



SECOND PARTY OPINION

TOHOKU ELECTRIC POWER CO., INC. GREEN/TRANSITION FINANCE FRAMEWORK

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Revision History

Revision Number	Date of Issue	Remarks
0	20 February 2023	Initial

Disclaimer

Our assessment relies on the premise that the data and information provided by 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. 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. But errors or irregularities, possibly significant, may not have been detected. DNV expressly disclaims any liability or co-responsibility for any 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 We have complied with the requirements 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. We have complied with the DNV Code of Conduct1 during the assessment and maintain independence where required by relevant This engagement work was carried out by an independent team of sustainability assurance professionals. DNV maintains complete impartiality towards stakeholders. DNV maintains complete impartiality towards stakeholders.

 $^{^{1}}$ DNV Code of Conduct is available from the DNV website (www.DNV.com)



Executive Summary

Tohoku Electric Power Co., Inc. (hereinafter referred to as "Tohoku Electric Power") was founded in 1951, a time when Japan was still recovering from the turmoil of the Second World War. Since then, Tohoku Electric Power have continued difficult challenges in each era, including power shortages during the post war period of reconstruction, oil crises, numerous natural disasters, and the deregulation of the electric power market. On each occasion, the Group (77 group companies) has worked as a team to fulfil its mission of delivering a stable, high-quality supply of electricity. Moving forward, Tohoku Electric Power will continue to work with local communities to contribute to the growth and development of the six Tohoku prefectures and Niigata Prefecture while ceaselessly working to create new corporate value.

In January 2020, Tohoku Electric Power formulated the Tohoku Electric Power Green Bond Framework and issued the company's first Green Bond (Green Bond with Climate Bond Certification) in February of the same year. Subsequently, in August 2020, the framework was revised to the "Tohoku Electric Power Green Finance Framework" with the addition of green loans in order to further promote green finance, and the company is working to contribute to the environment through its business by executing green bonds and green loans multiple times. In order to further promote its efforts towards carbon neutrality, the Tohoku Electric Power Group has now revised the Green/Transition Finance and Transition Linked Finance Framework (hereinafter referred to as the "Framework") in accordance with the following principles and guidelines.

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.), 2021.
- 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, et al.), 2022.
- 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 Tohoku Electric 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 transition strategy of the Fundraiser, Tohoku Electric Power, 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. Tohoku Electric 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, Tohoku Electric 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:

Eight key environmental materialities in Tohoku Electric Power's business model have been identified, based on discussions at the Sustainability Promotion Council and advice from external experts. The materiality that Transition primarily relates to is the "Challenge to become carbon neutral," which sets the tasks of closing the gap with the current situation in order to achieve the "Tohoku Electric Power Group Carbon Neutral Challenge 2050." In Tohoku Electric's transition strategy, management strategy and ESG (environment, society and governance) initiatives are inseparable, and specific initiatives are set out in the "Tohoku Electric Group Carbon Neutral Challenge 2050," which also takes into account contributions to the SDGs, which will be discussed later. 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:

Tohoku Electric Power's transition strategy has been formulated based on science-based goals and pathways. Specifically, the medium- to long-term goals 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

Tohoku Electric Power has presented the basic investment plan including the amount to be invested to implement the Transition Strategy and outlined the effects and returns from the implementation. DNV has confirmed that the future overall and individual investments required to implement the Transition Strategy are planned to be implemented in accordance with the internal management system and processes, taking into account CTF-1 to CTF-3. 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 Tohoku Electric 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:

DNV 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 identified and classified in Table-1 and are earmarked as new expenditure or refinancing of existing expenditure; DNV has ensured that these projects are consistent with the elements of CTF-1 to 4. The projects have been evaluated by Tohoku Electric 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.

Roadmap	Eligibility Criteria	Project Overview		Project Examples
	Renewable	Development,	~	Wind Farm Tsugaru (onshore wind
	Energy	construction,		power)
		operation and	✓	Tamagawa Hydroelectric Power Station
		renovation of wind,		No. 2 (hydropower)
Maximum Use		geothermal, solar,	✓ Miyagi Osato Solar Park (solar)	
of Renewable		hydro and biomass	✓	Matsukawa Geothermal Power Station
Energy and		power generation		(geothermal)
Nuclear Power		projects (*)		
	Nuclear	Further safety	✓	Onagawa Nuclear Power Station Unit 2
	Power	improvements and		safety works
		continued		
		safe/stable		
		operation		

Table-1: Tohoku Electric Power Green/Transition Finance Eligibility Criteria and Project Summary



	Power Grid	Upgrading through grid maintenance and digitalisation, storage of surplus renewable energy, P2G, etc.	*	Tohoku-Tokyo interconnection line Northern Tohoku Area Power Supply Recruitment Process
	LNG Thermal Power	Decarbonisation using hydrogen and ammonia, and High efficiency of thermal power	✓ ✓	Mixed-firing project at Niigata Thermal Power Station, No. 5. Development of Joetsu Thermal Power Plant 1.
Decarbonization of Thermal Power	Coal Thermal Power	Decarbonisation using biomass and ammonia	*	Mixed burning f black pellets at Noshiro Thermal Power Station. Production of the biomass raw materials on unused land at our power stations
	Fading Out Inefficient Power Sources	Discontinuation of Ageing Firepower	~	East Niigata Thermal Power Station Port No. 1 and Port No. 2 decommissioned.
	CCUS	Studying CCUS	~	Converting the CO ₂ generated by thermal power sources of methane gas
	Home and Business	Heat pump Electrification and Sales of Renewable Energy Menus through Credit Purchases	✓ ✓	Installation of Electrification Systems. More End-User-Friendly Renewable Electricity.
Electrification and Realization of a Smart Society	Transport	Promotion of Electric Vehicles, etc.	~	Electrification of Company-Owned Vehicles (*)
	Industry	Energy Conversion of Production Processes, etc.	~	Electrification of Heat Resources (*)
	Use of Decentralized Energy	VPP Projects Using Private Solar and Storage Battery Services, etc.	✓ ✓	Aozora Charge service (*) The Renewable Aggregation Business (*)

Projects marked with an asterisk (*) in Table-1 are green eligible projects; thus, Transition Finance and Green Finance may use them as a source of funds.



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

Tohoku Electric 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, Tohoku Electric 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 Office Department with jurisdiction over each project selects project candidates based on the "Tohoku Electric Power Group Carbon Neutral Challenge 2050" and the eligibility criteria in Table-1, which are then approved through appropriate internal processes. These processes are consistent with GBP/GLP-2.

GBP/GLP-3. Management of Proceeds:

The appropriation and management of proceeds are carried out by the Accounting and Finance Department of Tohoku Electric Power. 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:

Tohoku Electric Power will report the allocation of the proceeds and the effects of environmental improvements in the annual Tohoku Electric Group Integrated Report or on its website 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 even after the completion of the appropriation.

<SLBP/SLLP Eligibility Assessment Results>

Based on the documents and information provided by Tohoku Electric 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 CO₂ emissions (domestic power generation business)) related to environmental sustainability (transition) set by Tohoku Electric Power shown in Table-2 is an important indicator in a comprehensive transition strategy for the "Carbon Neutral Challenge 2050" set forth by Tohoku Electric 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):

The SPTs of Tohoku Electric Power shown in Table-2 are meaningful and closely related to the sustainability (transition) and business strategy required of Tohoku Electric Power as an energy provider and show significant improvements according to a pre-set timeline. The Agency for Natural Resources and Energy has set a 2030 CO₂ emission reduction target of 46% (compared to 2013), and the SPT is set as an ambitious target to benchmark against and exceed that level. Through the review, DNV has confirmed that Tohoku Electric Power's plan is feasible for the achievement of the SPT in FY2030.

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.

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 at an appropriate frequency.

SLBP/SLLP-5. Verification:

Tohoku Electric Power intends to have the data relating to the KPIs independently verified annually by an external evaluation agency.



Table-2: Toho	ku Electric Power	Transition-Linked	Finance KPIs and SPTs
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KPIs	SPTs
KPI: CO ₂ emissions (*)	SPT: halve by 2030 compared to 2013 (22.82 million t-CO ₂)
(*) Emissions from Retail Electricity	
Description of KPIs	Description of SPTs
The KPIs have been set for items closely related to the "carbon neutrality challenge", one of the materialities identified by Tohoku Electric Power. It is a core KPI towards the realisation of Tohoku Electric's 2050 carbon neutrality target and can be measured quantitatively and continuously in accordance with the Act on Promotion of Global Warming Countermeasures (Anti-Warming Law).	The SPT is an ambitious, meaningful and realistic target set to accelerate Tohoku Electric's Carbon Neutral Challenge 2050 efforts, surpassing the 2030 target of 46% reduction set by the Agency for Natural Resources and Energy. Reference: CO_2 emissions in 2013 were 45.63 million t- CO_2 (Source: Tohoku Electric Power Group Sustainability Report 2022)

Based on the assessment of the Framework and other relevant documents and information provided by Tohoku Electric Power, DNV has confirmed that the Framework established by Tohoku Electric 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 Tohoku Electric Power Group consists of 77 Group companies and its main business is to supply electricity mainly to the six Tohoku prefectures and Niigata Prefecture. The Group has also positioned the "Smart Society Realisation Business" as a growth business, which aims to solve social issues and realise a society in which local residents can live comfortably, safely and securely, and is boldly taking up the challenge of changing its business model. Since its founding in 1951, the Tohoku Electric Power Group has been striving to contribute to the development of the six prefectures of Tohoku and Niigata Prefecture. They have been doing so through stable, eco-friendly supply of reasonably priced power on the premise of safety, with their basic principle: "The prosperity of the Tohoku region is essential to our own growth."

