



ANNEX - SECOND PARTY OPINION

TOHO GAS CO., LTD. TRANSITION BOND (#1)

Prepared by: DNV Business Assurance Japan K.K.

Location: Kobe, Japan

Date: 21st October 2022

Ref. Nr.: PRJN-432401-2022-ANX-JPN-1

This opinion is prepared based on the Toho Gas Green/Transition Finance Framework Second Party Opinion (hereinafter, "Master SPO") (Ref. Nr.: PRJN-432401-2022-AST-JPN-1 *21st October 2022), which was assessed against to the Toho Gas Green/Transition Finance Framework (hereinafter, "Framework").

*For more information on the ANNEX - Second Party Opinion, see following DNV website https://www.dnv.jp/news/page-227965 Release of a new evaluation service (Master SPO + ANNEX)



Executive Summary

DNV Business Assurance Japan K.K. (hereinafter, "DNV") confirmed that the Toho Gas Transition Bond (#1) issued by Toho Gas Co., Ltd. (hereinafter, "Toho Gas"), meets the various principles and guidelines requirements for such bond issuance and is planned to be issued and managed through appropriate internal processes, based on the Framework^{*1} which has been assessed its eligibility^{*2}.

- *1: Toho Gas Green/Transition Finance Framework
- *2: Toho Gas Green/Transition Finance Framework Second Party Opinion

Table-1 shows an outline of the Toho Gas Transition Bond (#1) and ANNEX - Second Party Opinion. The additional items to be assessed in the ANNEX - Second Party Opinion are Element-1 (Use of Proceeds) and Element-4 (Reporting) which are under the bond with specific use of proceeds (response to the four elements). The conformances against to the criteria for the other elements has already been assessed its eligibility in accordance with Framework.

Target finance	Toho Gas Transition Bond (#1)				
Target organization	Toho Gas Co., Ltd.				
Target framework	Toho Gas Green/Tran	Toho Gas Green/Transition Finance Framework			
Targeted external review	-	oho Gas Green/Transition Finance Framework Second Party Opinion Ref. Nr.: PRJN-432401-2022-AST-JPN-1 Issued on 21 st October 2022			
Target criteria	 Criteria for Climate Transition Finance Climate Transition Finance Handbook (ICMA, 2020) Basic Guidelines on Climate Transition Finance (FSA, METI, and MoE, 2021) 				
raiget cittena	 Criteria for the use of proceeds bond Green Bond Principles (ICMA, 2021) Green Bond Guidelines (MoE, 2022) 				
	Disclosure eleme strategy and gov	ent-1 (Transition vernance)	- Confirmed reliance on Framework		
Climate Transition Finance (response		ent-2 (Environmental	- Confirmed reliance on Framework		
the four disclosure elements)	e Disclosure eleme strategy)	ent-3 (Science-based	- Confirmed reliance on Framework		
Disclosure elemen transparency)		ent-4 (Implementation	- Confirmed reliance on Framework		
Bonds with specifi use of proceeds (response to the f elements)	specific eds Element-1 • Building the four (Use of proceeds) Aichi)		Confirmed reliance on Framework. Additional assessment was implemented as follows: Building a clean energy production base (Chita, Aichi) Installation of NAS batteries (Tsu, Mie)		

Table - 1 Toho Gas Transition Bond	(#1) ANNEX - Second Party Opinion



	 Offshore wind power business in Taiwan (in the waters off Miaoli, Taiwan)
Element-2 (Process for project evaluation and selection)	- Confirmed reliance on Framework
Element-3 (Management of proceeds)	- Confirmed reliance on Framework
Element-4 (Reporting)	 Confirmed reliance on Framework. Additional review was carried out as follows: Allocation of proceeds: Items and categories Environmental benefits: Annual CO₂ reduction (t-CO₂/year), etc.

DNV, as an external reviewer, evaluated the eligibility of the use of proceeds and reporting for the Toho Gas Transition Bond (#1), based on an assessment of the Framework and other relevant documents and information provided by Toho Gas. DNV also confirmed that there were no changes to the other items (in accordance with the Framework).



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Revision history

Date of issue	Remarks		
21 st October 2022	Prepared and issued as Toho Gas Transition Bond (#1) ANNEX - Second Party		
	Opinion		

Disclaimer

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

Statement of Competence and Independence

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct1 during the assessment and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of statements or data included in the Framework except for this Statement. DNV maintains complete impartiality toward stakeholders interviewed during the assessment process.

¹ DNV Code of Conduct is available from DNV website (www.DNV.com)



I. Scope and Objectives

DNV has been commissioned by Toho Gas to provide a pre-issuance assessment on the Transition Bond. Our objective has been to implement an assessment on whether Toho Gas meet the criteria established on CTFH·CTFBG and GBP·GBGLs, which are the criteria for bonds with the specific use of proceeds, to provide ANNEX - Second Party Opinion regarding the eligibility of the Transition Bond.

DNV, as an independent external reviewer, has identified no real or perceived conflict of interest associated with the delivery of this ANNEX - Second Party Opinion for Toho Gas.

In this report, no assurance is provided regarding the financial performance of the BOND, the value of any investments in the BOND, or the long-term environmental benefits of the transaction.

(1) Scope of review^{*}

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

- \boxtimes Use of proceeds \square Process for project evaluation and selection
- □ Management of proceeds ⊠ Reporting
- * The scope of review is to be applied as a part of the evaluation of the transition finance with use of proceeds.
- * DNV has already reviewed the four disclosure elements of CTFH/CTFBG, "Process for Project Evaluation and Selection", and "Management of Proceeds" and has exposed our opinion below. DNV also confirmed through our assessment with Toho Gas that there were no changes in the Transition Bond to be implemented this time or additional assessments required.

"Toho Gas Green/Transition Finance Framework Second Party Opinion"

Ref. Nr.: PRJN-432401-2022-AST-JPN Issued on 21st October 2022

(2) Role(s) of review provider

- ☑ Second party opinion □ Certification
- □ Verification

□ Ratings

 \Box Other (*please specify*):



(3) Standards/guidelines to be 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	International Capital Market Association (ICMA), 2021
4.	Green Bond Guidelines (GBGLs) *2	Ministry of the Environment, 2022

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

*2 It confirms compliance with the four core elements (use of proceeds, process for project evaluation and selection, management of proceeds, and reporting) that must be met when implementing as a bond/loan that meets the four elements of transition and has a specific use of proceeds (quoted from CTFBG).



I. Responsibilities of Toho Gas and DNV

Toho Gas has provided the information and data used by DNV during the delivery of this review. DNV's ANNEX - Second Party Opinion represents an independent opinion and is intended to inform interested stakeholders in the Toho Gas Transition Bond (#1) as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by Toho Gas. DNV is not responsible for any aspect of the nominated projects and 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 Toho Gas's management and used as a basis for this assessment were not correct or complete.

II. Basis of DNV's Opinion

To provide a more flexible ANNEX - Second Party Opinion for the issuer, Toho Gas, DNV identified the key assessment targets and carried out assessments in accordance with its procedures.

DNV, as an independent external reviewer, provides ANNEX - Second Party Opinion according to the protocol.

Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principle behind the Climate Transition Finance with a use of proceeds bond as the basis for the opinion are as follows:

"provide an investment opportunity with transparent sustainability credentials"

"enable capital-raising and investment for new and existing projects with environmental benefits"

As per our Protocol, the criteria against which the Toho Gas Transition Bond (#1) has been grouped into common elements bellow.

The additional assessment for this ANNEX - Second Party Opinion covers Element 1 and Element 4 out of the four common elements of (2) GBP/GBGLs.

Part of (1) and (2) has already been assessed for eligibility. Detailed results of the eligibility assessment for such parts of (1) and (2) can be found in the "Toho Gas Green/Transition Finance Framework Second Party Opinion" (Ref. Nr.: PRJN-432401-2022-AST-JPN-1, issued on 21st October 2022).



(1) Four common elements of CTFH and CTFBG (disclosure elements)

Principle One: Issuer's climate transition strategy and governance The financing purpose should be for enabling an issuer's climate change strategy.

Principle Two: Business model environmental materiality

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

Principle Three: Climate transition strategy to be science-based including targets and pathways

Issuer'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 issuer's climate transition strategy should also provide transparency of the underlying investment program.

(2) Four elements of GBP/GBGLs

Principle One: Use of Proceeds <u>*Subject to additional assessment of ANNEX - Second Party</u> Opinion

The Use of Proceeds criteria are guided by the requirement that an issuer of a transition finance with specific use of proceeds must use the funds raised to bond eligible activities. The eligible activities should produce clear environmental benefits.

Principle Two: Process for Project Evaluation and Selection

The Project Evaluation and Selection criteria are guided by the requirements that an issuer of a transition finance should outline the process it follows when determining eligibility of an investment using the proceeds from transition finance and outline any impact objectives it will consider.

Principle Three: Management of Proceeds

The Management of Proceeds criteria are guided by the requirements that a transition finance should be tracked within the issuing organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.

Principle Four: Reporting *Subject to additional assessment of ANNEX - Second Party Opinion

The Reporting criteria are guided by the recommendation that at least Sustainability Reporting to the bond investors should be made of the use of bond proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.



IV. Work Undertaken

Our work constituted a comprehensive review of the available information, based on the understanding that this information was provided to us by the issuer 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 includes:

i. Pre-funding assessment (ANNEX - Second Party Opinion)

- Assessment of additional documentary evidence provided by Toho Gas on the Toho Gas Green/Transition Finance and supplemented assessment by a comprehensive desktop research. These checks refer to current assessment best practice and standards methodologies;
- Discussions with Toho Gas, and review of relevant documentation;
- Documentation of findings against each element of the criteria to be additionally assessed.

ii. Post-funding assessment (periodic review) (*not included in this report)

- Interviews with fundraiser managers and review of relevant documentation;
- Site surveys and inspections (if required);
- Documentation of post-issuance assessment results.



V. Findings and DNV's Opinion

DNV's findings and opinion are as described below.

GBP/GBGLs-1. Use of Proceeds

Toho Gas has defined the criteria applied to eligible projects as transition projects which meet Transition Strategy and related handbook, principle, and guidelines (CTFH and CTFBG).

The proceeds of the Toho Gas Transition Bond (#1) will be used for the following three projects. Please see Schedule-1 for details.

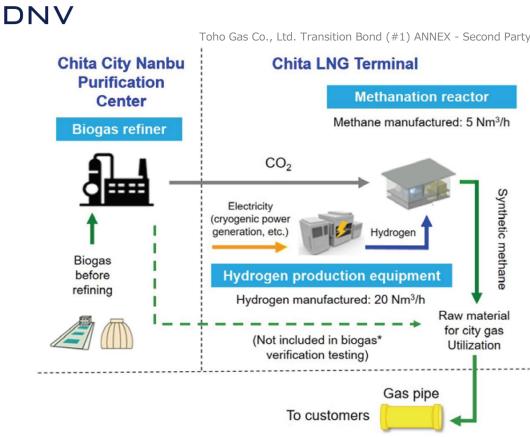
All three projects are eligible projects that are aligned with either or all of the Technology Roadmap for "Transition Finance" in Gas Sector (METI, February 2022), the "Transition Roadmap for Power Sector" (Agency for Natural Resources and Energy, February 2022) and the Action Plan of the Carbon Neutral Challenge 2050 by the Japan Gas Association (The Japan Gas Association, November 2020), in addition to the Toho Gas Green/Transition Finance Framework.

The amount of proceeds of the Toho Gas Transition Bond (#1) will be JPY 10 billion. DNV confirmed at the time of this assessment that the proceeds will be allocated for new investments and refinancing. The actual allocation results will be reported on an annual basis in accordance with GBP/GBGLs-4.Reporting.



