant</td><td></td><td>○</td></tr>
<tr><td rowspan="3">Power network</td><td>Stabilisation</td><td>Distributed Energy Services</td><td>○</td><td>○</td></tr>
<tr><td rowspan="2">Enhancement</td><td>Expansion of facilities such as frequency converter stations</td><td></td><td>○</td></tr>
<tr><td>Network enhancement to accommodate renewable energy</td><td></td><td>○</td></tr>
<tr><td colspan="2" rowspan="2">Domestic coal-fired thermal power</td><td>Shutdown and decommission of deteriorated/aged thermal power plants</td><td></td><td>○</td></tr>
<tr><td>Facilities for mixed/dedicated combustion for biomass and ammonia</td><td></td><td>○</td></tr>
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Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1c	Environmental benefits	All green projects to which the funds are used should have clear environmental benefits, the effects of which should be assessed by the fundraiser and, where possible, quantitatively demonstrated.	Confirmed documents: - Framework - Project List Interviews with the Fundraiser	Green/transition projects are projects that contribute to the goals based on J-POWER's Transition Strategy and to low carbon and decarbonisation which fall into the eleven eligible criteria shown in 1b. The environmental benefit is CO_2 emission reduction, which has been quantitatively or qualitatively evaluated by the Fundraiser. DNV confirmed that the disclosure prior to the execution of the Green/Transition Finance will cover the environmental benefit evaluation method (calculation method) and that items of the project, and the indicators set according to the characteristics of the project and the amount of CO_2 emission reduction will be quantitatively evaluated and reported annually. (If quantitative assessment of CO_2 emission reduction is difficult due to the characteristics of the project, information such as project outline and status of R&D and demonstration will be reported to the extent practicable.)
1d	Refinancing rate	If all or part of the proceeds are used or may be used for refinancing, the fundraiser will indicate the estimated ratio of the initial investment to the refinancing and, if necessary. Therefore, it is recommended to clarify which investment or project portfolio is subject to refinancing.	Confirmed documents: - Framework - Project List Interviews with the Fundraiser	J-POWER plans to use all proceeds for new investments, refinancing or both for eligible project candidates included in Schedule-1. If J-POWER is clear about whether it will use the proceeds for new investment or refinancing prior to the financing, J-POWER will disclose the information in a legal document. If undecided prior to financing, DNV confirmed that J-POWER plans to disclose the amount (or the share) of the proceeds allocated to refinancing through the annual report.

GBP/GLP-2 Process for Project Evaluation and Selection

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Project Selection Process	Green/Transition bond fundraisers should provide an overview of the process of qualifying projects for which green/transition bond funding will be used. This includes (but is not limited to): • The process by which the fundraiser determines that the project in question is included in the business category of a qualified green project. • Creation of criteria for eligibility of projects for which green/transition bond funding will be used • Environmental sustainability goals	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that the Fundraiser has a process document for determining the eligibility of the projects for which the proceeds from the Green/Transition Finance will be used and that it is clearly outlined in the Framework.
2b	Fundraiser's Environmental and Social Governance Framework	In addition to criteria and certifications, the information published by fundraisers regarding the green/transition bond process also considers the quality of performance of the fundraiser's framework and environmental sustainability.	Confirmed documents: - Framework Interviews with the Fundraiser	When selecting green/transition projects, the Fundraiser takes into consideration that it complies with environment-related laws, ordinances and regulations, and that the environmental benefits improvement such as CO_2 reduction are clear in the entire life cycle or each process. In the operation and implementation of the project, each of the departments involved is committed to the preservation of the surrounding environment. DNV has confirmed that the green/transition projects implemented by the Fundraiser are consistent with the Fundraiser's management and environmental policies, as well as with the transition strategy, goals and pathways.

GBP/GLP-3 Management of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Tracking procedure-1	The net proceeds from Green/transition bonds should be managed in sub-accounts, included in sub-portfolio, or otherwise tracked. It should also be certified by the fundraiser in a formal internal process related to the fundraiser's investment and financing operations for the Transition Project.	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that the proceeds from the Green/Transition finance can be tracked by the Fundraiser's internal system and forms such as the proceeds management table. Based on the review of the actual system and relevant documents in use, DNV confirmed that the management status of the proceeds will be proved.
3b	Tracking procedure-2	During the green/transition bond redemption period, the balance of funds raised that is being tracked should be adjusted at regular intervals to match the amount allocated to eligible projects undertaken during that period.	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that, during the period from the execution of the Green/Transition Finance to redemption, the Fundraiser plans to periodically (quarterly) review the balance of the proceeds by using the internal system and forms such as the proceeds management table described in 3a.
3c	Temporary holding	If no investment or payment has been made in a qualified green/transition project, the fundraiser should also inform the investor of the possible temporary investment method for the balance of unallocated proceeds.	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed through the confirmation process based on the Fundraiser's internal system, forms and related workflow that they are designed to ensure that the balance of unallocated proceeds is sequentially recognised. DNV confirmed through the description and verification of the framework that the balance of unallocated proceeds is managed in cash or cash equivalents. DNV also confirmed that the balance of unallocated funds will be disclosed through reporting on the allocation status.