The strong commitment to local communities expressed in this approach is a fundamental value of Tohoku Electric's management and is clearly expressed in the Tohoku Electric Group's management philosophy, "Prospering with Local Communities." Moreover, the two thoughts of "Be more in touch with customers" and "Be close to the community" are well-expressed in the Tohoku Electric Group's slogan, "The Strength of Working Alongside", which aims to realise the "Smart Society of the New Era from Tohoku" set out in the medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~."

ii. Fundraiser's Initiatives for ESG/SDGs

Under the Tohoku Electric Power Group Sustainability Policy, the Tohoku Electric Power Group has identified Sustainability Materialities, which are priority issues to be addressed in order to place sustainability at the core of management and contribute to medium- to longterm improvements in corporate value and the sustainable development of society as a whole.

The Tohoku Electric Power Group is committed to co-creating social and corporate value together with stakeholders across future generations and contributing to the achievement of the SDGs by working to resolve materiality, realising the Tohoku Electric Power Group's medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~" and taking on the challenge of the "Carbon Neutral Challenge 2050." The Group will also contribute to the achievement of the SDGs.

Tohoku Electric Power Group Sustainability Policy

The Tohoku Electric Power Group is actively promoting sustainability through the realisation of the Tohoku Electric Power Group's medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~" and the challenge of the "Carbon Neutral Challenge 2050."

The Tohoku Electric Power Group's concept of sustainability is based on its management philosophy of "The prosperity of the Tohoku region is essential to our own growth" and the Group slogan "The Strength to Work Alongside ~Yori, Sou, Chikara~." The Group's vision of



sustainability is to contribute to medium- and long-term improvements in corporate value and the sustainable development of society as a whole by resolving issues faced by local communities and society, and by working as a unified corporate group to create a smart society through the provision of energy-centred services and other means, while being close to customers and local communities.

In order to realise this, the Tohoku Electric Power Group, under the Tohoku Electric Power Group Code of Conduct, will demonstrate its collective strength through concerted efforts while utilising the characteristics of each Group company, which strongly support the value chain of its business activities, to conduct honest and fair business activities, meet the expectations of its stakeholders, and fulfil its corporate as a Group is committed to fulfilling its social responsibility as a company by meeting the expectations of its stakeholders.



Figure-1 Tohoku Electric Power Group Sustainability Policy



iii. Fundraiser's Environmental Initiatives

The Tohoku Electric Power Group is promoting environmental management to evolve its management foundations, with the aim of realizing the Tohoku Electric Power Group's medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~." Based on the Tohoku Electric Power Group Environmental Policy and the Four Principles of Environmental Action shown in Figure 2, we are promoting initiatives for the formation of a recycling-oriented society and regional environmental Conservation. In addition, based on the Tohoku Electric Power Group Medium-Term Environmental Plan, which was formulated as an action plan for the next three years in consideration of the situation surrounding the environment, we are developing various measures based on the three pillars of tackling climate change issues based on the "Carbon Neutral Challenge 2050", thorough environmental conservation and communication with local communities. The Group is developing a range of measures based on the three pillars.

Tohoku Electric Power Group Environmental Policy



Figure-2 Tohoku Electric Power Group Environmental Policy



Table-3: Tohoku Electric Power's Participation in External Initiatives and Efforts

External Initiatives		Initiatives of Tohoku Electric Power		
Task Force on Climate-related Financial Disclosures (TCFD)		The Tohoku Power Group endorsed the TCFD in April 2019 and considers it important not only to disclose information but also to reflect mechanism-related risks and opportunities in its business strategy.		
UN Global Compact	WE SUPPORT	Seeking to build a sound global society through joint efforts between the United Nations and the private sector (companies and other organizations), the UN Global Compact is the world's largest sustainability initiative. Signatory organizations are required to conform to and put into practice 10 principles in the four areas of human rights, labor, the environment, and anti-corruption.		
Challenge Zero	Challenge Zero	Challenge Zero is an initiative to communicate across the world and support innovative actions by companies and other organizations to take on the challenge of realizing a carbon-neutral society, a long-term goal under the Paris Agreement, through joint efforts between Keidanren and the Japanese government. The following two challenge cases were registered by Tohoku Electric Power.		
		- Realization of a hydrogen society.		
Challenge initiatives for 30% of Executives to be Women by 2030	2030年30%へのチャレンジ #HereWeGo203030	The Challenge Initiatives for 30% of Executives to be Women by 2030 program was launched by Keidanren to accelerate efforts to promote diverse human resources for inclusion and co-creation based on diverse values, the key to sustainable capitalism. The goal is to ensure that 30% of executives will be women by 2030.		
Plastics Smart	Plastics Smart	Plastics Smart is a campaign launched by the Ministry of the Environment to promote joint efforts and partnership among a wide range of parties including individuals, NGOs, corporations, research institutes, and government agencies, to resolve the issue of ocean plastic wastes		
Keidanren Initiative for Biodiversity Conservation	Keidanren Initiative for Biodiversity	The Keidanren Initiative for Biodiversity Conservation is an initiative launched by Keidanren and the Keidanren Committee on Nature Conservation. By promoting the Keidanren Biodiversity Conservation Statement and Guidelines, it strives to promote further mainstream adoption of efforts to preserve biodiversity.		



iv. About the Green/Transition Finance Framework

In pursuing Tohoku Electric Power's "Carbon Neutral Challenge 2050," Tohoku Electric Power has set ambitious targets for CO₂ 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.

Tohoku Electric Power intends to procure the funds necessary for achieving this ambitious CO_2 emission reduction target 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.

In January 2020, Tohoku Electric Power established a Green Bond Framework, which was revised to a Green Finance Framework including loans in August 2020. Now, in order to implement Green/Transition Finance in a way that conforms to the internationally defined framework, the Tohoku Electric Power Green/Transition Finance Framework has been established.

The criteria to which this Framework specifically referred to are listed in section II, (3) below.

v. Fundraiser's Transition Strategy for Decarbonization

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

Figure-3 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" 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-4. As an even more ambitious target, they set a target of 50% reduction (compared to FY 2013).

Tohoku Electric Power is taking on the challenge of becoming carbon neutral by 2050 based on the three pillars of "Maximum use of renewable energy and nuclear power",



"Decarbonization of thermal power" and "Electrification and realization of a smart society", in accordance with the policies of the Agency for Natural Resources and Energy.

Transition Roa	admap for Decar	bonizatio	n of the Powe	r Sector	arch and development Demonstration and introduction	
	2020	2025	2030	2040		2050
Decarbonized power sources, etc.	Efforts toward decarbonization					
Ammonia <mark>fi</mark> ring	Technology development through the GI Fu	nd Demonstra	stion 🕨 🖛	Practical use and introduction (However, the introdu	ction is in the 2040s.)	
Hydrogen firing	Technology development through NEDO at	d other projects Demons	stration by GI Fund (~ 2030)	Establishment and commercialization of	technology	
CC (U) S	manufacturing technology development)	Demonstra	ation 🕨 🔶			
Renewable energy and nuclear power	4					
Suspension or decommission of thermal power plants	•					
Transition power.						
Ammonia co-firing Energy base target: 1% by 2030	Demonstration is underway at NEDO	(~ 2024)	About 20% Full-scale intro	duction of ammonia thermal power generation		
(Total of Hydrogen and Ammonia) Hydrogen co-firing Energy base target: 1% by 2030	Demonstration of actual equipment by GI F	und (~ 2025), etc.	Establishment of technology with	(about 10% co-firing rate and commercialization aroun	nd 2030	In the 2050, onbustion ngines has had o introduce CCS
Biomass co-firing Energy base target: about 5% by 2020 (including mono-firing)	+	Expansion of introd	luction and improvement of co-firing rate			
Efforts that depend on the zero-emission status of power sources	Initietives that should be promoted w	hile promoting decarb	omization of the power sector			
Strengthening and upgrading transmission and distribution networks	*It can be eligible for transition financing on	the premise that it will contr	ribute to the expansion of the introduction	of decarbonized power sources		
Promotion of DR and electrification	4					ŧ
Storage battery and water pumping distributed energy resource	4					
*Efficiency improvement and conversi combustion of ammonia and hydroge	on from coal to natural gas of thermal power sou n and CC (U) S in the future.	rces can be subject to trans	ition financing on the premise of decarbo	nizing power sources by 2050, with an eye toward the introdu	ction of mixed combustion a	and exclusive

""Electrification" includes indirect electrification (utilization of hydrogen produced by water electrolysis using electric power derived from renewable energy, etc.).

*The mixing ratio is based on heat quantity.

Figure-3: Transition Roadmap for Decarbonizing Power Sector

(Transition Roadmap for Power Sector, Agency for Natural Resources and Energy, February 2022)



		(FY2019 ⇒ previous energ	y mix)	Energy mix in Fi (ambitious out)	(2030 look)	
Energy efficiency improvement Final energy consumption (without energy conservation)		(16.55 million kl \Rightarrow 50.30 million kl) (350 million kl \Rightarrow 377 million kl)		62 million kl		
				350 million kl		
Power generation mix	Renewable energy	(18% ⇒ 22-24%) -		36-38% #If progress is made in utilization and imp of R&D of renewable energy currently und 38% or higher will be aimed at.		
Liectricity generated : 1,065 TWh	Hydrogen/Ammonia	(0% ⇒ 0%)	geothermal $0.3\% \Rightarrow 1.0\sim1.1\%$	1%		
⇒	Nuclear	(6% ⇒ 20-22%)	hydropower 7.8% ⇒ 8.8~9.2%	20-22%	(details of renewable)	
Approx. 934 TWh	LNG	(37% ⇒ 27%)	biomass 2.6% ⇒ 3.7~4.6%	20%	solar 14~16% wind 5%	
	Coal	(32% ⇒ 26%)	-	19%	geothermal 1% hydropower 11%	
	Oil, etc.	(7% ⇒ 3%)		2%	biomass 5%	
(+ non-energy	related gases/sinks)					
GHG reduction rate		(14% ⇒ 26%)	Cor	46%	its challenge to n	

the lofty goal of cutting its emission by 50%

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Figure-4: 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

Tohoku Electric Power positions the following activities as "transition strategy": activities that contribute to the CO_2 emission reduction targets that are aligned with "The Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy, and to realise the Tohoku Electric Power Group Carbon Neutral Challenge 2050" set by Tohoku Electric Power.