Project 1: Building a clean energy production base

- Building a clean energy production base is a project aims to achieve Toho Gas' Transition Strategy by conducting verification testing of methanation and constructing a hydrogen production plant in Chita, Aichi.
- The methanation verification testing will produce synthetic methane from biogasderived CO₂ generated from the treatment of sewage sludge at the Chita City Nanbu Purification Center and hydrogen produced using electricity from LNG cryogenic power generation, etc., which will be used as a raw material for city gas. This is expected to be the first time in Japan that synthetic methane from methanation will be used as a raw material for city gas. Toho Gas plans a large-scale social implementation of methanation facilities in the future, with the aim of decarbonizing the gas itself.
- The hydrogen production plant using natural gas as a raw material will be built on the premises of Toho Gas' Chita-Midorihama Factory, with the aim of creating a hydrogen supply chain that contributes to carbon neutrality. The construction will be completed and hydrogen supply will start by 2024, after which the scale of the plant will be expanded in line with the growing demand for hydrogen in the region. The CO₂ generated during hydrogen production will be offset for the time being through the use of credits, with a view to capture and utilization in the future. The Chita-Midorihama Factory is also aiming to build a foundation for the spread and expansion of hydrogen by forming alliances with other companies that have expertise and knowhow in the fields of hydrogen transport and consumption, and in the future, to use the Chita-Midorihama Factory as a receiving terminal for imported hydrogen from overseas.
- In view of the above, building a clean energy production base is a transition project that is aligned with the "Toho Gas Group 2050 Carbon Neutrality Initiative", the Technology Roadmap for "Transition Finance" in Gas Sector (METI) and the Carbon Neutral Challenge 2050 (The Japan Gas Association).



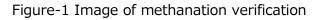


Table-1 Outlines of Project – Building a clean energy production base

Project name:	Building a clean energy production base				
Estimated allocation:	Approx. JP	(2.5 billion			
Content:	Methanation verification testing	Hydrogen production plant			
Location:	Chita City, Aichi Prefecture (Chita LNG Terminal)	Chita City, Aichi Prefecture (Chita- Midorihama Factory)			
Start of operation:	FY2023 - FY2026 (planned)	2024 (planned)			
Estimated environmental benefits:	Quantitative reduction effects are under consideration as it is still in the verification phase.	Hydrogen production capacity 1.7 t/day			

Toho Gas Co., Ltd. Transition Bond (#1) ANNEX - Second Party Opinion



Project 2: Installation of NAS batteries

- Installation of NAS batteries is a project that is the first case in the three prefectures in Tokai area where storage batteries are being installed on the former site of the Tsu LNG Station owned by Toho Gas, with the aim of contributing to the promotion of renewable energy. The storage batteries to be installed are NAS batteries manufactured by NGK Insulators, Ltd. with a capacity of 69,600 kWh and an output of 11,400 kW.
- By introducing storage batteries using subsidies under the "Supporting Project for the Installation of NAS Batteries, etc. to Accelerate the Introduction of Renewable Energy" by the Agency for Natural Resources and Energy, the project aims to promote the spread of renewable energy and contribute to achieving carbon neutrality.
- In order to expand the introduction of renewable energy in the future, it will be an urgent task to ensure the effective use of surplus renewable energies and to secure the power to adjust to fluctuations. The project aims to indirectly contribute to the reduction of CO₂ of the entire society by utilizing NAS batteries, absorbing surplus renewable energy and providing adjusting power through trading on various electricity markets.
- In view of the above, installation of NAS batteries is a transition project that is aligned with the "Toho Gas Group 2050 Carbon Neutrality Initiative" and the "Transition Roadmap for Power Sector" (Agency for Natural Resources and Energy).



Figure-2 Appearance of a NAS battery



Project name:	Installation of NAS batteries
Estimated allocation:	Approx. JPY 2.5 billion
Location:	Tsu City, Mie Prefecture (former site of Tsu LNG Station)
Output:	11,400 kW
Capacity:	69,600 kWh
Start of operation:	FY2025 (planned)
Estimated environmental benefits:	Output: 11,400 kW, Capacity: 69,600 kWh

Table-2 Outlines of Project – Installation of NAS batteries



Project 3: Offshore wind power business in Taiwan (Formosa 1)

- Formosa 1 is a project classified as offshore wind power and is a green project that meets the technical criteria of the referenced Climate Bond Standard.
- Formosa 1 is the first commercial-scale offshore wind farm in Taiwan, which has started selling electricity to Taiwan Power Company for 20 years under the feed-in tariff (FIT) system. Toho Gas, together with Mitsui O.S.K. Lines, Ltd. and Hokuriku Electric Power Company will participate in the offshore wind power project by acquiring shares in the holding company of the project through a special purpose company.
- Through due diligence when participating in the project, Toho Gas has assessed the major risks arising from climate change, impacts on stakeholders, the design and implementation of the adaptation plan, the maintenance system and impacts on ecosystem services to confirm that there are no issues.
- In its Green/Transition Finance Framework, Toho Gas has identified offshore wind power and other renewable energies as key initiatives (Green/Transition Eligible Criteria) towards the "Toho Gas Group 2050 Carbon Neutrality Initiative".
- Toho Gas has a target of the volume of renewable energy sources handled in 2030 of 500,000 kW, and Formosa 1 will directly contribute to achieving this target. In addition, it is expected that Toho Gas will contribute to the future development of the offshore wind power project in Japan by accumulating knowledge on offshore wind power generation through its participation in Formosa 1.
- The expected annual CO₂ reduction is estimated to be approximately 27,000 t-CO₂/year. (The reduction amount is proportionally distributed according to their share, as it is a joint project of several companies.)



Figure-3 Offshore wind power business in Taiwan (Formosa 1)



Table-3 Outlines of Project - Offshore wind power business in Taiwan (Formosa 1)

Project name:	Offshore wind power business in Taiwan (Formosa 1)
Estimated allocation:	Approx. JPY 5 billion
Location:	In the waters of Miaoli, Taiwan
Installed capacity:	Approx. 128,000 kW
Number of turbines:	22 (bottom-mounted)
Start of operation:	April 2017: Phase 1 (8,000 kW) December 2019: Phase 2 (120,000 kW)
Estimated environmental benefits:	Approx. 27,000 t-CO ₂ /year



GBP/GBGLs-4. Reporting

<Allocation status>

DNV confirmed that the following items relating to the allocation status of the proceeds will be disclosed on the issuer's website until the proceeds of the Toho Gas Transition Bond (#1) have been fully allocated. DNV also confirmed that, even after allocation have been completed, Toho Gas plans to promptly disclose on its website any material changes in the project for which the proceeds are to be used, and information of unallocated proceeds.

- Allocated amount
- Estimated amount of unallocated proceeds, estimated time of allocation
- Estimated amount or percentage of the portion of the proceeds allocated as refinancing

<Environmental benefits>

DNV confirmed that during the period between the implementation and redemption of the Toho Gas Transition Bond (#1), Toho Gas plans to disclose on its website, as long as reasonably practicable, any or all of the following items relating to environmental benefits.

- Outlines of each project
- Progress in R&D, capital investment, etc.
- Installed capacity
- Annual power generation
- Annual CO₂ emission reductions from each project (t-CO₂/year)



Use of Proceeds reporting: \boxtimes \times Project-by-project On a project portfolio basis Linkage to individual bond(s) Other (please specify): Information reported: ☑ Allocated amounts GB refinanced share of total investment \Box Other (*please specify*): **Frequency:** 🛛 Annual Semi-annual \Box Other (please specify):

Impact reporting (Environmental impact):

\boxtimes	Project-by-project	\boxtimes	On a project portfolio basis
	Linkage to individual bond(s)		Other (please specify):

Frequency:

- Annual □ Semi-annual
- Other (please specify):

Information reported (estimated or ex-post):

- \times GHG emissions/savings □ Energy savings \times Other ESG indicators (please specify): Outlines of project, installed capacity, annual power generation, etc. Means of disclosure Information published in financial Information published in sustainability report (Integrated Report) report
 - Information published in ad hoc Other (please specify): on Toho Gas \mathbf{X} website documents
 - Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review)



VI. Assessment Conclusion

On the basis of the information provided by Toho Gas and the work undertaken, it is DNV's opinion that the Toho Gas Transition Bond (#1) meets the criteria established in the Protocol, and that it is aligned with the following stated definition or purpose of the bonds that specify the use of proceeds within the CTFH/CTFBG and GBP/GBGLs:

"provide an investment opportunity with transparent sustainability credentials"

"enable capital-raising and investment for new and existing projects with environmental benefits"

DNV Business Assurance Japan K.K.

21st October 2022

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Masato Kanedome Project Leader DNV Business Assurance Japan K.K.

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About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight.

With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

Disclaimer

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



Schedule-1 Toho Gas Transition Bond (#1) Eligible Projects

E	Eligible Criteria (partly extracted from the framework)		Project Overview		
Gas	Decarbonization of gas itself	Methanation	R&D or capital investment in the practical implementation of methanation technology	Methanation verification testing and hydrogen production plant *New allocations planned <estimated environmental<="" td=""><td>Project name: Building a clean energy production base Estimated allocation: Approx. JPY 2.5 billion</td></estimated>	Project name: Building a clean energy production base Estimated allocation: Approx. JPY 2.5 billion
Hydrogen	Supply chain creation	Hydrogen production, CCUS	R&D or capital investment in hydrogen production by reforming natural gas, etc. and carbon recycling	 Selection and the environmental benefits> Methanation verification testing: Quantitative reduction effects are under consideration as it is still in the verification phase. Hydrogen production plant: Hydrogen production capacity 1.7 t/day 	Location: Chita, Aichi (Chita LNG Terminal and Chita- Midorihama Factory) Period for methanation verification testing: FY2023 - FY2026 (planned) Start of operation of the hydrogen production plant: FY2024 (planned)
Electricity	Reductions of carbon and decarbonization at customer locations	Distributed energy system, renewable energy, clean transportation	R&D or capital investment in encouraging the popularization of diverse distributed energy sources, including solar power generation, storage batteries, electric automobiles, etc. and	Installation of NAS batteries *New allocations planned <estimated environmental<br="">benefits> Output 11,400 kW Capacity 69,600 kWh</estimated>	Project name: Installation of NAS batteries Estimated allocation: Approx. JPY 2.5 billion Location: Tsu, Mie Battery type: NAS battery Output: 11,400 kW Capacity: 69,600 kWh Start of operation: FY2025 (planned)



		integrating in the controlling these utilizing digital technology		
Decarbonization of electrical power sources	Renewable energy	Capital investment / investment and lending for the development of renewable energy sources such as solar, biomass, wind (including offshore wind) and small hydropower	Offshore wind power business in Taiwan *Refinancing planned <estimated environmental<br="">benefits> Approx. 27,000 t-CO₂/year</estimated>	Project name: Offshore wind power business in Taiwan (Formosa 1) Estimated allocation: Approx. JPY 5 billion Location: In the waters of Miaoli, Taiwan Installed capacity: 128,000 kW Number of turbines: 22 (bottom-mounted) Start of operation: April 2017 (Phase 1) December 2019 (Phase 2)





SECOND PARTY OPINION

TOHO GAS CO., LTD. GREEN/TRANSITION FINANCE FRAMEWORK

Prepared by: DNV Business Assurance Japan K.K.

Location: Kobe, Japan

Date: 21st October 2022

Ref. Nr.: PRJN-432401-2022-AST-JPN-01



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Revision history

Revision number	Date of issue	Remarks
0	21 st October 2022	Initial

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



Executive Summary

Over almost 100 years since its establishment in 1922, Toho Gas Group has been an energy company with strong roots in the local communities. In response to changes in the business environment, Toho Gas Group has converted the energy resources used for city gas, expanded usage applications, and achieved growth and development together with the local communities. Toho Gas Group has achieved the growth of the city gas business as well as LPG business operations developed since 1959. In addition, the Group is working to expand the scope of business by taking initiatives such as entering into the retail electricity business in 2016.

Amid the recently heightening sense of crisis with respect to global warning, in July 2021, Toho Gas Co., Ltd. (hereafter, "Toho Gas") has formulated the "Toho Gas Group 2050 Carbon Neutrality Initiative." Toho Gas Group will continue to contribute to realizing a sustainable society and to the further development of the region through clean energy systems.

Toho Gas has decided to utilize green finance and transition finance in order to achieve carbon neutrality in 2050 in its entire value chain, including customer locations, and has formulated the "Toho Gas Green/Transition Finance Framework" (hereinafter, the "Framework").

The Framework is structured as a comprehensive framework that includes the following elements necessary for the implementation of finance:

- Green Finance (green bond and loan)
- Transition Finance (transition bond and loan with specific use of proceeds)

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

Specifically, DNV provided the eligibility evaluation for frameworks (principles, guidelines, etc.) against the following handbook, principle and guidelines which are widely recognized:

- Climate Transition Finance Handbook (CTFH), International Capital Markets 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 Markets Association (ICMA), 2021
- Green Bond Guidelines (GBGLs), Ministry of the Environment, 2022
- Green Loan Principles (GLP), Loan Market Association (LMA) and others, 2021
- Green Loan Guidelines (GLGLs), 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 following from the documentation and information provided by Toho Gas. CTF-1 to CTF-4 below are findings and opinions of DNV against the four common elements (disclosure elements) of the CTFH and CTFBG as criteria for the Climate Transition Finance.