GBP/GLP-4 Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Periodical Reporting	In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, the fundraiser will consider each project at least once a year for projects to which the Green/transition bond proceeds have been allocated, taking into account the following: A list of each project should be provided. - Confidentiality and competitive considerations - Outline of each project, expected sustainable environmental and social effects	Confirmed documents: - Framework - Project list Interviews with the Fundraiser	DNV confirmed that the Fundraiser will annually report on the Green/Transition Finance until the proceeds are fully allocated and will disclose the allocation status, the projects to which the proceeds have been allocated, or information on environmental benefits. Regarding the environmental benefits, DNV confirmed that the Fundraiser will disclose any or all of the following within the scope of confidentiality and to the extent reasonably practicable. The report will be disclosed in the Integrated Report, on the website or to the lenders (in the case of loans). <Allocation Status> • Amount of allocated proceeds • Balance of unallocated proceeds • Approximate amount (or the share) of proceeds allocated to refinancing <Environmental Benefits> • Project outline and its progress • Amount of CO_2 emission reduction (t-CO_2 /y) (t/year) *Any or all the indicators above will be disclosed. *The amount of CO_2 emission reduction is calculated by multiplying the theoretical value of the amount of electric power generated through eligible projects (installed capacity x 24 hours x 365 days x estimated facility utilisation rate) by the CO_2 emission factors published by Japan Electric Power Exchange.

Schedule-5 Sustainability-Linked Finance Framework Eligibility Assessment Protocol

The checklist below (SLBP/SLLP-1 through 5) is DNV assessment protocol created for the eligibility assessment of the J-Power Group Green/Transition Finance Framework based on the requirements of SLBP/SLLP.

SLBP/SLLP-1 Selection of Key Performance Indicators (KPIs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	KPI – material to core sustainability and business strategy	The fundraiser's sustainability performance is measured using sustainability KPIs that can be external or internal. The KPIs should be material to the fundraiser's core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector and be under management's control. The KPI should be of high strategic significance to the fundraiser's current and/ or future operations; It is recommended that fundraiser communicate clearly to investors the rationale and process according to which the KPI(s) have been selected and how the KPI(s) fit into their sustainability strategy.	Confirmed documents: - Framework - J-POWER Group Integrated Report 2022 - J-POWER "BLUE MISSION 2050" Interviews with the Fundraiser	DNV reviewed J-POWER's KPIs related to sustainability and confirmed that the selected KPIs are material and relevant to J-POWER's core transition strategy and sustainability management. J-POWER has upheld the J-POWER "BLUE MISSION 2050". One KPI (Reduction of CO_2 emissions (domestic power generation business)) for environmental sustainability (transition) set by J-POWER shown is an important indicator in the overarching transition (sustainability) strategy of J-POWER as an energy company. An important KPI for J-POWER is the reduction of CO_2 emissions towards the J-POWER "BLUE MISSION 2050". As approximately 80% of GHG emissions are Scope 1 emissions, it is appropriate enough for J-POWER to choose reduction of CO_2 emission in domestic power generation business as a KPI. This is positioned as a core KPI for "expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero-emission power sources" and "power network" as set forth in the J-POWER "BLUE MISSION 2050". DNV confirmed that the KPI selected by J-POWER are consistent with "The Sixth Strategic Energy Plan" and the "Transition Roadmap for Power Sector" formulated by the Agency for Natural Resources and Energy, and that the KPIs are appropriately set as comparable indicators. From the perspective of business strategies of J-POWER as an energy company, J-POWER works on to address the KPIs closely related to "expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero-emission power sources" and "power network" set forth in J-POWER "BLUE MISSION 2050" towards realisation of carbon