Table-4 shows the long-term and medium-term targets of Tohoku Electric Power. Tohoku Electric Power has set a target of achieving carbon neutrality by 2050 and halving CO₂ emissions (compared to FY2013) by 2030. This target is confirmed to be higher than the greenhouse gas emission reduction target of "The Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy.

	Table-4: Long-term and medium-term goals
2050	Carbon-neutral
2030	CO ₂ emissions halved (compared to 2013) Aim for 2 million kW of renewable energy development as early as 2030 onwards.

Table-5 shows a breakdown of Tohoku Electric Power's GHG emissions by scope, with Scope 1 accounting for more than 70% of GHG emissions. The maximum use of renewable energy and nuclear power and the decarbonisation of thermal power, as set out in the Tohoku Electric Power Group Carbon Neutral Challenge 2050, are initiatives that contribute



to the reduction of Scope 1 emissions, which account for the majority of Tohoku Electric Power's GHG emissions. In addition, according to the Tohoku Electric Power Group Integrated Report 2022, approximately 4.31 million tonnes of Scope 3 emissions are related to fuel extraction and transportation, which will be reduced in tandem with Tohoku Electric Power's efforts to reduce its consumption of fossil fuels in order to reduce Scope 1 emissions. In other words, reducing Scope 1 emissions is considered to be an important initiative in lowering Tohoku Electric's overall GHG emissions. In addition, the progress in the low-decarbonization of power generation across the country in accordance with the Government's CO₂ emission reduction targets is expected to reduce Tohoku Electric Power's Scope 3 emissions related to the electricity it receives from other companies.

Table 5. Scope 1, 2, and 5 greenhouse gas emissions			
GHG emissions	FY2020 results	FY2021 results	
Scope 1.	31,140	32,815	
(Direct GHG emissions by the business)	thousand t-CO ₂	thousand t-CO ₂	
Scope 2.	1	1	
(Indirect GHG emissions from the use of electricity, heat	L thousand t CO	L thousand t CO	
and steam supplied by other companies).			
Scope 3.	8,491	13,599	
(Indirect GHG emissions other than Scope 1 and 2)	thousand t-CO ₂	thousand t-CO ₂	

Table-5: Scope 1, 2, and 3 greenhouse gas emissions

Figure-6 and Table-6 show Tohoku Electric Power's approach towards carbon neutrality in 2050. In order to achieve its 2030 and 2050 targets, Tohoku Electric Power is accelerating CO₂ emission reductions with a focus on three pillars: maximising the use of renewable energy and nuclear power, decarbonization of thermal power, and electrification and realization of a smart society, and has set specific strategies for implementing specific technologies. In addition, the initiatives in these three pillars are closely interrelated, as shown in Figure-7.





We will consider measures besides the initiatives above, including measures involving the carbon credit market currently being studied by the Japanese government.

Figure-6: Approaches	towards	carbon	neutrality
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Enforcement Agenda	Contents		
Maximum use of renewable	[Renewable energy] The aim is to develop 2 million kW as early as possible after 2030. In the power transmission and distribution business, work on upgrading the electricity network to maintain a stable supply and expand the introduction of renewable energy.		
energy and nuclear power	[Nuclear power] The government will work to ensure the early restart of nuclear power plants and to improve their operating rates, based on the premise that safety is ensured and with the understanding of local communities.		
Decarbonization of thermal power	The development of Joetsu Thermal Power Plant No. 1 and the steady promotion of the decommissioning of ageing thermal power plants, and the expansion of biomass co-firing in coal-fired power plants, will be addressed, as well as the low-carbonisation and decarbonisation of thermal power generation through demonstrations towards decarbonisation.		
Electrification and realization of a smart society	The company will also actively work on the efficient use of energy and distributed energy through the promotion of electrification and smart society realisation projects, and contribute to the reduction of CO_2 for customers and local communities.		

Table-6: Initiatives to become carbon neutral





Figure-7: Towards carbon neutrality

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

The Board of Directors of Tohoku Electric Power has made a decision to strengthen its response to climate change and incorporate it into its management strategy through recognition of climate change risks and opportunities and consideration of response measures, as well as monitoring and supervising the progress of targets. The President and Chief Executive Officer chairs the Carbon Neutral and Environmental Management Promotion Council, which is responsible for overseeing environmental activities, including addressing climate change. After consolidating the progress in addressing climate-related issues in the framework of environmental management, the company reports annually to the Board of Directors, via the Sustainability Promotion Council, as one of the materialities.

In addition, the Tohoku Electric Power Group Environmental Committee is used to liaise with Group companies, and a system has been established to promote sustainability throughout the Tohoku Electric Power Group. Furthermore, at the practical level, actual progress is managed at the Carbon Neutral Liaison Meeting, which is attended by deputy general managers and section managers, and an implementation system has been established from the management level to the practical level.



Figure-8: Tohoku Electric Power's sustainability promotion system

Name of Fundraiser: Tohoku Electric Power Co., Inc. Name of Framework: Tohoku Electric Power Green/Transition Finance Framework Name of External Reviewer: DNV Business Assurance Japan K.K. Date of Report: 20 February 2023



II. Scope and Objectives

DNV has been commissioned by Tohoku Electric Power to provide an assessment of the Framework. The objective of the assessment by DNV is to implement an assessment on whether Tohoku Electric 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 Tohoku Electric 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, Tohoku Electric 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.

- ☑ 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

 \Box Other (please specify):



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 Finance Execution

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)
X	Selection of KPIs	\boxtimes	Bond Characteristics
\boxtimes	Calibration of SPTs	\boxtimes	Reporting

☑ Verification

*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(s) of the Review Provider

\times	Second Party Opinion		Certification
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□ 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.), 2021.
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 et al.), 2022.
10.	Sustainability Linked Loan Guidelines (SLLGLs) *4	Ministry of the Environment, 2022.

*1 The concept of climate transition focuses principally on the credibility of an issuer'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 Green projects were qualified using the Climate Bond Initiative's Climate Bond Criteria and the EU Taxonomy of Referrable Technical Criteria.

*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.) The SLBP confirms compliance with the five elements, etc., which must also be met when implementing transition-linked finance without specifying the use of the funds.



III. Responsibilities of Tohoku Electric Power and DNV

The management of Tohoku Electric 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 Tohoku Electric Power's management and other interested stakeholders in the Green/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 presented to us by Tohoku Electric 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 Tohoku Electric Power's management and 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 Schedule-3, 4, and 5. The Protocol is applicable to green/transition finance and transition-linked finance based on CTFH/CTFBG, GBP/GBGLs, GLP/GLGLS, GLP/GBGLs, GLP/GLGLS, SLBP/SLBGLs, and SLLP/SLLGLs, 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 issuer'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 environmentallymaterial 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 SLBPs/SLBGLs and SLLPs/SLLGLs

* "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.



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 Tohoku Electric 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 Assessment)
 - Creation of the Tohoku Electric Power-specific assessment protocol for the purpose of application to Tohoku Electric Power Green/Transition Finance with respect to the above and Schedule-3 to 5 below, which contribute to this assessment.
 - Assessment of documentary evidence provided by Tohoku Electric 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 Tohoku Electric Power and review 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 Tohoku Electric 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), (2) and (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-2 and 5 for details.

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

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

- In March 2021, Tohoku Electric Power formulated the Tohoku Electric Power Group Carbon Neutral Challenge 2050. In addition, the Tohoku Electric Power Group's management strategy and ESG (environment, society and governance) initiatives are inseparable, and the strategies of the Tohoku Electric Power Group's medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~" are linked to ESG, respectively. In addition, transition strategies and pathways/trajectories are shown as medium- and long-term targets up to 2030 and 2050 and approaches towards carbon neutrality.
- DNV has reviewed and confirmed, based on the scientific evidence quantified by Tohoku Electric Power, that Tohoku Electric Power's targets are aligned with the goals of the Paris Agreement.
- Tohoku Electric 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.
- Tohoku Electric Power has established a system and structure to promote the transition strategy at the management level.
- Tohoku Electric 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 "Tohoku Electric Power Group Carbon Neutral Challenge 2050" and the implementation plan, DNV confirmed that they are well aligned with Tohoku Electric Power's transition strategy. DNV

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



confirmed that the implementation plan based on the transition strategy is credible, ambitious, and achievable.

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

- Tohoku Electric Power's initiatives for transition include not only emission reductions from its own operations (Scope 1 and 2), but also activities that contribute to 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, Tohoku Electric Power's initiatives for transition will directly support the transition of the whole society, including Tohoku Electric Power itself, as an energy company taking on the challenge to achieve carbon neutrality by 2050.
- Tohoku Electric Power's approach towards carbon neutrality is well aligned with "The Sixth Strategic Energy Plan" and 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 Tohoku Electric 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 CO₂ in the whole society, thus contributing to the overall environment and supporting Tohoku Electric Power to advance its businesses. Tohoku Electric Power's planned transition strategy and transition pathways are associated with the issues that Tohoku Electric Power has identified as materiality by utilizing GRI standards^{*1}, ISO 26000, TCFD, etc., and will contribute to a significant environmental benefit (impact) from both qualitative and quantitative perspectives.

*1: 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

- Tohoku Electric Power has set a transition plan for the Tohoku Electric Power Group's CO₂ emissions that is consistent with the science-based Paris Agreement and a transition trajectory that is consistent with the Agency for Natural Resources and Energy's targets.
- DNV confirmed that Tohoku Electric 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 exceed the goals of the Agency for Natural Resources and Energy, as milestones.

Table-4	(re-posted):	Long-term and	medium-term goals

2050	Carbon-neutral
	CO ₂ emissions halved (compared to 2013)
2030	Aim for 2 million kW of renewable energy
	development as early as 2030 and beyond.