CTF-1. Fundraiser's climate transition strategy and governance:

The transition strategy of the fundraiser Toho Gas is set forth in the "Toho Gas Group 2050 Carbon Neutrality Initiative," which sets out a realization image and scenario for achieving the targets. This is in line with the targets and pathways set out in the "Technology Roadmap for "Transition Finance" in Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap for Power Sector" (Agency for Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association). In addition, Toho Gas's Transition Strategy will contribute to the realization of supply-side and demand-side carbon neutrality as a key initiative presented in various plans and strategies for decarbonization in Japan.

In terms of governance related to implementation of the Transition Strategy, an internal structure in the entire Toho Gas Group, including the Group Environmental Preservation Board, and information disclosure process based on TCFD^{*1} have been established. These are disclosed in the frameworks and other documents and meet the disclosure elements of CTF-1. *1: Task Force on Climate-related Financial Disclosures

CTF-2. Business model environmental materiality:

The environmental materiality of Toho Gas's business model is identified by extracting individual issues with reference to the GRI Standards^{*2}, evaluating from the viewpoints of economic and social value, and going through the Management Committee and the Board of Directors. Each materiality is disclosed in the "Integrated Report 2022" with the relevant SDGs tied to it, and one of the materialities is the promotion of carbon neutrality. In addition, the Toho Gas Group Medium-Term Management Plan 2022-2025 includes the promotion of carbon neutrality as one of the four themes to be addressed during the period of the medium-term plan (FY2022 - FY2025). The response to climate change is closely linked to the management strategy and business activities of Toho Gas Group. In addition, efforts to address environmental materiality include not only emissions reductions from their own business activities, but also activities that contribute to Scope 3 emissions reductions and those of other companies.

In accordance with the TCFD Guidance, Toho Gas has selected less than 2° scenario and less than 4° scenario as external scenarios to identify risks and opportunities, taking into account time horizons such as short-to-medium-term and medium-to-long-term, and grasp the impact of these scenarios. These are disclosed in the frameworks and other documents and meet the disclosure elements of CTF-2.



*2: Global Reporting Initiative (an international standard providing ESG-related reporting, management and analysis tools)

CTF-3. Climate transition strategy to be science-based including targets and pathways:

Toho Gas's Transition Strategy is defined by science-based targets and pathways. Specifically, it is consistent with the targets and pathways set out in the "Transition Roadmap in the Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap in the Power Sector" (Agency for Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association). In addition to reducing CO₂ emissions from the company's own activities, long-term and medium-term targets that take into account Scope 3 and reduction contributions are indexed and quantified, and the process of achieving these targets is clarified. As the targets of the Ministry of Economy, Trade and Industry and the Agency for Natural Resources and Energy were formulated to be consistent with the Paris Agreement, Toho Gas's Transition Strategy can also be judged as science-based.

Toho Gas has set a long-term target for 2050 of carbon neutrality in its entire value chain, including customer locations, and a medium-term target for 2030 of 3 million tonnes of CO_2 reduction contribution (compared to FY2020), a gas carbon neutrality rate of at least 5%, and 500,000 kW of renewable energy sources handled.

As a pathway to achieving the target, Toho Gas aims to build an energy system that contributes to carbon neutrality, based on gas (city gas and LPG), hydrogen, and electricity. These are disclosed in the frameworks and other documents and meet the disclosure elements of CTF-3.

CTF-4. Implementation transparency:

To address climate change-related risks and opportunities, including the implementation of the Transition Strategy, Toho Gas aims for a 1:1 ratio of core projects to strategic projects out of the JPY 230 billion of investments in the medium-term management plan period covering FY2022 - FY2025, which includes projects implemented with green/transition finance.

DNV has confirmed that the investments required to implement the Transition Strategy will be carried out in accordance with the appropriate timeline, based on the internal management system and processes, taking into account CTF-1 to CTF-3. These are disclosed in the frameworks and other documents and meet the disclosure elements of CTF-4.



<GBP/GLP eligibility assessment results>

DNV has confirmed the following from the documentation and information provided by Toho Gas. GBP/GLP-1 to GBP/GLP-4 below are findings and opinions of DNV against the four elements common to GBP and GLP (including GBGLs and GLGLs) required for green finance and transition finance with specific use of proceeds.

GBP/GLP-1. Use of Proceeds:

The proceeds raised by Toho Gas through green/transition finance will be allocated to new investment and refinancing for existing investments as R&D, capital investments, investments and loans, and other related expenditure regarding green/transition eligible projects, focusing on the initiatives of gas (city gas and LPG), hydrogen, and electricity as described in the realization image of carbon neutrality in 2050. DNV has confirmed that these projects are consistent with the elements of CTF-1 to CTF-4. Each project has been evaluated by Toho Gas as having clear environmental benefits on the transition strategy and is expected to contribute directly and indirectly to the SDGs.

Eligible Project			
Business Category	Type of Initiative	Project Overview	
	Reductions of carbon and decarbonization at customer locations		
	Fuel conversion to gas	Expenditure and investment in supporting fuel conversion from coal and petroleum to city gas	
	Creation of gas supply chain	Capital investment in extending or maintaining gas pipelines	
	Gas-related energy savings	Capital investment in cogeneration, installation of high- efficiency gas appliances, and regional heating and cooling	
	Carbon recycling*		
Gas	CCUS	R&D or capital investment in separation, recovery, utilization, and storage of CO_2	
	Decarbonization of gas itself*		
	Methanation	R&D or capital investment in the practical implementation of methanation technology	
	Carbon neutral LNG	Expenditure and investment in the procurement and supply of carbon neutral LNG	
	Biogas (Renewable energy)	R&D or capital investment in biogas introduction	
Hydrogen	Mobility applications*		

Table-1 Toho Gas Green/Transition Finance Project Overview



_		Toho Gas Co., Ltd. Green/Transition Finance Framework Second Party Opinio		
	Hydrogen station	Capital investment in the development of hydrogen		
		stations		
	Further application expansion*			
	Hydrogen combustion	R&D related to hydrogen combustion, mixed-combustion		
	equipment, etc.	with city gas, etc.		
	Distributed energy	Capital investment in the construction of smart towns		
	systems	combining various technologies, such as hydrogen and renewable energy		
	Supply chain creation*			
	Hydrogen production, CCUS	R&D or capital investment in hydrogen production and carbon recycling through natural gas reforming, etc.		
	Local hydrogen network	R&D or capital investment in hydrogen pipeline supply through local networks		
	Reductions of carbon and decarbonization at customer locations*			
	Distributed energy systems, renewable energy, clean	R&D or capital investment in the promotion of various distributed energy resources, including solar power generation, storage batteries, and electric vehicles, and		
	transportation	their integration and control using digital technology		
Electricity	Decarbonization of power sources*			
	Renewable energy	Capital investment / investment and loan for the development of renewable energy sources such as solar power, biomass, wind (including offshore wind), and small hydropower		
		Investment and loan for new regional power companies		

*: Projects that could be used for green finance as well as transition finance

Alignment of the above eligible projects with the SDGs:



*The relevance to the SDGs is based on Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals published by ICMA, which sets out the Green Bond Principles. It is complementary upon the issuance of green bonds etc. and is not directly associated as a financing objective.



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

Toho Gas confirms that the green/transition projects meet the GBP/GLP-1 eligible project categories, and that they do not conflict with the exclusion criteria set out in the Framework in advance. Specifically, the Finance Department takes the lead in selecting eligible projects after consulting with the Corporate Planning Department and the CSR/Environment Department to assess the environmental benefits of each project, with the Finance Officer making the final decision. It is also confirmed that all nominated eligible projects have been addressed to reduce environmental and social risks.

GBP/GLP-3. Management of Proceeds:

Toho Gas's Finance Department will track the proceeds raised as green/transition finance on an annual basis using an internal management system and proceeds allocation control chart to ensure that an amount equal to the amount raised is allocated to one of the eligible projects, and to report the allocation status to the Finance Officer. Unallocated proceeds will be managed in cash or cash equivalents and will be allocated within approximately three years of financing.

GBP/GLP-4. Reporting:

Toho Gas plans to disclose the allocation status of the proceeds raised on its website until the full amount has been allocated. The disclosure will include the amount of allocated proceeds, the estimated unallocated amount, the estimated time of allocation, and the estimated amount or percentage of proceeds allocated to refinancing. In addition, the environmental benefits of the project subject for allocation will be disclosed on the website as long as reasonably practicable for the period from the implementation of financing to the completion of redemption or repayment. In the event of material changes to the projects subject for the use of proceeds, even after the allocation of the proceeds is completed, such changes and the status of unallocated proceeds will be promptly disclosed on the website.



I. Introduction

i. About the Fundraiser

Over almost 100 years since its establishment in 1922, Toho Gas Group has been an energy company with strong roots in the local communities. In response to changes in the business environment, Toho Gas Group has converted the energy resources used for city gas, expanded usage applications, and achieved growth and development together with the local communities. Toho Gas Group has achieved the growth of the city gas business as well as LPG business operations developed since 1959. In addition, the Group is working to expand the scope of business by taking initiatives such as entering into the retail electricity business in 2016.

ii. Fundraiser's initiatives for ESG/SDGs

With regard to highly-important social issues, Toho Gas Group identifies individual issues with reference to the GRI Standards, an international standard for sustainability information disclosure, and in conjunction with the examination of the Toho Gas Group Vision and Medium-Term Management Plan, based on the expectations of stakeholders, etc. Subsequently, the extracted individual issues are evaluated from the two viewpoints of economic and social value, and after exchanging opinions with the relevant agencies, the new materialities were identified in August 2022 through the Management Committee and the Board of Directors, and the relevant SDGs are tied to them.



Materiality	Action Issues	Related SDGs
	 Reductions of carbon and decarbonization at gas customer locations Contribute to the reduction in CO₂ emissions from society as a whole 	7 #1994487.000 9 #1994487.000 11 #1014687 11 #1014687 13 #10907
Promote carbon neutrality	•Develop technologies to decarbonize gas itself	
	 Establish a foundation to expand the use of hydrogen 	
	•Low-carbonize/decarbonize electricity	
Provide various kinds of energy and services	 Development into a Total Energy Provider Expansion of domestic and overseas energy- related business 	7 инжиналие Заличное 9 инстититета Эжина 11 инстаниента В 4
	 Provide value through services that enrich life and services that support business 	
Supply safe, secure and	 Advancing security measures and disaster measures 	7 аптичие им 2 алистор
stable energy	•Stable procurement at a reasonable price	
	 Strengthen initiatives for coexistence with local communities 	4 startin Will Reserve and the second secon
Contribute to the region through the resolution of	 Promotion of CSR procurement 	
social issues	 Promoting resource recycling 	
	Biodiversity conservation	
Improve work satisfaction and ease of work and promote diversity	 Human resource management 	З соотнытия 4 симета 5 солгот. В сестов налисирания солоти
	 Diversity and inclusion 	-w 🚺 🥰 🐔
	 Realizing flexible workstyles 	
	 Safety and health management 	
Strengthen compliance	 Promote risk management and strengthen information security 	16 recertance actinize actinizes
and governance	Compliance promotion	

Figure-1 Materiality and relevant SDGs



iii. Fundraiser's environmental initiatives

Toho Gas formulated the "Toho Gas Group 2050 Carbon Neutrality Initiative" in July 2021, aiming to accelerate efforts to reduce carbon and even achieve decarbonization at customer locations, and achieve technical innovation for utilizing hydrogen and in carbon recycling, and to connect to future decarbonization of gas itself. Through combinations of diverse means, including decarbonization in electrical power sources and the like, Toho Gas is tackling the challenge of achieving carbon neutrality in the entire value chain, including customer locations, in 2050.