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				neutrality. DNV believes that such initiatives will contribute to J-POWER's aim to "improve corporate value by taking on the challenge of transitioning based on various approaches to achieve carbon neutrality aiming at the decarbonisation of the energy supply". In addition, DNV believes that the KPIs will contribute to the realisation of the J-POWER "BLUE MISSION 2050" and simultaneous pursuit of goals related to sustainability management and J-POWER's business strategies. The selected KPIs are listed below and detailed in Schedule-2. **KPIs** KPI 1: Reduction of CO_2 emissions (J-POWER Group domestic power generation business)
1b	KPI - Measurability	KPIs should be measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT's level of ambition. Fundraiser are encouraged, when possible, to select KPI(s) that they have already included in their previous annual reports, sustainability reports or other non-financial reporting disclosures to allow investors to evaluate historical performance of the KPIs selected. In situations where the KPIs have not been previously disclosed, fundraiser should, to the extent possible, provide historical externally verified KPI values covering at least the previous 3 years.	Confirmed documents: - Framework - J-POWER Group Integrated Report 2022 - J-POWER "BLUE MISSION 2050" Interviews with the Fundraiser	DNV concludes that the reduction of CO_2 emissions as a KPI is measurable based on a consistent methodology (GHG Protocol), externally verifiable and can be benchmarked against external references. DNV confirmed that the KPI selected by J-POWER are linked to the KPIs in the Medium-Term Management Plan and the performance over time has been managed internally to be consistent with the plan.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1c	KPI – Clear definition	A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter as well as the calculation methodology.	Confirmed documents: - Framework - J-POWER Group ESG data collection Interviews with the Fundraiser	DNV confirmed that the KPI selected by J-POWER provide a clear scope of assessment and calculation methodology. Specifically, it is calculated as follows. KPI 1: Reduction of CO_2 emissions from the J-POWER Group's domestic power generation business compared to the base year DNV confirmed that this calculation method has a high correlation as a method of evaluating the emission intensity of J-POWER.

SLBP/SLLP-2 Calibration of SPT (Sustainability Performance Targets)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a.	Target Setting - Meaningful	The SPTs should be ambitious, realistic and meaningful to the fundraiser's business and be consistent with the fundraisers' overall strategic sustainability/ESG strategy.	Confirmed documents: - Framework - J-POWER Group Integrated Report 2022 - J-POWER "BLUE MISSION 2050" Interviews with the Fundraiser	DNV confirmed that the substantive contribution of J-POWER to the reduction of CO_2 emissions is consistent with the ambitious target of 46% set in "The Sixth Strategic Energy Plan", based on the perspective that the SPTs support the reduction of CO_2 emissions set in "Expansion of CO_2 free power sources", "CO_2 free hydrogen energy and zero emissions of power sources" and "Power network" set forth in J-POWER "Blue MISSION 2050". DNV also confirmed that there is a more concrete plan internally and these SPTs are ambitious, realistic and meaningful. In addition, DNV confirmed that the achievement of SPTs is consistent with J-POWER's initiatives towards the realisation of carbon neutrality.
2b	Target Setting – Meaningful	SPTs should represent a material improvement in the respective KPIs and be beyond a "Business as Usual" trajectory; where possible be compared to a benchmark or an external reference and be determined on a predefined timeline, set before (or concurrently with) the issuance of the loan.	Confirmed documents: - Framework - J-POWER Group Integrated Report 2022 - J-POWER "BLUE MISSION 2050" - Supplementary document for Use of Proceed instruments Interviews with the Fundraiser	Regarding the targets set by J-POWER to reduce CO_2 emissions (domestic power generation business) by 9.2 million tons by FY2025 (SPT1) and by 46%/22.5 million tons by FY2030 (SPT2) compared to the actual emission for FY2013, the substantive contribution to reducing CO_2 emissions is consistent with the ambitious target of 46% set in "The Sixth Strategic Energy Plan" and the contribution to future CO_2 reduction will exceed "Business as Usual".
2c	Target Setting – benchmarks	The target setting exercise should be based on a combination of benchmarking approaches: The fundraiser's own performance over time for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is	Confirmed documents: - Framework - J-POWER Group Integrated Report 2022 - J-POWER "BLUE MISSION 2050"	DNV confirmed that the process to set the SPTs is based on an appropriate combination of benchmarking approaches. - The target setting up to FY2030 has been provided as a guideline, with KPI information based on appropriate data based on J-POWER's actual emissions for FY2013.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		recommended and when possible forward-looking guidance on the KPI The SPTs relative positioning versus the fundraiser's peers where comparable or available, or versus industry or sector standards Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognised Best-Available-Technologies or other proxies	Interviews with the Fundraiser	- The SPTs are evaluated as ambitious based on the most recent performance level of J-POWER. - DNV concludes that the SPTs are appropriately linked to the GHG emission reduction targets set by the Agency for Natural Resources and Energy. In addition, the Framework is consistent with national guidelines which are consistent with the goals of the Paris Agreement. J-POWER will be supported by KPIs/SPTs and respective action plans for the realisation of J-POWER "BLUE MISSION 2050".
2d	Target setting – disclosures	Disclosures on target setting should make clear reference to: 1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs 2. Where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used 3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place 4. Where possible and taking into account competition and confidentiality considerations, how the fundraiser intends to reach such SPTs	Confirmed documents: - Framework - J-POWER Group Integrated Report 2022 - J-POWER "BLUE MISSION 2050" Interviews with the Fundraiser	DNV confirmed that the SPTs settings have been appropriately disclosed as follows. - The timeline for achieving the SPT is set up until FY2030. For the interim process leading up to the determination of the trigger event, the SPTs have been set based on SPTs calculated by linear interpolation between the actual emission for the base year of FY2013 and targets by FY2030. - The base year for the SPTs concerning the reduction of CO_2 emissions is the actual emission for FY2013, which is consistent with the base year (2013) set by the Agency for Natural Resources and Energy. - Through the Framework, Action Plan and Roadmap towards carbon neutrality by 2050, the progress of the CO_2 emission reduction has been detailed in terms of how it will be achieved. Based on the information provided by J-POWER, DNV has concluded that the SPTs are realistic, the plan is feasible, and the SPT targets outlined in the Framework are likely to be met. The following SPTs are not set for each year due to the fact that the amount of electricity generated by power supply and demand conditions cause fluctuations in the amount of electricity generated by