CTF-4. Implementation Transparency

- DNV has confirmed that the investment and deployment plans related to Tohoku Electric Power's transition strategy include agreement on future investment and expenditure. As a specific example, in order to realise the Tohoku Electric Power Group's medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~", the renewable energy business, including grid reinforcement of the power transmission and distribution network, and the smart society realisation business are positioned as mediumto long-term growth areas, and around 400 billion yen will be invested by around 2030. The Group also plans to make the necessary investments to maximise the use of nuclear power and to reduce and decarbonise thermal power as set out in the roadmap of the "Tohoku Electric Power Group Carbon Neutral Challenge 2050". See Figure-9 for details.
- DNV also reviewed the Framework and the "Tohoku Electric Group Carbon Neutral Challenge 2050" to ensure that the implementation was transparent and that the validity of the implementation was explained and agreed by Tohoku Electric Power.



Figure-9: Tohoku Electric Power's investment plans



(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

Tohoku Electric 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-1: (re-posted) Tohoku Electric Power Green/Transition Finance Eligibility Criteria and Project Summary

Roadmap	Eligibility	Project Overview	Project Examples	
	Criteria			
Maximum Use	Renewable	Development,	~	Wind Farm Tsugaru (onshore
of Renewable	Energy	construction,		wind power)
Energy and		operation and	✓	Tamagawa Hydroelectric Power
Nuclear Power		renovation of		Station No. 2 (hydropower)
		wind,	✓	Miyagi Osato Solar Park (solar)
		geothermal,	✓	Matsukawa Geothermal Power
		solar, hydro and		Station (geothermal)
		biomass power		
		generation		
		projects (*)		
	Nuclear	Further safety	✓	Onagawa Nuclear Power Station
	Power	improvements		Unit 2 safety works
		and continued		
		safe/stable		
		operation		
	Power Grid	Upgrading	~	Tohoku-Tokyo interconnection line
		through grid	✓	Northern Tohoku Area Power
		maintenance and		Supply Recruitment Process
		digitalisation,		
		storage of		
		surplus		
		renewable		
		energy, P2G, etc.		
	LNG Thermal	Decarbonisation	~	Mixed-firing project at Niigata
Decarbonization	Power	using hydrogen		Thermal Power Station, No. 5.
of Thermal		and ammonia,	~	Development of Joetsu Thermal
Power		and		Power Plant 1.



		High efficiency of		
	Coal Thermal Power Fading Out	Decarbonisation using biomass and ammonia Discontinuation	✓ ✓ ✓	Mixed burning f black pellets at Noshiro Thermal Power Station. Production of the biomass raw materials on unused land at our power stations East Niigata Thermal Power
	Inefficient Power Sources	of Ageing Firepower		Station Port No. 1 and Port No. 2 decommissioned.
	CCUS	Studying CCUS	~	Converting the CO2 generated by thermal power sources of methane gas
Electrification and the Realization of a Smart Society	Home and Business	Heat pump Electrification and Sales of Renewable Energy Menus through Credit Purchases	✓ ✓	Installation of Electrification Systems. More End-User-Friendly Renewable Electricity.
	Transport	Promotion of Electric Vehicles, etc.	~	Electrification of Company-Owned Vehicles (*)
	Industry	Energy Conversion of Production Processes, etc.	~	Electrification of Heat Resources (*)
	Use of Decentralised Energy	VPP Projects Using Private Solar and Storage Battery Services, etc.	✓ ✓	Aozora Charge service (*) The Renewable Aggregation Business (*)

Projects marked with an asterisk (*) in Table-1 are green eligible projects; thus, Transition Finance and Green Finance may use them as a source of funds.

DNV has confirmed that Tohoku Electric 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 Tohoku Electric Power's investment plan for implementation of its transition strategy. For refinancing, projects that



have been disbursed within 36 months retroactively from the date of the financing are eligible for the refinancing.

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.

Use of proceeds categories as per GBP/GLP

\boxtimes	Renewable Energy	
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- □ Pollution prevention and control
- Terrestrial and aquatic biodiversity conservation
- □ Sustainable water management
- □ Eco-efficient products, production technologies and processes

- Energy efficiency (energy savings)
- Sustainable management of living natural resources
- ☑ Clean Transportation
- □ Climate change adaptation
- Green buildings with regional, national or internationally recognized standards and certifications

- \Box Other (please specify).
- □ It is undecided at the time of bond issuance, but is expected to be line with the GBP/GLP classification or other eligible areas not listed in the GBP/GLP at this time.



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

In selecting Green/Transition projects, the office department with jurisdiction over each project selects project candidates based on the "Tohoku Electric Power Group Carbon Neutral Challenge 2050" and the eligibility criteria in Table-1, which are then approved through an appropriate internal decision-making process. In addition, the following processes for reducing environmental and social risks, which have been defined in advance in the framework, will be implemented.

These have been established as internal processes at Tohoku Electric Power and the DNV confirmed that they will be implemented in accordance with the appropriate processes.

DNV also confirmed that the Green/Transition projects implemented by Tohoku Electric Power are consistent with Tohoku Electric Power's management and environmental policies and that they are aligned with the transition strategy, targets, and pathways.

<Processes for reducing environmental and social risks>

Tohoku Electric Power will accurately monitor legal amendments and policy trends and ensure compliance with environmental laws and regulations for all its operations. In addition, through the Tohoku Electric Power Group Environmental Management System (T-EMS) and other programmes, Tohoku Electric Power will continuously improve the level of environmental management at each company in the corporate group and strive to further reduce environmental risks.

Evaluation and Selection

- The project is consistent with the
 Fundraiser's achievement of
 environmental contribution goals.
- The project is eligible for use of proceeds by 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 on Responsibilities and Accountability
 - Evaluation/selection criteria based on
 Evaluation/selection criteria based on
 Internal assessment
 - \Box Other (please specify):

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GBP/GLP-3. Management of Proceeds

DNV confirmed how Tohoku Electric Power will track and manage proceeds during the period from bond issuance to redemption/repayment of Green/Transition Finance. With respect to the proceeds from the Green/Transition Finance, based on Tohoku Electric Power's internal control procedures, the Finance and Accounting 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.
- \Box 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	\boxtimes	Allocation to both existing and new
			investments
\times	Allocation to individual (project)		Allocation to a portfolio of disbursements
	disbursements		
П	Disclosure of portfolio balance of	\boxtimes	Other (please specify): includes allocation

JDisclosure of portfolio balance of
unallocated proceedsImage: ConstructionUnallocated proceedsUnallocated proceeds


GBP/GLP-4. Reporting

DNV has confirmed that the following information will be disclosed in the Tohoku Electric Power Group Integrated Report or on the Tohoku Electric Power website as part of the reporting on the allocation of proceeds and impact reporting until Tohoku Electric Power has allocated the full amount of proceeds raised through the green/transition finance. Even after the completion of the allocation, any significant changes in the progress of the projects subject to allocation or in the effects of environmental benefits will be disclosed.

<Reporting on Allocation Status>

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

<Impact Reporting>

As for impact reporting, all or part of the information illustrated in Table-7 will be disclosed, within the limits of confidentiality and as far as is reasonably practicable. Please note that the impact reporting indicators are illustrative and are subject to change in the future.

Eligibility	Project	Project Examples	Example of Impact
Criteria	Overview		Reporting Items
Renewable Energy	Development, construction, operation and renovation of wind, geothermal, solar, hydro and biomass power generation projects (*)	 ✓ Wind Farm Tsugaru (onshore wind power) ✓ Tamagawa Hydroelectric Power Station No. 2 (hydropower) ✓ Miyagi Osato Solar Park (solar) ✓ Matsukawa Geothermal Power Station (geothermal) 	 ✓ Annual CO₂ emission reductions by renewable energy type (t-CO₂/y) ✓ Installed capacity by renewable energy type (MW)
Nuclear Power	Further safety improvements and continued safe/stable operation	 ✓ Onagawa Nuclear Power Station Unit 2 safety works 	 ✓ Installed capacity (MW) ✓ Annual CO₂ emission reductions (t-CO₂/y) ✓ Annual electricity production (MWh)
Power Grid	Upgrading through grid maintenance and digitalisation, storage of surplus renewable energy, P2G, etc.	 ✓ Tohoku-Tokyo interconnection line ✓ Northern Tohoku Area Power Supply Recruitment Process 	 ✓ Outline of capital investment, etc. ✓ Reduction in renewable energy output suppression (estimated)

Table-7: An example of impact reporting



LNG Thermal Power Coal Thermal Power	Decarbonisation using hydrogen and ammonia, and High efficiency of thermal power Decarbonisation using biomass and ammonia	✓ ✓ ✓ ✓	Mixed-firing project at Niigata Thermal Power Station, No. 5. Development of Joetsu Thermal Power Plant 1. Mixed burning f black pellets at Noshiro Thermal Power Station. Production of the biomass raw materials on unused land at our power stations	 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ 	Project overview. Annual CO ₂ emission reductions (t-CO ₂ /y) Annual electricity production (MWh) Project overview. Annual CO ₂ emission reductions (t-CO ₂ /y) Annual electricity production (MWh)
Fading Out Inefficient Power Sources	Discontinuation of Ageing Firepower	~	East Niigata Thermal Power Station Port No. 1 and Port No. 2 decommissioned.	✓ ✓ ✓	Project overview. Annual CO ₂ emission reductions (t-CO ₂ /y) Annual electricity production (MWh)
CCUS	Studying CCUS	~	Converting the CO2 generated by thermal power sources of methane gas	~	Project overview.
Home and Business	Heat pump Electrification and Sales of renewable Energy Menus through Credit Purchases	× ×	Installation of Electrification Systems. More End-User-Friendly Renewable Electricity.	× × ×	Electrification introduction results Electricity sold (MWh) Credit purchases
Transport	Promotion of Electric Vehicles, etc.	~	Electrification of Company- Owned Vehicles (*)	~	EV introduction results
Industry	Energy Conversion of Production Processes, etc.	~	Electrification of Heat Resources (*)	~	Electrification introduction results
Use of Decentralised Energy	VPP Projects Using Private Solar and Storage Battery Services, etc.	✓ ✓	Aozora Charge service (*) The Renewable Aggregation Business (*)	✓ ✓	Service introduction results Annual CO ₂ emission reductions (t-CO ₂ /y)