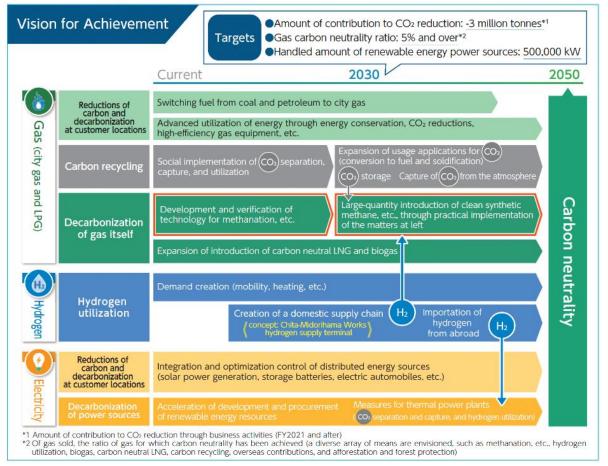


Figure-2 Realization image of carbon neutrality

To achieve carbon neutrality, innovative technical development is a requirement, and tremendous time and costs become necessary to overcome this. Consequently, Toho Gas aims to make a smooth transition to carbon neutrality by first steadily pressing ahead with reducing carbon and decarbonization using established technology and achieving decarbonization of gas itself in the future.





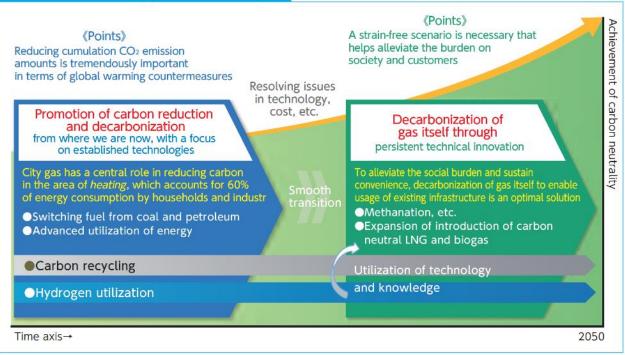


Figure-3 Scenario for achieving carbon neutrality

Toho Gas participates in the external initiatives listed in Table-2 to strengthen its ESG efforts.

External Initiatives		Toho Gas's Efforts
		In May 2020, Toho Gas Group signed and joined the "UN Global Compact" proposed by the United Nations.
UN Global Compact	WE SUPPORT	The UN Global Compact is a voluntary initiative in which individual companies and organizations participate in the creation of a global framework to act as good members of society and achieve sustainable growth by exercising responsible and creative leadership.
Task Force on Climate-related Financial Disclosures (TCFD)		In April 2020, Toho Gas Group expressed its support for the TCFD (Task Force on Climate-related Financial Disclosures), which recommends analyzing the risks and opportunities posed by climate change to business and disclosing information about them. At the same time, the Group joined the TCFD Consortium, which was established as a forum for discussion among companies and financial institutions that support the TCFD.



The Japan Business Federation (Keidanren) Challenge Zero	Challenge Zero	Toho Gas Group participates in the Japan Business Federation's "Challenge Zero" initiative to develop technologies for a future decarbonized society.
		Challenge Zero communicates the challenge of the business community to innovate net zero carbon technologies (including transition technologies), actively implement and disseminate them, and actively invest in or offer loans to companies working on these technologies, in order to encourage innovation towards the realization of a decarbonized society.
Keidanren Carbon Neutral Action Plan		As a member company of the Japan Gas Association, Toho Gas is promoting various initiatives to address reduction of greenhouse gas emissions in order to achieve the targets of the city gas industry.
Keidanren Declaration of Biodiversity and Action Policy		In July 2020, Toho Gas endorsed the Keidanren Declaration of Biodiversity and Action Policy. Toho Gas's endeavors are congruent with this declaration and action policy, and Toho Gas will continue to devote effort accordingly.
Keidanren Committee on Nature Conservation		Toho Gas Group has been a member of the Keidanren Committee on Nature Conservation since FY2014. Through the committee, The Group is providing aid for nature conservation activities by environmental NGOs in Indonesia and elsewhere around the world.



iv. About the Green/Transition Finance Framework

In order to promote the environmental initiatives, set out in the "Toho Gas Group 2050 Carbon Neutrality Initiative," Toho Gas has issued transition finance for transition activities to realize the Carbon Neutral Challenge 2050^{*1} set out by the Japan Gas Association (JGA) and the sector-specific technology roadmap^{*2*3} set out by the Ministry of Economy, Trade and Industry (METI). Also, Toho Gas engaged in dialogue with investors and a wide range of marked participants and has established the Toho Gas Green/Transition Finance Framework in order to carry out funds for in a manner that conform to the internationally recognized frameworks.

The frameworks which this Framework specifically refers to are described in (3) of Section II below.

- *1: Japan Gas Association: Carbon Neutral Challenge 2050 on 24th November 2020
- *2: Ministry of Economy, Trade and Industry (METI): Technology roadmap in the gas sector on "Transition Finance" on February 2022
- *3: Agency for Natural Resources and Energy: Technology roadmap in the power sector on "Transition Finance" on February 2022



v. Fundraiser's transition strategy for decarbonization

(1) Strategies by sector (industry) at the international/national/regional level

Figure-4 shows the scenarios for gas carbon neutrality set out in the "Carbon Neutral Challenge 2050" developed by the Japan Gas Association in November 2020. Figure-5 shows the technology roadmap by sector (gas) of the Ministry of Economy, Trade and Industry (METI).

The Japan Gas Association's scenario (Figure-4)/the METI's technology roadmap by sector (gas) (Figure-5) and Toho Gas's realization image of carbon neutrality (Figure-2) are well aligned, and it is designed to reduce CO₂ emissions throughout the entire gas supply chain, including demand-side, supply-side, CO₂ capture and decarbonization of the gas itself through methanation.

Toho Gas has set a gas carbon neutralization rate of at least 5% as one of its medium-term targets for 2030, which is consistent with the targets of the Carbon Neutral Challenge 2050 Action Plan of the Japan Gas Association.



Figure-4 Scenarios for achieving gas carbon neutral (Japan Gas Association)

- 1 Shift to natural gas and advanced use of natural gas (demand side)
 - Conversion from coal and oil to natural gas
 - Introducing cogeneration, fuel cell
 Introducing high efficient equipment
- Decarbonization of Gas (supply side)
- Synthetic Methane and hydrogen utilization
- Decarbonization of Gas by innovation by supplier
- ③ CCUS and overseas contribution
- R&D and installation of CCUS.
- Expand innovative gas technology and engineering to global, use of carbon neutral LNG

Fuel conversion from coal and oil to natural gas is one of the main ways contributing to the reduction of CO₂ emissions in society as a whole in the gas sector and is widely recognized as a typical transition project. According to METI's technology roadmap in the gas sector, the progress of fuel conversion in society as a whole will lead to an increase in gas demand (consumption and sales) for gas utilities, which in turn will lead to an increase in supply-side (gas utility) CO₂ emissions (increase in Scope 3) in the short to medium term (Figure-6).

In other words, while Toho Gas is working to reduce CO_2 emissions in its gas business through the introduction of high-efficiency gas appliances and other measures (Figure-7), its Scope 3 CO_2 emissions are expected to increase due to the relatively large amount of natural gas supplied for fuel conversion. Toho Gas is committed to reduce CO_2 emissions for society as a whole through the supply of gas for fuel conversion, etc. (contributing to the reduction of CO_2 emissions), and the voluntary reduction of CO_2 emissions through the introduction of high-efficiency gas appliances, etc. (the introduction of technologies and



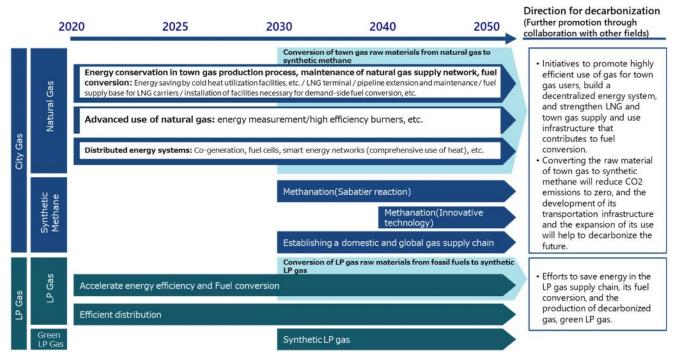
equipment that will contribute to the reduction of the supply of low-carbon gas in the future) will also contribute to the reduction of Scope 3.

Furthermore, Toho Gas has set out to evolve as an energy provider and is actively working on expanding its electricity services in addition to its gas business as a diverse energy supply. Toho Gas recognizes the importance of building a system for supplying electricity from renewable energy sources until the technology necessary to achieve a decarbonized society is established, and is promoting the introduction of renewable energy sources, which is the green power infrastructure necessary for the future supply of green gas body energy through methanation, etc.

The acceleration of the development and procurement of renewable energy sources shown by Toho Gas in its image of achieving carbon neutrality, and the amount of renewable energy sources handled (500,000 kW) as a 2030 target are considered to be closely related to the renewable energies in the Agency for Natural Resources and Energy's Transition Roadmap in the power sector (Figure-8).



3. Carobon neutral technology pathway | 2-1 Technical roadmap (City Gas and LP Gas)



3. Carobon neutral technology path | 2-1 Technical roadmap (common technology)

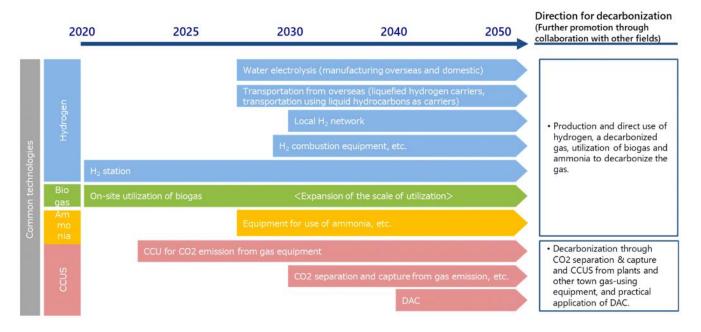


Figure-5 Ministry of Economy, Trade and Industry Technology roadmap in the gas sector (city gas, LP gas, common technologies)

Technology roadmap in the gas sector on "Transition Finance" (METI, February 2022)

Provisional translation by DNV based on the Japanese version

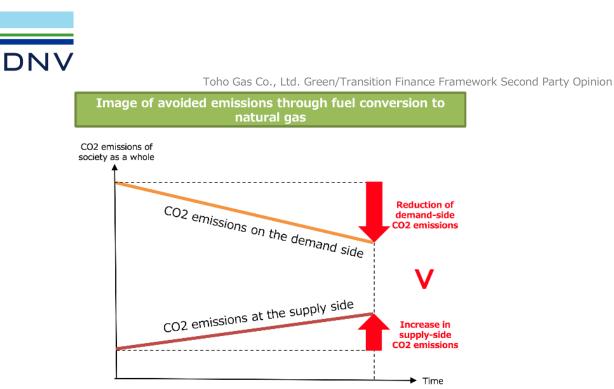


Figure-6 Ministry of Economy, Trade and Industry Technology roadmap in the gas sector (avoided CO₂ emissions on demand side)

Technology roadmap in the gas sector on "Transition Finance" (METI, February 2022)

2. Overview of Gas Industry (Common) | (Reference) Development and expansion of high-efficiency gas cogeneration

• The introduction of a <u>highly efficient gas cogeneration system</u> will not only contribute to <u>reducing carbon emissions during the transition period</u>, but will also contribute to <u>resilience</u> <u>and renewable energy coordination</u>.



Figure-7 Ministry of Economy, Trade and Industry Technology roadmap in the gas sector (development and expansion of high-efficiency gas cogeneration)

Technology roadmap in the gas sector on "Transition Finance" (METI, February 2022)



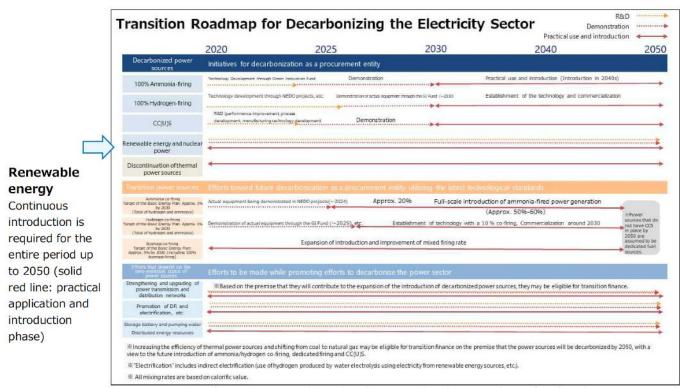


Figure-8 Transition roadmap for decarbonizing the electricity sector

(Agency for Natural Resources and Energy, Electric Infrastructure Division, February 2022)



(2) Fundraiser's transition strategy

Toho Gas has formulated the "Toho Gas Group 2050 Carbon Neutrality Initiative" and the "Toho Gas Group Medium-Term Management Plan 2022-2025" as a medium- to long-term strategy for transitions and has disclosed the following medium-term targets for FY2025 and up to 2030 and long-term targets for 2050.