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				power supply and demand, and that initiatives need to be implemented with due consideration from the perspective of ensuring electricity supply capacity.

SLBP/SLLP-3 Bond Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Bond Characteristics – SPT Financial/structural impact	The SLB will need to include a financial and/or structural impact involving trigger event(s) based on whether the KPI(s) reach the predefined SPT(s).	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that the inclusion of trigger events in the Framework complies with the requirements set forth in the SLBP. DNV confirmed that, for sustainability-linked bonds executed under the Framework, trigger events and their scope of impact with specific SPTs' observation timing and performance requirements are linked to target achievement and financial incentives.
3b	Bond Characteristics – Fallback mechanism	Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained. Fundraisers may also consider including, where needed, language in the bond or loan documentation to take into consideration potential exceptional events.	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that J-POWER considered the appropriate fallback mechanisms and, as a result, decided not to set up another SPT or calculation method at this time since the risks of not being able to calculate or observe were extremely small. J-POWER has explained that changes may be made to KPIs and SPTs after discussion with external certification agencies, when there are reasonable grounds, such as changes in business environment, business structure, KPIs, etc., regardless of whether such events are due to external factors or the result of J-POWER's management decision. Changes in the characteristics of the bond/loan may be foregone if there are reasonable grounds for a temporary non-achievement of the SPT due to transient changes in domestic electricity supply capacity.

SLBP/SLLP-4 Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a.	Reporting	Fundraisers of SLBs should publish, and keep readily available and easily accessible: Up-to-date information on the performance of the selected KPI(s), including baselines where relevant A verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the loan's financial and/or structural characteristics Any information enabling investors to monitor the level of ambition of the SPTs This reporting should be published regularly, at least annually, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLB's financial and/or structural characteristics.	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that the necessary information will be disclosed to the public in a timely manner for the following details required by the SLBP/SLLP. - KPIs' performance against SPTs will be verified by an external agency at least once a year until the completion of redemption or repayment after the execution of Transition-Linked Finance and disclosed in the Integrated Report or on the website or disclosed to the lenders (in the case of loan only). - SPTs' achievement status will be verified annually by an independent third-party organisation and used for determination of the financial characteristics (such as bond interest rate) or other financial incentives.

SLBP/SLLP-5 Verification

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
5a	External Verification	Fundraisers should have its performance against each SPT for each KPI independently verified by a qualified external reviewer with relevant expertise, at least once a year and for each SPT trigger event.	Confirmed documents: - Framework Interviews with the Fundraiser	DNV confirmed that J-POWER plans to undergo independent verification of KPI-related data at least once a year by qualified external assessment agency that has relevant expertise in SPT trigger events.