Reporting on Allocation Status:

\boxtimes	On a pr	oject-by-project basis	\boxtimes		On a project portfolio basis
	On an ir	ndividual related bond basis			Other (please specify):
	Inforr	mation reported:			
	\boxtimes	Amount of allocated proceeds]	Share of total investment amount allocated by proceeds from Green Finance
		Other (please specify):			
	Frequ	ency:			
	\boxtimes	Annual]	Semi-annual
		Other (please specify):			
Impa	ct Repo	orting (Environmental Benefit	s):		
\boxtimes	On a pro	oject-by-project basis	\boxtimes	On	a project portfolio basis
	On an ir	ndividual related bond basis		Oth	er (please specify):
	Frequ	ency:			
	\boxtimes	Annual			Semi-annual
		Other (please specify):			
	Info	rmation Reported (Expected/Po	st-fu	ndir	ng Impact):
	\boxtimes	GHG emissions/reduction			□ Energy reduction
	\boxtimes	Other ESG evaluation items (please specify):	Insta (MW	alled 'h), e	capacity (MW), annual electricity production etc.
Mean	s of Dis	closure:			
\boxtimes	Includeo report)	d in the financial report (integrated		Inc	luded in the sustainability report
	Includeo	d in the extraordinary report	\boxtimes	Oth	er (please 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 the Five Requirements of SLBP/SLLP

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

- DNV reviewed Tohoku Electric Power's KPIs related to sustainability and confirmed that the selected KPIs are important to Tohoku Electric Power and relevant to its core transition strategy and sustainability management.
- DNV confirmed that Tohoku Electric Power's Transition Link Finance KPIs and SPTs, shown in Table-2, are closely related to the "carbon neutrality challenge" among the materialities identified by Tohoku Electric Power. In addition, it was confirmed through interviews that the KPI CO₂ emissions from retail electricity account for a large proportion of the CO₂ emissions in the Tohoku Electric Power Group and are an important indicator in the Tohoku Electric Power Group's carbon neutrality efforts.
- DNV confirmed that the KPIs selected by Tohoku Electric 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 are appropriately set as comparable indicators.
- DNV believes that Tohoku Electric Power's KPI initiatives are closely related to the goals set out in the Tohoku Electric Power Group Carbon Neutral Challenge 2050 and will contribute to the realisation of Tohoku Electricity Power Group's medium- to long-term vision "Working Alongside next ~Yori, Sou, Chikara~", as well as being an important driver for profit growth. The KPIs are also considered to contribute to both the goals related to Tohoku Electric Power's sustainability management and Tohoku Electric Power's business strategy.
- DNV concludes that CO₂ emissions as a KPI are measurable according to a consistent methodology (Act on Promotion of Global Warming Countermeasures), are externally verifiable and can be benchmarked against external references. DNV concludes that CO₂ emissions are a robust and reliable indicator.
- DNV has confirmed that the KPIs selected by Tohoku Electric Power provide a clear assessment scope and calculation methodology. For more information, see Schedule-5.



Selected KPIs

- ✓ KPI: CO_2 emissions (*)
- (*) Emissions from retail electricity

Definition, Scope and Parameters

- ☑ Clear definition of each selected KPIs ☑ Clear calculation methodology
- \Box Other (please specify):

Relevance, Robustness and Reliability of the Selected KPIs

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



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

- DNV confirmed that it can be estimated that the substantive contribution of Tohoku Electric Power to the reduction of CO₂ emissions exceeds the target more than in "The Sixth Strategic Energy Plan", based on the perspective that the SPTs shown in Table-2 support the reduction of CO₂ emissions set in "Tohoku Electric Power Group Carbon Neutral Challenge 2050." DNV also confirmed SPTs shown in Table-2 is ambitious, realistic, and meaningful.
- Based on the "Tohoku Electric Power Group Carbon Neutral Challenge 2050" and the information provided by Tohoku Electric Power, DNV concluded that Tohoku Electric Power has an inherent concrete plan to achieve the SPT, that the SPT is realistic, that the plan is feasible and that it is likely to be achieved.
- The SPT set by Tohoku Electric Power of halving emissions by 2030 compared to 2013 (22.82 million t-CO₂) is more ambitious than the target set in "The Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy of reducing CO₂ emissions by 46% by 2030 (compared to 2013), which goes beyond "Business as Usual."
- DNV has confirmed that the SPTs set by Tohoku Electric Power are tied to the improvement of the KPIs. Tohoku Electric Power's KPI/SPT efforts are expected to be a driving force in the implementation of Tohoku Electric's Transition (Sustainability) strategy.
- DNV has ensured that the process of setting SPT targets is based on the right combination of benchmarking approaches.
 - DNV confirmed that the selected KPI CO₂ emissions have been measured for at least 10 years and are disclosed in the Tohoku Electric Power Group Sustainability Report 2022, which provides guidelines for setting targets up to 2030.
 - DNV confirmed that the set SPT of half the 2030 reduction (compared to 2013) is at a level that exceeds the 2030 target of 46% set by the Agency for Natural Resources and Energy.
 - DNV concludes that the SPTs set are appropriately related to the CO₂ emission reduction targets set by the Agency for Natural Resources and Energy. The Agency's targets have been developed with a view to aligning them with those of the Paris Agreement and can be judged to be based on scientific evidence.
- DNV confirmed that SPT target setting has been adequately disclosed as follows.
 - The timeline for achieving the SPT is 2030. Milestone SPTs may be defined for redemption periods, etc.
 - CO₂ The base year for the SPT on emission reductions is 2013. This is consistent with the base year (2013) set by the Agency for Natural Resources and Energy.



• It details how CO₂ emission reductions can be achieved through the approach towards carbon neutrality described in the "Tohoku Electric Power Group Carbon Neutral Challenge 2050".

Selected SPTs

✓ SPT: halve by 2030 compared to 2013 (22.82 million t-CO₂)

(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):
Bench	marking approach		
\boxtimes	Fundraiser's own performance		Fundraiser's industry peers
\boxtimes	Reference to scientific evidence		Other (please specify):
Additi	onal disclosure		
\boxtimes	Explanation of possible recalculations or adjustments	\boxtimes	Explanation of the fundraiser's strategy for
\boxtimes	Identification of key factors that may affect the achievement of SPTs		Other (please specify):



SLBP/SLLP-3 Bond/Loan Characteristics

DNV has confirmed that the financial and structural characteristics of the Transition-Linked Finance (bond or loan) executed under the Framework vary depending on the timing of the observation of certain SPTs and trigger events with performance requirements. The details, including terms and conditions, will be determined after discussions at Tohoku Electric Power's internal meetings and will be disclosed in the legal disclosure documents for the bond or the loan agreement, as the case may be, each time the financing is executed.

- DNV confirmed that Tohoku Electric Power has considered appropriate fallback mechanisms (fallback alternatives) and as a result has decided not to set up another SPT or calculation method at this time as the risk of not being able to calculate or observe is very small.
- DNV confirmed that there is a possibility that changes may be made to the KPIs and SPTs after discussions at internal meetings, etc., if there are reasonable reasons, such as changes in the business environment / business structure / KPIs at Tohoku Electric Power, whether such events are due to external factors or as a result of management decisions by Tohoku Electric Power. The company has confirmed that the KPIs and SPTs may be changed for reasonable reasons.
- DNV confirmed that if Tohoku Electric Power changes its KPIs and SPTs, it intends to disclose this in the statutory disclosure documents for the bonds or in the loan agreement documents.

Financial impact

- ☑ Variation in interest rates
- Other (please specify): other financial incentives (determined on the basis of the fundraiser's internal criteria)

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.
 - KPI performance for SPT: 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 to the lender in the Integrated Report or on the website (in the case of loan only).
 - SPT achievement status: will be verified annually by an independent third • party and used for determination of the financial characteristics. When targets set by the Agency for Natural Resources and Energy were changed: an evaluation by an external evaluation body may be obtained after consultation with the relevant parties, including setting evaluation criteria for the SPT with a level of ambition equal to or higher than the conventional evaluation criteria.

Information reported

\boxtimes	Performance of the selected KPIs	\boxtimes	Verification assurance report
	Level of ambition of the SPTs		Other (please specify): Information on the financial impact when implementing trigger event determination. Validity of the adjustment and recalculation result of KPIs and SPTs, if necessary.
Frequ	ency		
\boxtimes	Annual		Semi-annual
	Other (please specify):		
Means	s of disclosure		
	Information published in financial report		Information published in sustainability report
	Information published in ad hoc	\boxtimes	Other (please specify): disclosed on the
	documents		case of loan only)
	Reporting externally reviewed		
	- 6		
Levei	of assurance on reporting		
\boxtimes	Limited assurance		Reasonable assurance
			Other (please specify):



SLBP/SLLP-5 Verification

DNV confirmed that Tohoku Electric Power planned to undergo independent verification of KPI and SPT-related performance at least once a year by qualified external assessment agency.

Information reported \times Limited assurance Reasonable assurance Other (please specify): Frequency Semi-annual \times Annual Other (please specify): **Material changes** \boxtimes Perimeter KPI methodology SPTs calibration



VII. Assessment Conclusion

On the basis of the information provided by Tohoku Electric Power and the work undertaken, it is DNV's opinion that the Tohoku Electric Power's Green/Transition Finance Framework meets the criteria established in the Protocol, and that they are aligned with the following stated definition or purpose of Green/Transition Finance and Transition-Linked Finance for bonds and loans that specified use of Proceeds or for the general purposes, within the CTFH/CTFBG, GBP/GLP, GBGLs/GLGLs, SLBP/SLBGLs, and SLLP/SLLGLs.

- "Enable capital-raising and investment for new and existing projects with environmental benefits"
- "Provide an investment opportunity with transparent sustainability credentials"
- "Climate Transition Finance is important (as climate transitions) through KPIs and SPTs, quantitative, pre-determined, ambitious, and regularly monitored and externally validated and encourage the achievement of ESG (in terms of climate transitions) of fundraisers"

DNV Business Assurance Japan K.K.