	Targets up to FY2025		
	CO ₂ emission reduction contribution: $\blacktriangle 1$ million		
	tonnes (compared to FY2020)		
Medium-	Renewable energy sources handled: 250,000 kW		
term	Targets up to 2030		
targets	CO_2 emission reduction contribution: $\blacktriangle 3$ million		
	tonnes ^{*1} (compared to FY2020)		
	Gas carbon neutralization rate: At least 5% ^{*2}		
	Renewable energy sources handled: 500,000 kW		
Long-	Targets for 2050		
term	Carbon neutrality of the entire supply chain,		
targets	including customer locations		

Table-3 Toho Gas transition targets

*1: Contribution to CO₂ reduction through business activities (from FY2021)

*2: Percentage of gas sold that is carbon neutral (assuming various means such as methanation, etc., hydrogen use, biogas, carbon neutral LNG, carbon recycling, overseas contributions, afforestation and forest protection, etc.)

In order to achieve the above targets, Toho Gas aims to build an energy system that contributes to carbon neutrality, based on gas (city gas and LPG), hydrogen, and electricity. The future energy system that Toho Gas envisions based on these three types of energy is shown in Figure-9.



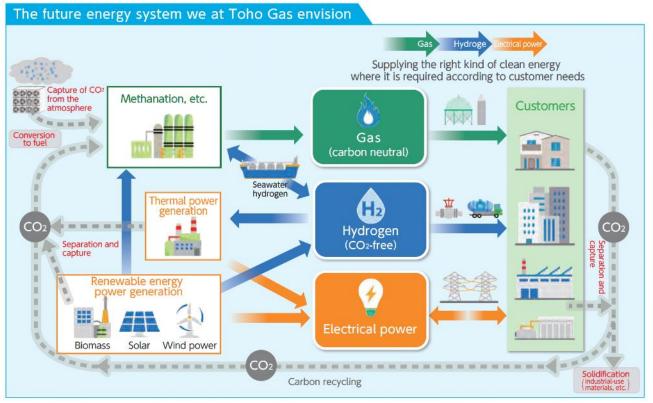


Figure-9 The future energy system Toho Gas envisions

Toho Gas' specific efforts to build an energy system that contributes to carbon neutrality are as follows.

(i) Gas

• Reductions of carbon and decarbonization at customer locations

The Chubu area is a prominent industrial region, and because coal and petroleum are both still heavily used in high-temperature thermal applications, switching the fuel type from these to environmentally friendly city gas accelerated reductions in carbon. Further, in conjunction with such conventional efforts as energy conservation and advanced utilization of energy, Toho Gas is also promoting such new initiatives as carbon recycling and hydrogen, supporting carbon reduction and decarbonization at customers in a thoroughgoing way.

• Carbon recycling

Toho Gas was quick to turn attention to technical development for CO_2 separation and capture and will continue to enhance its technical capabilities from the perspective of CO_2 utilization (conversion to fuel and solidification) and storage. As a means of carbon reduction that can be carried out right now, Toho Gas is socially implementing carbon recycling to separate, capture, and utilize CO_2 at customer locations, and in the future,



Toho Gas will also take up such challenges as direct capture from the atmosphere and expanding usage applications.

• Decarbonization of gas itself

Aiming for the practical implementation of methanation technology and the like and the large-quantity introduction of clean synthetic methane and similar substances, through broad-based alliances Toho Gas is devoting effort to such matters as verification geared toward resolving such issues as greater high efficiency and lower costs. For carbon neutral LNG and biogas for which the start of introduction has already been completed, Toho Gas will work to further expand the amounts handles and achieve decarbonization of gas itself through diverse means.

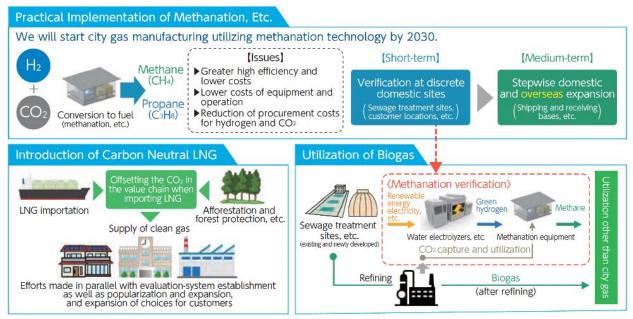


Figure-10 Decarbonization of gas itself



(ii) Hydrogen

• Demand creation: Mobility applications

In the Chubu area, the utilization of hydrogen as a mobility application is progressing, and to help drive the spread of fuel cell automobiles, Toho Gas has been proactively endeavoring to prepare hydrogen stations. Along with continuing to work expand hydrogen station facilities and reduce costs, Toho Gas will press on with expanding infrastructure by also making full use of cross-sectional frameworks in the industry to move toward expanding vehicle types and application to include industrial vehicles, transport vehicles, and others.

• Demand creation: Further expansion of applications

Toho Gas has even heretofore been devoting effort to the development of technology relating to hydrogen combustion and of mixed-combustion technology for city gas and hydrogen. Through further technical development, Toho Gas will turn its efforts toward application expansion and practical implementation for the areas of heating and the like. Also, in the phase II development for "Minato AQULS" that is now under discussion, Toho Gas is delineating a plan for the practical implementation of hydrogen technology.

The "Decarbonized Compact City Model for Redevelopment Areas (proposal name)" in Minato AQULS has been selected as the Ministry of the Environment's 1st Decarbonization Leading Region. Nagoya City and Minato AQULS will work together to decarbonize the area by maximizing the use of renewable energy and introducing advanced technologies, and to develop a regional decarbonization model that will contribute to solving regional problems and improving the attractiveness of the area and the quality of life of its inhabitants.

• Supply chain creation

To accommodate the vigorous hydrogen utilization needs of the Chubu region, Toho Gas is driving the spread and expansion of hydrogen in the Chubu region through the early actualization of a planned change to a hydrogen supply terminal at the Chita-Midorihama Factory and the creation of a hydrogen supply chain.



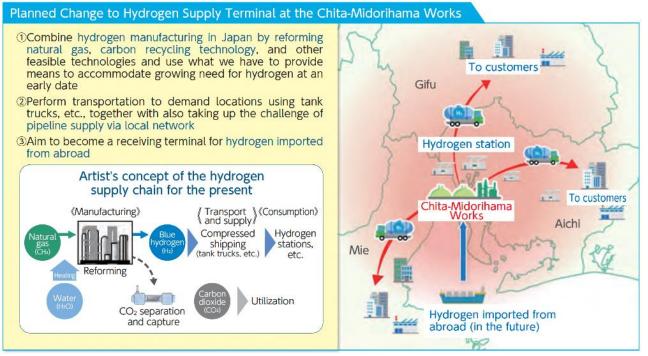


Figure-11 Creation of hydrogen supply chain



(iii) Electricity

• Reductions of carbon and decarbonization at customer locations

Together with encouraging the popularization of diverse distributed energy sources, including solar power generation, storage batteries, electric automobiles, and more, by integrating in the controlling these utilizing digital technology and achieving mutual flexibility for electricity and environmental values, Toho Gas aims to offer services that achieve both creating of advantages for customers and efficient energy usage.

• Decarbonization of electrical power sources

With an eye to decarbonizing its own power sources, Toho Gas is devoting effort to the development and procurement of renewable energy power sourced and to their diversification. Through cooperation with local governments and other entities and such means as regional electricity business, Toho Gas is endeavoring to utilize latent renewable energy resources in local regions and contribute to resolving local issues through local production and local distribution of energy and strengthened resilience.

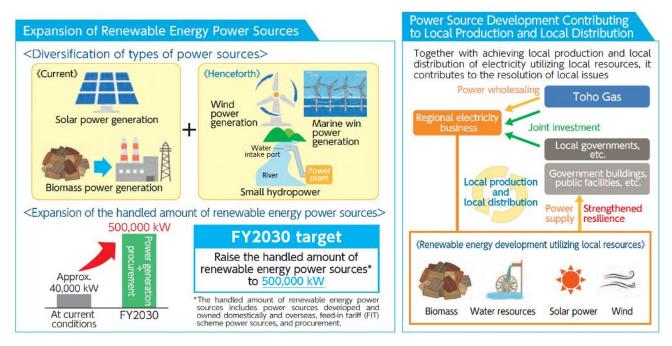


Figure-12 Decarbonization of electrical power sources



(3) Governance of the fundraiser (sustainability promotion system)

Figure-13 show Toho Gas's sustainability promotion system and its approach to sustainability promotion.

Toho Gas Group recognizes that addressing environmental issues, including climate change, is an important management issue and has established environmental action policies and guidelines, which are positioned in the management policy. Important matters such as risks and opportunities relating to climate change, strategies, risk management, and indicator reporting are reported to the Board of Directors via the Management Committee, which supervises the implementation status.

Toho Gas Group has set up the Group Environmental Preservation Board, consisting of Toho Gas and its major subsidiaries. The committee aims to reduce impacts of Group activities on the environment and promote the Group's compliance with laws and regulations related to environmental preservation. Specifically, the committee is designed to formulate the Group's basic policy on environmental preservation activities while setting goals regarding such activities. It is also intended to discuss and study measures aimed at achieving these goals, and to manage implementation of the measures. Regarding environmental action goals in particular, Toho Gas has established an Environmental Promotion Meeting in each department to verify progress and realization planning in conjunction with the Group Environmental Preservation Board.

Deliberation, examination, and progress management of environmental policies, goals, and measure - Generally 2 times a year Chair: Director in charge of the CSR/Environment Department, Managing Executive Officer Members: General Manager of each department and Directors of major subsidiaries, etc Each department at Toho Gas and its Environmental Promotion Meetings subsidiaries Verification of progress and planning for environmental action goals relating to each department Generally 2 times a year Management of environmental activities at each departm at Toho Gas and its subsidiaries Review of environmental activities, checking of response to laws and Promotion of environmental activities regulations

Figure-13 Organizational structure for management of environmental preservation

Toho Gas deploys staff to handle environmental affairs at each department of Toho Gas and its subsidiaries. "Environmental promoters" are tasked with undertaking specific environmental activities. "Environmental auditors" are in charge of reviewing what has been achieved through environmental preservation activities and checking if these activities are consistent with relevant regulations. "Environmental controllers" are assigned to control the activities of the "environmental promoters" and "environmental auditors." The deployment of these environmental experts is meant to promote environmental activities. The environmental management system is shown in Figure-13.



Fundraiser Name: Toho Gas Co., Ltd.

Framework Name: Toho Gas Green/Transition Finance Framework

Review Provider's Name: DNV Business Assurance Japan K.K.

Date of Report: 21st October 2022



II. Scope and Objectives

DNV has been commissioned by Toho Gas to provide an assessment on the Framework. Our objective has been to implement an assessment on whether Toho Gas meets the criteria established on CTFH·CTFBG, GBP·GBGLs, GLP·GLGLs, applicable CBS, and EU Taxonomy to provide a second party opinion on the eligibility of the framework.

DNV, as an independent external reviewer, has identified no real or perceived conflict of interest associated with the delivery of this second-party opinion for Toho Gas.

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

*Stated with GBP as an axis but to be replaced with loan-specific items where appropriate

(1) Scope of review^{*}

The review assessed the following elements and confirmed their alignment with the gist of GBP:

- \boxtimes Use of Proceeds \boxtimes Process for Project Evaluation and Selection
- ☑ Management of Proceeds ⊠ Reporting

*The scope of review is to be applied as a part of the evaluation of the sustainable finance (green or transition) with use of proceeds.

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

(2) Role(s) of review provider

- ☑Second Party Opinion□Certification
- □ Verification
- \Box Other (please specify):

(3) Standards/guidelines to be 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) and others, 2021	
6.	Green Loan Guidelines (GLGLs) ^{*2*3}	Ministry of the Environment, 2022	

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Ratings

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



*² It confirms compliance with the four core elements (use of proceeds, process for project evaluation and selection, management of proceeds, and reporting) that must be met when implementing as a bond/loan that meets the four elements of transition and has a specific use of proceeds (quoted from CTFBG).
*³ Green projects were assessed for eligibility using the referable technical criteria of the Climate Bond Initiative's Climate Bond Standard and EU Taxonomy.

II. Responsibilities of Toho Gas and DNV

Toho Gas 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 Toho Gas and other interested stakeholders in the bonds and loans as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by Toho Gas. 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 Toho Gas's management and used as a basis for this assessment were not correct or complete.



IV. Basis of DNV's Opinion

To provide as much flexibility for the fundraiser, as possible, we have adapted our Toho Gas Green^{*}/Transition Finance assessment methodologies, which incorporates the requirements of the CTFH, CTFBG, GBP, GBGLs, GLP and GLGLs, to create a Toho Gas Green/Transition Finance Eligibility Assessment Protocol (hereinafter, "Protocol"). Please refer to Schedule-2 and Schedule-3. The Protocol is applicable to Toho Gas Transition Finance under the CTFH, CTFBG, GBP, GBGLs, GLP and GLGLs.

*Green projects have been evaluated using the technical criteria referred to in the Climate Bond Initiative's Climate Bond Standard.

DNV, as an independent external reviewer, provides second party opinion according to the protocol.

Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principle behind the Climate Transition Finance of Bond and Loan with a specific use of proceeds as the basis for the opinion are as follows:

"provide an investment opportunity with transparent sustainability credentials"

"enable capital-raising and investment for new and existing projects with environmental benefits"

As per our Protocol, the criteria against which the Toho Gas Green/Transition Finance has been reviewed are grouped into common elements bellow, represented by CTFH, CTFBG, GBP, GBGLs, GLP and GLGLs.

(1) Four elements of CTFH/CTFBG (disclosure elements)

Principle One: Fundraiser's climate transition strategy and governance

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

Principle Two: Business model environmental materiality

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

Principle Three: Climate transition strategy to be science-based including targets and pathways

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

Principle Four: Implementation transparency

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



(2) Four elements of GBP/GBGLs and GLP/GLGLs

Principle One: Use of Proceeds

The Use of Proceeds criteria are guided by the requirement that a fundraiser of a green finance or a transition finance with specific use of proceeds must use the funds raised to bond eligible activities. The eligible activities should produce clear environmental benefits.

Principle Two: Process for Project Evaluation and Selection

The Project Evaluation and Selection criteria are guided by the requirements that a fundraiser of a green finance or a transition finance with specific use of proceeds should outline the process it follows when determining eligibility of an investment using the green finance or transition finance with specific use of proceeds and outline any impact objectives it will consider.

Principle Three: Management of Proceeds

The Management of Proceeds criteria are guided by the requirements that a green finance or a transition finance with specific use of proceeds should be tracked within the fundraising organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.

Principle Four: Reporting

The Reporting criteria are guided by the recommendation that at least Sustainability Reporting to the bond investors or loan lenders should be made of the use of proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.



V. Work Undertaken

Our work constituted a comprehensive review of the available information, based on the understanding that this information was provided to us by the fundraiser in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The assessment work that forms DNV's opinion includes:

Pre-funding assessment (Green/Transition Finance Framework Assessment)

- Creation of a Toho Gas-specific Protocol, adapted to the purpose of the Toho Gas Green/Transition Finance, as described above and in Schedule-2 to this assessment;
- Assessment of documentary evidence provided by Toho Gas on the Toho Gas Green/Transition Finance and supplemented assessment by a comprehensive desktop research. These checks refer to current assessment best practice and standards methodologies;
- Discussions with Toho Gas, and review of relevant documentation management;
- Documentation of findings against each element of the criteria.



VI. Findings and DNV's Opinion

DNV's findings and opinion are as follows:

From the CTF-1 to 4 in (1) below are the findings and opinions of DNV against the disclosure elements of the CTFH and CTFBG. Please see Schedule-2 for details.

From the GBP/GLP 1 to 4 in (2) below are the findings and opinions of DNV against the requirement of the four common elements of GBP/GBGLs and GLP/GLGLs. Please see Schedule-3 for details.

(1) Findings and opinions of DNV against the four common elements (disclosure elements) of CTFH and CTFBG

CTF-1: Fundraiser's climate transition strategy and governance

- In July 2021, Toho Gas formulated the "Toho Gas Group 2050 Carbon Neutrality Initiative," which sets out a realization image of carbon neutrality. In the vision, Toho Gas sets the long-term goal of achieving carbon neutrality in 2050, which is consistent with the goals of the Paris Agreement, and the medium-term goals for achieving the long-term goal. The realization image discloses the technology introduction plan to achieve the transition to carbon neutrality.
- DNV has reviewed and confirmed that Toho Gas's targets are consistent with the targets of the Paris Agreement, based on the action to achieve carbon neutrality in 2050, a science-based long-term target quantified by Toho Gas. Toho Gas sets environmental corporate strategies that are important to its business model, by identifying risks and opportunities based on the scenario analysis using TCFD guidance and grasping their impact.
- In the event of technological developments or changes in trends related to the transition strategy, or changes in the external scenarios on which the transition strategy is based, Toho Gas plans to revise the materiality and review its climate change initiatives, including the transition strategy, as necessary, and to disclose the details in a timely manner on its website, etc.
- Toho Gas identified individual issues with reference to the GRI Standard^{*1}, evaluated them from the aspects of economic and social values to identify new materialities through the Management Committee and the Board of Directors. The "Integrated Report 2022" discloses the promotion of carbon neutrality as one of the materialities, while the "Toho Gas Group Medium-Term Management Plan 2022-2025" describes the promotion of carbon neutrality as one of the four themes to be addressed during the medium-term period (FY2022 to FY2025). The Group Environmental Committee and other structures and mechanisms have been established to promote this at the management level, including the implementation of the transition strategy.

*1: Global Reporting Initiative (an international standard providing ESG-related reporting, management and analysis tools)



- Toho Gas has expressed its aim to build an energy system that contributes to carbon neutrality based on gas (city gas and LPG), hydrogen, and electricity in order to become carbon neutral throughout its supply chain, including its customer locations, in the "Toho Gas Group 2050 Carbon Neutrality Initiative", etc. Based on this approach, Toho Gas aims to promote the various initiatives listed in the image of carbon neutrality and, through these activities, to make a broad contribution to the achievement of the SDGs set by the United Nations.
- Based on an assessment of the implementation plan provided by Toho Gas under the Framework, the "Toho Gas Group 2050 Carbon Neutrality Initiative" and Toho Gas's realization image and scenario of carbon neutrality, DNV confirmed that it is well aligned with Toho Gas's Transition Strategy. Through the assessment, DNV confirmed that the implementation plan based on the Transition Strategy is reliable, ambitious, and achievable.

CTF-2: Business model environmental materiality

- Toho Gas's transition efforts include not only CO₂ emission reductions from its own business activities, but also activities that contribute to the CO₂ emission reduction at customers. This will contribute to the implementation of supply-side and demand-side carbon neutrality as an important initiative indicated in the various plans and strategies for decarbonization in Japan. In other words, Toho Gas's transition initiatives directly support the transition of society as a whole, including its own company.
- Toho Gas's realization image and scenario of carbon neutrality are well aligned with the "Transition Roadmap in the Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap in the Power Sector" (Agency for Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association), and its specific implementation plans and targets are set and quantified in the absolute sense that they must be the optimization to achieve them and the possibility of further improvement.
- DNV confirmed that Toho Gas's plan to implement its Transition Strategy is closely linked to the activities of its core business and to activities that contribute to the CO₂ emissions reduction of in society as a whole, thus contributing to the environmental aspects of society as a whole and supporting the promotion of Toho Gas's business. Toho Gas's planned transition strategy and transition pathway are associated with the materiality that Toho Gas has achieved through GRI standards, TCFD, etc., and will contribute to significant environmental benefits (impact) in both qualitative and quantitative terms.



CTF-3: Climate transition strategy to be science-based including targets and pathways

- Toho Gas has set a transition plan that is consistent with the Paris Agreement based on science-based evidence, and a transition trajectory that is consistent with the goals of the Ministry of Economy, Trade and Industry, Agency for Natural Resources and Energy, and the Japan Gas Association.
- DNV has confirmed that Toho Gas's Transition Strategy is quantified based on a consistent measurement methodology with prescribed assumptions.
- DNV has confirmed that Toho Gas set out Transition Strategy targets for sustainable CO₂ emission reductions using the TCFD, etc., which are consistent with the "Transition Roadmap in the Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap in the Power Sector" (Agency for Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association).

	Targets up to FY2025		
	CO ₂ emission reduction contribution: \blacktriangle 1 million		
	tonnes (compared to FY2020)		
Medium-	Renewable energy sources handled: 250,000 kW		
term	Targets up to 2030		
targets	CO_2 emission reduction contribution: $\blacktriangle 3$ million		
	tonnes ^{*1} (compared to FY2020)		
	Gas carbon neutralization rate: At least 5% ^{*2}		
	Renewable energy sources handled: 500,000 kW		
Long-	Targets for 2050		
term	Carbon neutrality of the entire supply chain,		
targets	including customer locations		

Table-3 (re-posted) Toho Gas transition targets

*1: Contribution to CO₂ reduction through business activities (from FY2021)

*2: Percentage of gas sold that is carbon neutral (assuming various means such as methanation, etc., hydrogen use, biogas, carbon neutral LNG, carbon recycling, overseas contributions, afforestation and forest protection, etc.)

- Toho Gas is promoting the advanced use of energy, including the introduction of high-efficiency gas facilities, and the carbon neutralization of gas while encouraging customers fuel conversion to city gas, with the aim of reducing CO₂ emissions by 500,000 tonnes for a part of Scope 3 emission equivalents (compared to FY2020) in 2030, and of contributing to society's overall CO₂ reduction contribution of 3 million tonnes (compared to FY2020).
- Toho Gas's CO₂ reduction include not only CO₂ emission reductions from its own business activities (Scope 1 and 2), but also Scope 3 and activities that contribute to the reduction at customers. This will contribute to the implementation of supply-



side and demand-side carbon neutrality as an important initiative indicated in the various plans and strategies for decarbonization in Japan. In other words, Toho Gas's transition initiatives directly support the transition of society as a whole, including its own company, as a company handling natural gas.

- DNV has confirmed that a third-party assurance was obtained for the quantitative information such as CO₂ emissions from Toho Gas, and that the subject data will be disclosed in the Integrated Report and on Toho Gas's website.

CTF-4: Implementation transparency

- DNV has confirmed that the investment plan related to Toho Gas's Transition Strategy includes agreement on future investment and expenditure. Specifically, in order to address climate change-related risks and opportunities, including the implementation of the Transition Strategy, Toho Gas aims for a 1:1 ratio of core projects to strategic projects out of the JPY 230 billion of investments in the medium-term management plan period covering FY2022 - FY2025, which includes projects implemented with green/transition finance.
- DNV has confirmed that the overall investment plan (investment amount) for the future will be carried out in accordance with the appropriate timeline, based on the internal management system and processes, taking into account CTF-1 to CTF-3.



(2) Findings and opinions of DNV against the four common elements of GBP/GBGLs and GLP/GLGLs

* The four elements are used as criteria for green finance or transition finance to specify the use of proceeds, and some green bonds/loans below can be read as transition finance (bond/loan).

GBP/GLP-1: Use of Proceeds

Toho Gas has defined the criteria applied to eligible projects as green/transition projects which meet Transition Strategy and related handbook, principle, and guidelines (CTFH and CTFBG). Table-1 shows the overview of green/transition finance projects.

DNV has confirmed that Toho Gas plans to allocate the full amount of the proceeds raised through green/transition finance for new investment and refinancing for existing investments as R&D, capital investments, investments and loans, and other related expenditure regarding eligible projects in order to implement the Transition Strategy.

These are projects that contribute to typical greenhouse gas reductions and to achieve carbon neutrality towards business transformation, as exemplified by CTFH/CTFBG, GBP/GBGLs, and GLP/GLGLs. These projects are also consistent with the "Transition Roadmap in the Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap in the Power Sector" (Agency for Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association) and contribute to achieving their targets. These projects have been evaluated as meeting the criteria required for green/transition projects and having clear environmental benefits on the Transition Strategy and are expected to contribute to the SDGs.