20 February 2023

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Much.

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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 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 the Fundraiser has provided the 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 are met. 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 are met. 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 In our work we have relied on the information and the facts presented to us by the Fundraiser. Thus, DNV shall be liable 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 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 Nominated Projects List

The projects listed in the table are the nominated projects that have been evaluated for eligibility at the time of pre-issue eligibility assessment (as of January 2023). In future Green/Transition Finance issued under the Tohoku Electric Power's Green/Transition Finance Framework, one or more of the Eligible Criteria (nominated eligible projects) described in Schedule-1 as per its labelling and the use of proceed are reported in the pre-financing or post-financing reports. If additional green/transition projects are included, project eligibility will be evaluated in advance by Tohoku Electric Power in accordance with the process based on Tohoku Electric Power Finance Framework and, if necessary, DNV will evaluate them in a timely manner.

Roadmap	Eligibility Criteria	Project Overview	Project Examples
Maximum Use of Renewable Energy and	Renewable Energy	Development, construction, operation and renovation of wind, geothermal, solar, hydro and biomass power generation projects (*)	 Wind Farm Tsugaru (onshore wind power) Tamagawa Hydroelectric Power Station No. 2 (hydropower) Miyagi Osato Solar Park (solar) Matsukawa Geothermal Power Station (noothermal)
Nuclear Power	Nuclear Power	Further safety improvements and continued safe/stable operation	 Onagawa Nuclear Power Station Unit 2 safety works
	Power Grid	Upgrading through grid maintenance and digitalisation, storage of surplus renewable energy, P2G, etc.	 Tohoku-Tokyo interconnection line Northern Tohoku Area Power Supply Recruitment Process
Decarbonization of Thermal Power	LNG Thermal Power	Decarbonisation using hydrogen and ammonia, and High efficiency of thermal power	 ✓ Mixed-firing project at Niigata Thermal Power Station, No. 5. ✓ Development of Joetsu Thermal Power Plant 1.



	Coal Thermal Power	Decarbonisation using biomass and ammonia	× ×	Mixed burning f black pellets at Noshiro Thermal Power Station. Production of the biomass raw materials on unused land at our power stations
	Fading Out Inefficient Power Sources	Discontinuation of Ageing Firepower	~	East Niigata Thermal Power Station Port No. 1 and Port No. 2 decommissioned.
	CCUS	Studying CCUS	\checkmark	Converting the CO2 generated by thermal power sources of methane gas
	Home and Business	Heat pump Electrification and Sales of Renewable Energy Menus through Credit Purchases	× ×	Installation of Electrification Systems. More End-User-Friendly Renewable Electricity.
Electrification and the	Transport	Promotion of Electric Vehicles, etc.	✓	Electrification of Company-Owned Vehicles (*)
Society	Industry	Energy Conversion of Production Processes, etc.	~	Electrification of Heat Resources (*)
	Use of Decentralised Energy	VPP Projects Using Private Solar and Storage Battery Services, etc.	✓ ✓	Aozora Charge service (*) The Renewable Aggregation Business (*)

Projects marked with an asterisk (*) in Table-1 are green eligible projects; thus, Transition Finance and Green Finance may use them as a source of funds.

*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 CO₂ emission standards that meets the criteria for green projects). The eligibility criteria 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
CO ₂ Emissions (*)	The KPIs have been set for items closely related to the "carbon neutrality challenge" within Tohoku Electric Power's materiality.
(*) Emissions from retail electricity	It is a core KPI towards the realization of Tohoku Electric Power's 2050 carbon neutrality target and can be measured quantitatively and continuously in accordance with the Act on Promotion of Global Warming Countermeasures

SPTs Sustainability Performance Targets

SPT	Description
Halve by 2030 compared to 2013 (22.82 million t-CO ₂)	The SPT is an ambitious, meaningful and realistic target set to accelerate Tohoku Electric Power's Carbon Neutral Challenge 2050 efforts, surpassing the 2030 target of 46% reduction set by the Agency for Natural Resources and Energy. Reference: CO ₂ emissions in FY2013 were 45.63 million t-CO ₂ (Source: Tohoku Electric Power Group Sustainability Report 2022)



Schedule-3 Transition Finance Framework Eligibility Assessment Protocol

The following checklists (1-4) are DNV evaluation procedures created for Tohoku Electric Power Transition Finance (specific use of proceeds and general purposes) from Tohoku Electric Power's Green/Transition Finance Framework, based on the disclosure requirements of the CTFH and CTFBG.

The "confirmed documents" in the Work Undertaken include public or private documents (internal documents of the issuer or the fundraiser), etc., and are provided by Tohoku Electric Power as evidence of eligibility judgment for DNV.

*"Issuer" and "investor" may be read as "financier" and "lender" respectively in the disclosure requirements below and elsewhere 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 and<br="" information="">indicators>Long-term goal consistent with the Paris Agreement target (to keep global average temperature increase well below at least 2°C above pre-industrial levels, ideally limited to 1.5°C).</suggested> Reasonable medium-term objectives on a trajectory towards long-term goals. Disclosure by issuers on their measures to decarbonise and their strategic plans towards long-term goals that are 	 Confirmed Documents: Framework The Sixth Strategic Energy Plan. Transition Roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Medium- and Long-Term Vision Tohoku Electric Power Group Carbon Neutral Challenge 2050 project list 	Tohoku Electric Power has established a framework and has also introduced various plans and initiatives to manage and enhance the organisation's environmental sustainability and related performance against Tohoku Electric Power's broader environmental strategy. DNV has reviewed and confirmed that Tohoku Electric Power's targets are equivalent to achieving the Paris Agreement targets, in that they are based on an approach to achieving carbon neutrality in 2050, a science-based long-term goal quantified by Tohoku Electric Power. Based on the identification of risks and opportunities and scenario analysis using the TCFD guidance, Tohoku Electric Power has set a corporate strategy in environmental aspects that are important for its business model. In March 2021, Tohoku Electric Power formulated the Tohoku Electric Power Group Carbon Neutral Challenge 2050, in which it outlines its approach towards carbon neutrality. It sets a long-term goal of carbon neutrality in 2050, which is consistent with the goals of the Paris Agreement, and sets medium-term targets to realise that goal. Tohoku Electric Power's approach discloses a strategic plan to realise a transition to carbon neutrality (Transition).



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 aligned with the goals of the Paris Agreement. Clear oversight and governance of transition strategies Evidence of a broader sustainability strategy to contribute to the UN Sustainable Development Goals (SDGs) as well as mitigate associated negative any intermental and as sink outernal 		Specifically, Tohoku Electric Power's Transition Strategy incorporates the reduction targets and policies necessary to realise Japan's 2050 carbon neutrality and Paris Agreement targets. Furthermore, when the need arises to review initiatives to achieve sustained emission reductions in the future, it is planned to do so based on the progress in the development of each technology and in accordance with the timeline as appropriate.
		effects.		Tohoku Electric Power regards climate change response, including the implementation of the Transition Strategy, as one of its most important management issues, and has established a system and mechanism to promote the initiatives set out in Tohoku Electric Power Group Carbon Neutral Challenge 2050 and Tohoku Electric Power's approach towards carbon neutrality at the management level. The company has established a system and mechanism to promote the initiatives set out in the " Tohoku Electric Power Group Carbon Neutral Challenge 2050" and Tohoku Electric Power's approach to carbon neutrality at management level.
				Based on the Framework, the "Tohoku Electric Power Group Carbon Neutral Challenge 2050" and the implementation plan provided by Tohoku Electric Power, DNV confirmed that they are well aligned with Tohoku Electric Power's Transition Strategy. Through the evaluation, DNV confirmed that the implementation plans based on the Transition Strategy are credible, ambitious and achievable.
2	Business model environmental materiality	The planned climate transition trajectory should be relevant to the environmental material parts of the issuer's business model, taking into account potential future scenarios	Confirmed Documents: - Framework - The Sixth Strategic Energy Plan.	DNV assessed whether the key activities related to Tohoku Electric Power's operations corresponded to Tohoku Electric



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
Ref.	Criteria	Requirements which may impact on current determinations concerning materiality.	 Work Undertaken Transition Roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Medium- and Long-Term Vision Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with relevant stakeholders. 	DVV Findings Power's Transition Strategy, which was assessed as contributing to the environment. The greenhouse gas emissions of the Tohoku Electric Power Group (FY2020 and FY2021 results) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 and FY2021 results) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 and FY2021 results) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 and FY2021 results) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 and FY2021 results) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 result) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 result) are as follows: Image: Comparison of the Tohoku Electric Power Group (FY2020 result) are as follows: Image: Comparison of the tohoku Electric Power Group (FY2020 result) are as follows: Image: Comparison of the tohoku Electric Power Group (FY2020 result) are as follows: Image: Comparison of the tohoku Electric Power Group (FY2020 result) are as follows: Image: Comparison of the tohoku Electric Power (Fy2020 result) are as follows: Image: Comparison of the tohoku Electric Power (Fy2020 result) are as follows: Image: Comparison of the tohoku Electric Power (Fy2020 result) are as follows: Image: Comparison of the tohoku Electric Power (Fy2020 result) are as a follows: Image: Compariso
				formulated by the Agency for Natural Resources and Energy, and their specific implementation plans and targets have been set and quantified in the absolute sense that they must allow for optimal solutions and further improvements The following are set and quantified in absolute terms.
				DNV confirmed that Tohoku Electric Power's plan to implement its transition strategy is closely related to the activities of Tohoku Electric Power's core business and to activities that contribute to the reduction of CO ₂ in society as a whole, contributing to the environmental aspects of society