Eligible Project			
Business Category	Type of Initiative	Project Overview	
	Reductions of carbon and	decarbonization at customer locations	
	Fuel conversion to gas	Expenditure and investment in supporting fuel conversion from coal and petroleum to city gas	
Gas	Creation of gas supply chain	Capital investment in extending or maintaining gas pipelines	
	Gas-related energy savings	Capital investment in cogeneration, installation of high- efficiency gas appliances, and regional heating and cooling	
	Carbon recycling*		

Table-1 (re-posted) Toho Gas Green/Transition Finance Project Overview



Toho Gas Co., Ltd. Green/Transition Finance Framework Second Party Opinion			
	CCUS	R&D or capital investment in separation, recovery,	
		utilization, and storage of CO_2	
	Decarbonization of gas itse	elf*	
	Methanation	R&D or capital investment in the practical implementation of methanation technology	
	Carbon neutral LNG	Expenditure and investment in the procurement and supply of carbon neutral LNG	
	Biogas (Renewable energy)	R&D or capital investment in biogas introduction	
	Mobility applications*		
	Hydrogen station	Capital investment in the development of hydrogen stations	
	Further application expans	sion*	
	Hydrogen combustion equipment, etc.	R&D related to hydrogen combustion, mixed-combustion with city gas, etc.	
Hydrogen	Distributed energy systems	Capital investment in the construction of smart towns combining various technologies, such as hydrogen and renewable energy	
	Supply chain creation*		
	Hydrogen production, CCUS	R&D or capital investment in hydrogen production and carbon recycling through natural gas reforming, etc.	
	Local hydrogen network	R&D or capital investment in hydrogen pipeline supply through local networks	
	Reductions of carbon and	decarbonization at customer locations*	
	Distributed energy	R&D or capital investment in the promotion of various	
	systems, renewable	distributed energy resources, including solar power	
	energy, clean	generation, storage batteries, and electric vehicles, and	
	transportation	their integration and control using digital technology	
Electricity	Decarbonization of power	sources*	
	Renewable energy	Capital investment / investment and loan for the development of renewable energy sources such as solar power, biomass, wind (including offshore wind), and small hydropower	
		Investment and loan for new regional power companies	

*: Projects that could be used for green finance as well as transition finance



Use of proceeds classified under GBP/GLP (for green projects)

- ☑ Renewable energy
- Pollution prevention and control
- Conservation of terrestrial and aquatic biodiversity
- Sustainable water resources and wastewater management
- ☑ Highly eco-efficient products, environment-adapted products, environment-friendly production technologies and processes

Other (please specify):

- □ Energy efficiency (energy savings)
- Environmentally sustainable management of biological natural resources and land use
 Clean background tables
- ☑ Clean transportation
- □ Adaptation to climate change
- Green buildings with locally, nationally, or internationally recognized standards or certifications
- □ Undetermined at the time of implementation of the finance but expected to fit into the GBP/GLP classification or other eligible fields not currently listed in the GBP/GLP.



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

Toho Gas confirms that the green/transition projects contribute to the achievement of the transition strategy and that they do not conflict with the following exclusion criteria, which were set out in the Framework in advance. Toho Gas also confirms that measures for environmental and social risk reduction are implemented for all nominated eligible projects. Specifically, the Finance Department will take the lead in selecting the eligible projects, in consultation with the Planning Department and the CSR & Environment Department, and after evaluating the environmental benefits of each project, the Finance Officer will make the final decision.

DNV confirmed that these processes had been established as internal documents of Toho Gas and the plan will be implemented in accordance with the appropriate processes.

DNV also confirmed that the green/transition project implemented by Toho Gas is consistent with the fundraiser's management and environmental policies, as well as its transition strategy, goals, and pathways.

<Exclusion criteria>

- Inappropriate relationships such as unfair trade, bribery, corruption, extortion, embezzlement, etc. that do not comply with the laws and regulations of the country of the location
- · Transactions that could cause human rights, environmental, or other social issues

Evaluation and selection

- Conforms to the fundraiser's achievement of environmental contribution goals
- The project is eligible for use of proceeds by green finance and transparency is ensured.
- The project is evaluated and selected based on the published standard summary

Information on responsibilities and accountability

- ☑ Evaluation / Selection criteria subject to
 ☑ In-house assessment external advice or verification
- \Box Other (please specify):

- Documented process to determine that projects fit within defined categories
- Documented process to identify and manage potential ESG risks associated with the project
- \Box Other (*please specify*):



GBP/GLP-3: Management of Proceeds

The proceeds will be deposited into Toho Gas's common account, and the Finance Department will then manage the allocation of proceeds for each project by allocating them to Toho Gas, affiliated companies, and subsidiaries, using the internal management systems, the allocation management ledger, etc.

The internal management systems allow for tracking over the period of redemption or repayment, and the Finance Department will report the allocation status to the Finance Officer once a year for a review. Vouchers relating to the management of the proceeds will be kept in accordance with the document management rules.

The net proceeds will be allocated within approximately three years of the issue. If the proceeds are to be used to refinance existing expenditure, it is planned to be allocated within approximately three years from the time of the financing, and the projects that are determined to be eligible as transition projects at the time of allocation are eligible in accordance with the process set out in GBP/GLP-2. However, if the project execution (planning, construction, etc.) takes a long time, the period of allocation and refinancing may be flexibly adjusted in consideration of the green/transition characteristics of the project.

The amount of proceeds will be managed in cash or cash equivalents in the same amount as the unallocated proceeds until the allocation.

If green/transition finance is to be implemented under this framework in the future, the method of managing the proceeds will be explained prior to implementation of the finance through disclosure in legal documents and loan agreement documentation.

Tracking of proceeds:

- Some or all of the proceeds by green finance that are planned to be allocated are systematically distinguished or tracked by the fundraiser
- \Box Disclosure of intended types of temporary investment instruments for unallocated proceeds
- \boxtimes Other (*please specify*): Unallocated proceeds are managed in cash or cash equivalents

Additional disclosure:

- □ Allocation to future investments only
- Allocation to individual disbursements
- Disclosure of portfolio balance of unallocated proceeds
- Allocation to both existing and future investments
- \Box Allocation to a portfolio of disbursements
- Other (please specify): includes allocations made through subsidiaries and affiliates



GBP/GLP-4: Reporting

DNV confirms that Toho Gas will report (annual reporting) on the green/transition finance until the proceeds are allocated, and disclose information on the status of the allocation, the projects to which the proceeds have been allocated or the environmental benefits.

With regard to the allocation status of proceeds, the following items will be disclosed for the period until the full amount of the proceeds has been allocated to eligible projects. Environmental benefits will be disclosed for any or all of the items in the table below for the period from the implementation of the green/transition finance to the completion of redemption or repayment, as long as is reasonably practicable.

In the event of a material change in the project for which the proceeds are to be used, such change and the status of unallocated proceeds will be promptly disclosed even after the completion of the allocation.

The report will be disclosed on the Toho Gas website.

<Allocation status>

- Amount of allocated proceeds
- Estimated amount of unallocated proceeds, estimated time of allocation
- Estimated amount or percentage allocated to refinancing

<Environmental benefits>

	Eligible Project		Impact Reporting	
Business Category	Type of Initiative	Project Overview	Items	
	Reductions of carbon and o	decarbonization at customer		
	locations		Overview of each	
		Expenditure and investment in	project	
	Fuel conversion to gas	supporting customers' fuel	• Progress in R&D,	
		conversion from coal and oil to	capital	
Gas		city gas.	investment, etc.	
Gas	Creation of gas supply	Capital investment in extending	Annual CO ₂	
	chain	or maintaining gas pipelines	emission	
		Capital investment in	reductions from	
	Gas-related energy	cogeneration, installation of	each project (t-	
	savings	high-efficiency gas appliances	CO ₂ /year)	
		and district heating and cooling		



	Carbon recycling*		
	CCUS	Research and development or capital investment in the separation, recovery, utilisation and storage of CO ₂	
	Decarbonization of gas itse	elf*	
	Methanation	Research and development or capital investment in the practical application of methanation technology	
	Carbon neutral LNG	Expenditure and investment in the procurement and supply of carbon neutral LNG	
	Biogas (Renewable energy)	Research and development or capital investment in biogas introduction	
	Mobility applications*		
	Hydrogen station	Capital investment in the development of hydrogen stations	
	Further application expans		
Hydrogen	Hydrogen combustion equipment, etc.	Research and development related to hydrogen combustion, co-firing with city gas, etc.	 Overview of each project Progress in R&D,
	Distributed energy systems	Capital investment in the construction of smart towns combining various technologies, such as hydrogen and renewable energy.	capital investment, etc. • Annual CO ₂ emission reductions from each project (t-
	Supply chain creation*		CO ₂ /year)
	Hydrogen production, CCUS	R&D or capital investment in hydrogen production and carbon recycling through natural gas reforming, etc.	
	Local hydrogen network	Research and development or capital investment in hydrogen	



	I oho Gas Co., Ltd. Green/Transition Finance Fr			rk Second Party Opinion
		pipeline supply through local		
		networks		
	Reductions of carbon and	decarbonization at customer	•	Overview of each
	locations*			project
	Distributed energy systems, renewable energy, clean transportation	R&D or capital investment in the promotion of various distributed energy resources, including photovoltaic power generation, storage batteries and electric vehicles, and their integration and control using digital technology.	•	Progress in R&D, capital investment, etc. Installed capacity Annual CO ₂ emission reductions from each project (t- CO ₂ /year)
Electricity	Decarbonization of power sources*			Overview of each
Licenterty		Capital investment or]	project
		investment and financing for	•	Progress in R&D,
		the development of renewable		capital
		energy sources such as solar,		investment, etc.
		biomass, wind (including	·	Installed capacity
	Renewable energy	offshore wind) and small	•	Annual power
	Renewable energy	hydropower.		generation
			•	Annual CO ₂
		Investing in and financing new		emission
		regional power companies		reductions from
				each project (t-
				CO ₂ /year)



Use of Proceeds reporting:

\boxtimes	Project-by-project		\boxtimes	On a project portfolio basis
	Linkage to individual finance			Other (please specify):
	Infor	mation reported:		
	\boxtimes	Allocated amounts		Green finance share of total investment
		Other (please specify):		
	Frequ	iency:		
	\boxtimes	Annual		Semi-annual

 \Box Other (please specify):

Impact reporting (Environmental Impact):

 \boxtimes Project-by-project On a project portfolio basis X Linkage to individual finance Other (please specify):

Frequency:

- ⊠ Annual □ Semi-annual
- Other (please specify):

Information reported (expected or ex-post):

- \boxtimes GHG emissions/savings □ Energy savings
- \boxtimes Other ESG indicators (please specify): Installed capacity, annual power generation, etc.

Means of disclosure:

- Information published in financial report Information published in the sustainability (Integrated Report) report
 - Information published in ad hoc documents X Other (please specify): on Toho Gas website
- Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review)



Assessment Conclusion

On the basis of the information provided by Toho Gas and the work undertaken, it is DNV's opinion that the Toho Gas Green/Transition Finance Framework meets the criteria established in the Protocol, and that it is aligned with the following stated definition or purpose of climate transition finance for bonds and loans that specify the use of proceeds within the CTFH/CTFBG, GBP/GBGLs, GLP/GLGLs.

"provide an investment opportunity with transparent sustainability credentials"

"enable capital-raising and investment for new and existing projects with environmental benefits"

DNV Business Assurance Japan K.K.

21st October 2022

Mark Robinson. Manager, Sustainability Services DNV Business Assurance, Australia

M Konedone.

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Mach.

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About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight.

With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

Disclaimer

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



Schedule-1 Green/Transition Finance Nominated Projects

The projects listed in the table are green/transition finance candidates before the implementation of finance (as of October 2022). In the future, green/transition finance issued under the Toho Gas Green/Transition Finance Framework will be selected from one or more of the green/transition eligible criteria (nominated eligible projects) and the use of proceeds will be reported in the pre-financing or post-financing reports. If additional green/transition projects are included, eligibility will be evaluated in advance by Toho Gas in accordance with the Toho Gas Green/Transition Finance Framework and, if necessary, DNV will evaluate them in a timely manner.