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				as a whole and supporting the promotion of Tohoku Electric Power's business. Tohoku Electric Power's planned transition strategies and transition pathways are linked to the materialities identified by Tohoku Electric Power using GRI standards ^{*1} , ISO 26000, SASB ^{*2} , TCFD, etc., and contribute to significant environmental improvement effects (impacts) from qualitative and quantitative perspectives. The following are some examples.
				*1: Global Reporting Initiative (international standard providing ESG-related reporting, management and analytical methods).
				*2: Disclosure standards developed by the Sustainable Accounting Standards Board on ESG factors that are expected to have a high future financial impact.
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 recognized, science-based trajectories where such trajectories exist; be publicly disclosed (ideally in mainstream financing filings), include 	 Confirmed Documents: Framework The Sixth Strategic Energy Plan. Transition roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Medium- and Long-Term Vision 	Tohoku Electric Power has a transition plan that is consistent with the science-based Paris Agreement and a transition trajectory that is consistent with the targets formulated by the Agency for Natural Resources and Energy. The plan provides a realistic achievement and pathway for CO_2 emission reductions in absolute terms and a plan to reduce CO_2 emissions in absolute (gross) terms in order to maintain defined levels in the future. DNV confirmed that the transition strategies of Tohoku Electric Power have been quantified as absolute values or ratios based on a consistent measurement methodology based on prescribed assumptions. Transition targets are set voluntarily based on initiatives such as the TCFD for sustainable CO_2 emission reductions, and they are



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings	
		 interim milestones, and; be supported by independent assurance or verification <suggested and="" indicators="" information=""></suggested> Short, medium, and long-term greenhouse gas reduction targets aligned with Paris Agreement; Baseline Scenario utilized, 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 	 Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with relevant stakeholders. 	consistent with Resources and Specifically, To goals for trans 2050 2030 Tohoku Electric reducing emiss 2), but also on reduction of ot realisation of so as an importar strategies for o Tohoku Electric transition of so as an energy o neutrality in 20 Transition initia disclosed in the Report.	 the policies of the Agency for Natural Energy, which serves as a benchmark. bhoku Electric Power has defined the following itions: Carbon-neutral CO₂ emissions halved (compared to 2013) Aim for 2 million kW of renewable energy development as early as 2030 and beyond. c Power's CO₂ reductions focus not only on sions from its own operations (Scope 1 and a Scope 3 and activities that contribute to the ther companies. This contributes to the supply-side and demand-side carbon neutrality in tinitiative presented in the various plans and decarbonisation in Japan. In other words, c's transition efforts directly support the brocety as a whole, including its own company, company challenging to achieve carbon 500.
4	Implementation transparency	Market communication in connection with the offer of a financing instrument which has the 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	 Confirmed Documents: Framework The Sixth Strategic Energy Plan. Transition Roadmap for the power sector 	DNV confirmed Electric Power' future investm renewable ene the power tran smart society r medium- to lo	d that the investment plan related to Tohoku 's transition strategy includes agreement on ent and expenditure. Specifically, the ergy business, including grid reinforcement of nomission and distribution network, and the realisation business are positioned as ng-term growth areas for the realisation of



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 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 	 Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Medium- and Long-Term Vision Tohoku Electric Power Group Carbon Neutral Challenge 2050 project list Interviews with relevant stakeholders.	 the "Working Alongside, next ~Yori Sou, Chikara~" strategy, and around 400 billion yen will be invested by around 2030, while the "Tohoku Electric Power Group Carbon Neutral Challenge". The company also plans to make the necessary investments to maximise the use of nuclear power and to reduce and decarbonise thermal power, as set out in the roadmap of the "Tohoku Electric Power Group Carbon Neutral Challenge 2050". This encompasses projects implemented through green/transition finance. As an overall investment plan (investment amount) for the future, DNV has identified a plan whereby the investments required to implement the transition strategy will be carried out according to the appropriate timelines in accordance with internal management systems and processes, taking into account CTF-1 to CTF-3. DNV confirmed that Tohoku Electric Power plans to use the funds for expenditure on the development, construction, operation and refurbishment of the potential Transition Eligible Projects set out in Schedule-1, as well as for research and development-related expenditure.



Schedule-4 Green Finance (or transition finance with specific use of proceeds) Eligibility Assessment Protocol

The checklist below (GBP/GLP-1 to GBP/GLP-4) is a DNV evaluation procedure created for Tohoku Electric Power's Green/Transition Finance Eligibility Assessment (Green Finance and Transition Finance with specific use of proceeds) based on the requirements of GBP/GBGLs and GLP/GLGLs. "Confirmed documents" in the "Work Undertaken" includes documents inside the issuer and is provided by Tohoku Electric Power as evidence of eligibility judgment for DNV.

In Schedule-4, it is referred to as GBP or GLP according to the practice, but this is the standard to be referred to in the case of financing that specifies the use of proceeds such as transition projects in Transition Finance that specifies the use of proceeds based on CTFH and CTFBG, so please read as the meaning of the Green/Transition as appropriate.

GBP/GLP-1 Use of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	Type of funds	 The types of green/transition finance are classified into one of the following types defined by GBP. (Standard) Green/transition Bond/Loan Green/transition Revenue Bond/Loan Green/transition Project Bond/Loan Other 	Confirmed Documents: - Framework Interviews with relevant stakeholders.	DNV has identified the following categories of Green/Transition Finance through its assessment work: (Standard) Green/transition Finance
1b	Green/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 Interviews with relevant stakeholders	DNV has confirmed that the Green/Transition Finance is intended to fund a wide range of green/transition projects focused on Tohoku Electric Power's environmental objectives and transition strategy as set out in the Framework and Schedule-1. If green/transition projects have been pre- selected prior to the execution of the finance, this will be disclosed in legal documents.



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				Through the assessment, DNV concludes that the nominated green/transition-eligible projects provide tangible and genuinely environmental benefits.
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 issuer and, where possible, quantitatively demonstrated.	Confirmed Documents: - Framework - Project List Interviews with relevant stakeholders.	The Green/Transition project was found to have clear environmental benefits, including reduced CO ₂ emissions, and its environmental improvement benefits will be reported on an annual basis.
1d	Refinancing rate	If all or part of the proceeds are used or may be used for refinancing, the issuer 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 Interviews with relevant stakeholders	DNV confirmed that DNV and Tohoku Electric Power are planning to clarify "the approximate amount (or percentage) of the portion of the procured funds allocated to refinancing" through reporting on the status of the fund appropriation.



GBP/GLP-2 Process for Project Evaluation and Selection

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a.	Project selection process	 Green/Transition bond issuers 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 issuer determines that the project in question is included in the business category of a qualified green/transition 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 relevant stakeholders	DNV confirmed that Tohoku Electric Power has a process for determining the eligibility of projects to use Green/Transition Finance proceeds, which is outlined in the Framework.
2b	Issuer's Environment al and Social Governance Framework	In addition to criteria and certifications, the information published by issuers regarding the green/transition bond process also considers the quality of performance of the issuer's framework and environmental sustainability.	Confirmed Documents: - Framework Interviews with relevant stakeholders.	DNV confirmed that when selecting projects, Tohoku Electric Power followed a process of environmental and social risk reduction through the Tohoku Electric Power Group Environmental Management System (T- EMS), among others.



GBP/GLP-3 Management of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
За	Tracking procedure-1	The net proceeds from of Green/Transition bonds should be managed in sub-accounts, included in sub-portfolio, or otherwise tracked. It should also be certified by the issuer in a formal internal process related to the issuer's investment and financing operations for the Green/Transition Project.	Confirmed Documents: - Framework Interviews with relevant stakeholders.	Confirmation that the proceeds relating to funds raised through Green/Transition Finance are traceable by attaching an asset management code to the funds raised and are evidenced in the verification process in accordance with internal regulations.
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 relevant stakeholders.	DNV confirmed that, from Green/Transition Finance execution to redemption, Tohoku Electric Power plans to manage the total amount of eligible projects to be no less than the Green/Transition Finance execution amount at regular intervals.
3c	Temporary holding	If no investment or payment has been made in a qualified green project, the issuer should also inform the investor of the possible temporary investment method for the balance of unallocated proceeds.	Confirmed Documents: - Framework Interviews with relevant stakeholders.	DNV confirmed that Tohoku Electric Power intends to manage the proceeds in cash or cash equivalents until the appropriation of the funds is determined. It also confirmed that it intends to clarify the balance of unallocated funds through reporting on the status of the appropriation of funds.



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 issuer 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	 DNV has confirmed that Tohoku Electric Power intends to include the following as disclosure information. Impact Reporting intend to disclose any or all of the following items, as far as is reasonal practicable and within the limits of confidentiality obligations. The Government also confirmed that it intends to disclose any significant changes in the progress of the projects covered by the appropriation or in the effectiveness of environmental improvements, even after the appropriation has been complete [Funding appropriation reporting]. Balance of unappropriated funds (as a percentage of the amount raised in the case of loans) Amount allocated (as a percentage of the amount raised in the raised allocated to refinancing 	
				eligibility	Example of impact reporting items
				criteria	
				Renewable Energy	 ✓ Annual CO₂ emission reductions by renewable energy type (t-CO /y)₂ ✓ Installed capacity by renewable energy type (MW)
				Nuclear Power	 ✓ Installed capacity (MW) ✓ Annual CO₂ emission reductions (t-CO /y)₂



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings		
					✓ An (M	nual electricity production Wh)
				Power Grid	 ✓ Ou ✓ Re out 	Itline of capital investment, etc. duction in renewable energy tput suppression (estimated)
				LNG Thermal Power	✓ Pro✓ An	pject overview. nual CO ₂ emission reductions
					(t- ✓ An (M	CO ₂ /y) nual electricity production Wh)
				Coal Thermal Power	✓ Pro ✓ An (t-	bject overview. nual CO ₂ emission reductions CO $/y$) ₂
					✓ An (M	nual electricity production Wh)
				Fading Out Inefficient Power Sources	 ✓ Pro ✓ An (t ✓ An 	bject overview. nual CO_2 emission reductions $CO /y)_2$ nual electricity production
				CCUS	(M ✓ Pro	Wh) piect overview.
				Home and Business	 ✓ Ele ✓ Ele ✓ Ele ✓ Cre 	ectrification introduction results ectricity sold (MWh) edit purchase results
				Transport	✓ EV	introduction results
				Industry	✓ Ele	ectrification introduction results
				Decentralised Energy	✓ Sel ✓ An (t-	nual CO ₂ emission reductions CO $/y$ ₂



Schedule-5 Transition-Linked Finance Eligibility Assessment Protocol

The transition financing of Tohoku Electric Power may be executed as a General Corporate Purposes (GCP) transition bond or loan, and the five factors of SLBP and SLLP required for the eligibility assessment of a bond or loan without a specific use of proceeds as stipulated in the CTFH and CTFBG are applied to the assessment. The five SLBP and SLLP factors required for the eligibility assessment of bonds or loans that do not specify the use of the proceeds, as specified in the CTFH and CTFBG, are applied in the assessment.

The following checklists (SLBP/SLLP 1-5) are DNV evaluation procedures developed for the eligibility assessment of transition bonds or loans for general purposes, based on the SLBP and SLLP requirements.

The 'confirmed documents' in the evaluation work include public or non-public documents (internal issuer's documents), which are provided by Tohoku Electric Power to the DNV as evidence for the eligibility decision.

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

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 Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with Tohoku Electric Power officials. 	 DNV reviewed Tohoku Electric Power's KPIs related to sustainability and confirmed that the selected KPIs are important and relevant to Tohoku Electric Power's core transition strategy and sustainability management. Tohoku Electric Power has identified eight key sustainability issues (materialities), with reference to advice from the Sustainability Promotion Council and external experts, and the KPIs are closely linked to the 'carbon neutrality challenge'. Tohoku Electric Power's response to climate change-related issues is reported to the Board of Directors via the Sustainability Promotion Council, and the KPIs are under the control of the management team. In the Tohoku Electric Power Group Carbon Neutral Challenge 2050, the Group aims to be carbon neutral in 2050 and to halve its CO₂ emissions are set as a KPI and



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				clearly communicated to investors/lenders through the framework.
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 The Sixth Strategic Energy Plan. Transition Roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with Tohoku Electric Power officials. 	 DNV concludes that CO₂ emissions as a KPI are measurable based on a consistent methodology (Act on Promotion of Global Warming Countermeasures), are externally verifiable and can be benchmarked against external references. It was also confirmed that the KPIs selected by Tohoku Electric Power are consistent with "The Sixth Strategic Energy Plan" and the Transition Roadmap for Power Sector developed by the Agency for Natural Resources and Energy, and are appropriately set as comparable indicators. Tohoku Electric Power has selected CO₂ emissions as a KPI, for which historical data has already been disclosed in the Tohoku Electric Power Group Sustainability Report 2022 and on its website, allowing investors/lenders to assess past performance.
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 The Sixth Strategic Energy Plan. Interviews with Tohoku Electric Power officials. 	 DNV confirmed that the KPIs selected by Tohoku Electric Power provide a clear evaluation scope and calculation methodology. CO₂ emissions were confirmed to be the values reported as a retail electricity supplier and calculated in accordance with the Law on the Promotion of the Measures to Cope with Global Warming. KPIs are also indicators used in "the Sixth Strategic Energy Plan" formulated by the Agency for Natural Resources and Energy.



SLBP/SLLP-2 Calibration of SPTs (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 issuers' overall strategic sustainability/ESG strategy	 Confirmed Documents: Framework The Sixth Strategic Energy Plan. Transition Roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with Tohoku Electric Power officials. 	DNV confirmed that the SPT is ambitious, realistic and meaningful from the perspective that it supports the CO ₂ emission reduction targets set out in the Tohoku Electric Power Group Carbon Neutral Challenge 2050 and because it exceeds the targets set by the Agency for Natural Resources and Energy. It was also confirmed that the achievement of the SPT is consistent with Tohoku Electric Power's efforts to become carbon neutral. Based on the 'Tohoku Electric Power Group Carbon Neutral Challenge 2050', the DNV concluded that the SPT is realistic, the plan is feasible and the SPT targets outlined in the Framework are likely to be achieved. The halving of CO ₂ emissions in 2030, based on FY 2013, set by Tohoku Electric Power, has been confirmed to exceed the targets outlined in the Sixth Strategic Energy Plan developed by the Agency for Natural Resources and Energy. This is expected to provide impetus for efforts to implement Tohoku Electric's Transition (Sustainability) strategy.
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 The Sixth Strategic Energy Plan. Tohoku Electric Power Group Carbon Neutral Challenge 2050 	DNV has confirmed that the selected SPT is tied to the improvement of the KPI: the SPT is to halve (22.82 million t-CO ₂) by 2030 compared to 2013. This halving of CO ₂ emissions is more ambitious than the 46% reduction target of the Sixth Strategic Energy Plan formulated by the Agency for Natural Resources and Energy, and goes beyond "Business as Usual".



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
			Interviews with Tohoku Electric Power officials.	
2c	Target Setting – benchmarks	The target setting exercise should be based on a combination of benchmarking approaches: 1. 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 recommended and when possible forward-looking guidance on the KPI 2. The SPTs relative positioning versus the fundraiser's peers where comparable or available, or versus industry or sector standards 3. Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognized Best-Available-Technologies or other proxies	 Confirmed Documents: Framework The Sixth Strategic Energy Plan. Transition Roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with Tohoku Electric Power officials. 	 The DNV confirmed that the process of setting SPT targets is based on an appropriate combination of benchmarking approaches. DNV confirmed that the selected KPI CO₂ emissions have been measured for at least 10 years and are disclosed in the Tohoku Electric Power Group Sustainability Report 2022, which provides guidelines for setting targets up to 2030. DNV confirmed that the set SPT of halving the emissions by 2030 compared to 2013 (22.82 million t-CO₂) is a level that exceeds the 2030 target of 46% set by the Agency for Natural Resources and Energy. DNV concludes that the SPTs set are appropriately related to the CO₂ emission reduction targets developed by the Agency for Natural Resources and Energy. The Agency for Natural Resources and Energy's targets have been developed with a view to aligning them with the targets of the Paris Agreement and can be judged to be based on scientific evidence.
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	 Confirmed Documents: Framework The Sixth Energy Plan. Transition Roadmap for the power sector Tohoku Electric Power Group Integrated Report 2022 	 The DNV confirmed that SPT target setting was properly disclosed. The timeline for achieving the SPT is set at 2030. Milestone SPTs may be defined for redemption periods, etc. CO₂ The base year for the SPT on emission reductions is 2013. This is consistent with the base year (2013) set by the Agency for Natural Resources and Energy.



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place Where possible and taking into account competition and confidentiality considerations, how the borrowers intend to reach such SPTs 	 Tohoku Electric Power Group Sustainability Report 2022 Tohoku Electric Power Group Carbon Neutral Challenge 2050 Interviews with Tohoku Electric Power officials. 	 It details how CO₂ emission reductions can be achieved through the approach towards carbon neutrality described in the 'Tohoku Electric Power Group Carbon Neutral Challenge 2050'. Based on the 'Tohoku Electric Power Group Carbon Neutral Challenge 2050', the DNV concludes that the SPT is realistic, the plan is feasible and the SPT is likely to be achieved.



SLBP/SLLP-3 Finance Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
За	Finance Characteristics – SPT Financial/struct ural impact	The SLL/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 Tohoku Electric Power officials.	DNV confirmed that the framework includes trigger events and complies with the requirements described in the SLBP/SLLP. DNV has confirmed that the financial and structural characteristics of the transition-linked finance (bond or loan) executed under the Framework will vary depending on the timing of the observation of certain SPTs and trigger events with performance requirements. The details, including terms and conditions, will be determined after discussions at Tohoku Electric Power's internal meetings and will be disclosed in the statutory disclosure documents for the bond or the contractual documents for the loan, as the case may be, each time the financing is executed.
3b	Finance 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 Tohoku Electric Power officials.	The DNV confirmed that Tohoku Electric Power has considered appropriate fallback mechanisms (fallback alternatives) and as a result has decided not to set up another SPT or calculation method at this time as the risk of not being able to calculate or observe it is very small. It was confirmed that changes to KPIs and SPTs may be brought about by discussions at internal meetings, etc., when there are reasonable reasons, such as when changes in the business environment/restructuring of the business structure/changes to KPIs occur at Tohoku Electric Power, regardless of whether such events are caused by external factors or the result of management decisions made by Tohoku Electric Power.



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				Tohoku Electric Power confirmed that it intends to disclose any changes to the KPIs and SPTs in the statutory disclosure documents for the bonds or in the loan agreement documents.



SLBP/SLLP-4 Reporting

Ref.	Criteria	Requireents	Work Undertaken	DNV Findings
4a.	Reporting	 Fundraisers of SLLs should publish, and keep readily available and easily accessible: 1. Up-to-date information on the performance of the selected KPI(s), including baselines where relevant. 2. 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. 3. 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 SLL's financial and/or structural characteristics. 	Confirmed Documents: - Framework Interviews with Tohoku Electric Power officials.	 The DNV concludes that the SLBP/SLLP requires the following to ensure that the necessary information is and remains publicly available in a timely manner Performance of KPIs: after the implementation of transition-linked finance, at least once a year before the redemption or repayment is completed, the KPIs are verified by an external organisation, etc. and disclosed in a consolidated report or on the website, or disclosed to the lender (only in the case of loans). Achievement of SPTs: subject to annual verification by an independent third party and used to determine financial and structural characteristics. If the targets formulated by the Agency for Natural Resources and Energy are changed: an evaluation by an external evaluation body may be obtained after consultation with the relevant parties, including setting evaluation criteria for the SPT with a level of ambition equal to or higher than the conventional evaluation criteria.



SLBP/SLLP-5 Verification

Ref.	criterion	requirement	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 Tohoku Electric Power officials.	DNV has confirmed that Tohoku Electric Power plans to have an independent verification of its performance against the SPTs of its KPIs by an external evaluation body with expertise at least once a year.