Eligible Project				
Business Category	Type of Initiative	Project Overview		
	Reductions of carbon and	decarbonization at customer locations		
	Fuel conversion to gas	Expenditure and investment in supporting fuel conversion from coal and petroleum to city gas		
	Creation of gas supply chain	Capital investment in extending or maintaining gas pipelines		
	Gas-related energy savings	Capital investment in cogeneration, installation of high- efficiency gas appliances, and regional heating and cooling		
	Carbon recycling*			
Gas	CCUS	R&D or capital investment in separation, recovery, utilization, and storage of CO_2		
	Decarbonization of gas itself*			
	Methanation	R&D or capital investment in the practical implementation of methanation technology		
	Carbon neutral LNG	Expenditure and investment in the procurement and supply of carbon neutral LNG		
	Biogas (Renewable energy)	R&D or capital investment in biogas introduction		
	Mobility applications*			
Hudrogon	Hydrogen station	Capital investment in the development of hydrogen stations		
Hydrogen	Further application expans	sion*		
	Hydrogen combustion equipment, etc.	R&D related to hydrogen combustion, mixed-combustion with city gas, etc.		



	Distributed energy systems Supply chain creation*	Capital investment in the construction of smart towns combining various technologies, such as hydrogen and renewable energy
	Hydrogen production, CCUS	R&D or capital investment in hydrogen production and carbon recycling through natural gas reforming, etc.
	Local hydrogen network	R&D or capital investment in hydrogen pipeline supply through local networks
	Reductions of carbon and	decarbonization at customer locations*
	Distributed energy	R&D or capital investment in the promotion of various
	systems, renewable	distributed energy resources, including solar power
	energy, clean	generation, storage batteries, and electric vehicles, and
	transportation	their integration and control using digital technology
Electricity	Decarbonization of power	sources*
		Capital investment / investment and loan for the
		development of renewable energy sources such as solar
	Renewable energy	power, biomass, wind (including offshore wind), and small
		hydropower
		Investment and loan for new regional power companies

*: Projects that could be used for green finance as well as transition finance



Schedule-2 Transition Finance Framework Eligibility Assessment Protocol

The checklists (1-4) below are DNV evaluation procedures created for Toho Gas Green/Transition Finance Framework Eligibility Assessment based on the disclosure requirements of CTFH and CTFBG.

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

*Please replace "Issuer", "Investor" to "Borrower/Fundraiser", "Lender" in the context in the following requirements.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1	Fundraiser's climate transition strategy and governance	 The financing purpose should be for enabling a fundraiser's climate change strategy. A 'transition' label applied to a debt financing instrument should serve to communicate the implementation of a fundraiser's corporate strategy to transform the business model in a way which effectively addresses climate-related risks and contributes to alignment with the goals of the Paris Agreement. Suggested information and indicators A long-term target to align with the goals of the Paris Agreement (e.g. the objective of limiting global warming ideally to 1.5℃ and, at the very least, to well below 2℃); Relevant interim targets on the trajectory towards the longterm goal; Disclosure on the fundraiser's levers towards decarbonisation, and strategic planning towards a long-term target to 	 Confirmed documents: Framework 6th Basic Energy Plan Transition Roadmaps in the gas and power sectors Carbon Neutral Challenge Integrated Report 2022 Toho Gas Group Medium-Term Management Plan 2022-2025 Toho Gas Group 2050 Carbon Neutrality Initiative Project list Interviews with Toho Gas stakeholders 	Toho Gas has established a framework and has introduced a range of plans and initiatives to manage and enhance the environmental sustainability and related performance of the organization against Toho Gas Group's wider environmental strategy. DNV has reviewed and confirmed that Toho Gas's targets are consistent with the targets of the Paris Agreement, based on the action to achieve carbon neutrality in 2050, a science-based long-term target quantified by Toho Gas. Toho Gas sets environmental corporate strategies that are important to its business model, by identifying risks and opportunities based on the scenario analysis using TCFD guidance and grasping their impact. Toho Gas presented a realization image and scenario of achieving carbon neutrality in the "Toho Gas Group 2050 Carbon Neutrality Initiative" published in July 2021. The long-term target is to achieve carbon neutrality by 2050, which is consistent with the targets of the Paris Agreement, and the medium-term targets for realizing this target are to contribute 3 million tonnes of CO ₂ reduction in 2030 (compared to FY2020), to achieve a gas carbon



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 align with the goals of the Paris Agreement; Clear oversight and governance of transition strategy and, Evidence of a broader sustainability strategy to mitigate relevant environmental and social externalities and contribute to the UN Sustainable Development Goals. 		neutrality rate of at least 5%, and to handle 500,000 kW of renewable energy. Toho Gas's realization image of carbon neutrality discloses specific technologies to be introduced to realize the transition to carbon neutrality. Toho Gas's Transition Strategy is aligned with the "Transition Roadmap in the Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap in the Power Sector" (Agency for Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association), and incorporates the action plan to achieve the targets set by utilizing TCFD guidance. Furthermore, in the event of technological developments or changes in trends related to the transition strategy, or changes in the external scenarios on which the transition strategy is based, Toho Gas plans to revise the materiality and review its climate change initiatives, including the transition strategy, as necessary, and to disclose the details in a timely manner on Toho Gas's website, etc. Toho Gas identifies the promotion of carbon neutrality as one of the materialities in the "Integrated Report 2022", while describes the promotion of carbon neutrality as one of the four themes to be addressed during the medium- term period (FY2022 to FY2025) in the "Toho Gas Group Medium-Term Management Plan 2022-2025". Measures against climate change is recognized as one of the most important issues in Toho Gas's business, and structures and mechanisms have been established to promote this at the management level, including the implementation of the transition strategy. Toho Gas has expressed its aim to build an energy system that contributes to carbon neutrality based on gas,



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				 hydrogen, and electricity in order to become carbon neutral throughout its supply chain, including its customer locations, in the "Toho Gas Group 2050 Carbon Neutrality Initiative", etc. Based on this approach, Toho Gas aims to promote the various initiatives listed in the realization image of carbon neutrality and, through these activities, to make a broad contribution to the achievement of the SDGs set by the United Nations. Based on an assessment of the implementation plan provided by Toho Gas under the Framework, the "Toho Gas Group 2050 Carbon Neutrality Initiative" and Toho Gas's realization image and scenario of carbon neutrality, DNV confirmed that it is well aligned with Toho Gas's Transition Strategy. Through the assessment, DNV confirmed that the implementation plan based on the Transition Strategy is reliable, ambitious and achievable.
2	Business model environmental materiality	The planned climate transition trajectory should be relevant to the environmentally-material parts of the fundraiser's business model, taking into account potential future scenarios which may impact on current determinations concerning materiality.	 Confirmed documents: Framework 6th Basic Energy Plan Transition Roadmaps in the gas and power sectors Carbon Neutral Challenge Integrated Report 2022 Toho Gas Group Medium-Term Management Plan 2022-2025 	DNV evaluated whether the key activities associated with Toho Gas's business activities correspond to Toho Gas's Transition Strategy, which was evaluated as contributing to the environment. The greenhouse gas emissions from Toho Gas's value chain (FY2021) are as follows: Scope 1, 2: 142 thousand t-CO ₂ Scope 3 Category 1, 2, 3, 4: 1.67 million t-CO ₂ Scope 3 Category 5, 6, 7, 9: 18 thousand t-CO ₂ Scope 3 Category 11: 9.59 million t-CO ₂



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
			 Toho Gas Group 2050 Carbon Neutrality Initiative Project list Interviews with Toho Gas stakeholders	 Procurement(15%) Scope 3 Category 11, 2, 3, 4 1.42 million Scope 3 Category 11 9.59 million tonnes-CO2 Procure and tonnes-CO2 Scope 3 Category 11 9.59 million tonnes-CO2 Procure and tonnes-CO2 Scope 3 Category 5.6, 7, 9 18 thousand tonnes-CO2 greenhouse gas emissions Scope 2] Indirect emissions by business operator [Scope 2] Indirect emissions accompanying use of electricity and heat supplied by other companies [Scope 3] Indirect emissions other than Scope 1 and 2 (Emissions of others related to business activities of the operator) Toho Gas's Transition efforts include not only CO2 emission reductions from its own business activities (Scope 1 and 2), but also Scope 3 and activities that contribute to the reduction at customers. This will contribute to the implementation of supply-side and demand-side carbon neutrality as an important initiative indicated in the various plans and strategies for decarbonization in Japan. In other words, Toho Gas's realization image of carbon neutrality is well aligned with the "Transition Roadmap in the Gas Sector" (The Ministry of Economy, Trade and Industry), the "Transition Roadmap in the Power Sector" (Agency for



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				Natural Resources and Energy), and the Carbon Neutral Challenge 2050 (The Japan Gas Association), and its specific implementation plans and targets are set and quantified in the absolute sense that they must be the optimization to achieve them and the possibility of further improvement.
				DNV confirmed that Toho Gas'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 CO ₂ emissions reduction of in society as a whole, thus contributing to the environmental aspects of society as a whole and supporting the promotion of Toho Gas's business.
				Toho Gas's planned transition strategy and transition pathway are associated with the materiality that Toho Gas has achieved through GRI standards*1, TCFD, etc., and will contribute to significant environmental benefits (impact) in both qualitative and quantitative terms.
				*1: Global Reporting Initiative (an international standard providing ESG-related reporting, management and analysis methods)
3	Climate transition strategy to be science-based including targets and pathways	 Fundraiser'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, 	 Confirmed documents: Framework 6th Basic Energy Plan Transition Roadmaps in the gas and power sectors Carbon Neutral Challenge 	Toho Gas has set a transition plan that is consistent with the Paris Agreement based on science-based evidence, and a transition trajectory that is consistent with the goals of the Ministry of Economy, Trade and Industry, Agency for Natural Resources and Energy, and the Japan Gas Association. DNV has confirmed that Toho Gas's Transition Strategy is quantified based on a consistent measurement methodology with prescribed assumptions. The transition



Ref.	Criteria	Requirements	Work Undertaken	DNV Findin	igs
Ref.	Criteria	 science-based trajectories where such trajectories exist; be publicly disclosed (ideally in mainstream financing filings), include 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 utilised, and methodology applied (e.g. ACT, SBTi, etc.); Greenhouse gas objectives covering all scopes (Scope 1, 2 and 3); and, Targets formulated both in intensity and absolute terms. 	 Integrated Report 2022 Toho Gas Group Medium-Term Management Plan 2022-2025 Toho Gas Group 2050 Carbon Neutrality Initiative Interviews with Toho Gas stakeholders	targets we which are o Economy, Resources	re set out based on initiatives using TCFD, etc., consistent with the policies of the Ministry of Trade and Industry, Agency for Natural and Energy, and the Japan Gas Association. Toho Gas set out the following transition Targets up to FY2025 CO ₂ emission reduction contribution: ▲1 million tonnes (compared to FY2020) Renewable energy sources handled: 250,000 kW Targets up to 2030 CO ₂ emission reduction contribution: ▲3 million tonnes ^{*1} (compared to FY2020) Gas carbon neutralization rate: At least 5% ^{*2}
					Renewable energy sources handled: 500,000 kW
				Long-	Targets for 2050
				term	Carbon neutrality of the entire supply
				targets	chain, including customer locations ution to CO ₂ reduction through business activities
				*1: Contribut (from FY202	5
				*2: Percenta	age of gas sold that is carbon neutral (assuming
					ns such as methanation, etc., hydrogen use, biogas, ral LNG, carbon recycling, overseas contributions,
					and forest protection, etc.)



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				Toho Gas's CO ₂ reduction include not only CO ₂ emission reductions from its own business activities (Scope 1 and 2), but also Scope 3 and activities that contribute to the reduction at customers. This will contribute to the implementation of supply-side and demand-side carbon neutrality as an important initiative indicated in the various plans and strategies for decarbonization in Japan. In other words, Toho Gas's transition initiatives directly support the transition of society as a whole, including its own company as a company handling natural gases.
				Toho Gas is promoting the advanced use of energy, including the introduction of high-efficiency gas facilities, and the carbon neutralization of gas while encouraging customers fuel conversion to city gas, with the aim of reducing CO_2 emissions by 500,000 tonnes for a part of Scope 3 emission equivalents (compared to FY2020) in 2030, and of contributing to society's overall CO_2 reduction contribution of 3 million tonnes (compared to FY2020).
				A third-party assurance was obtained for the quantitative information such as CO_2 emissions from Toho Gas, which is disclosed in the Integrated Report 2022 and on Toho Gas's website.
4	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 to the extent practicable, of the underlying investment program including	 Confirmed documents: Framework Integrated Report 2022 Toho Gas Group Medium-Term 	DNV has confirmed that the investment and development plan related to Toho Gas's Transition Strategy includes agreement on future investment and expenditure. Specifically, in order to address climate change-related risks and opportunities, including the implementation of the Transition Strategy, Toho Gas aims for a 1:1 ratio of



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 capital and operational expenditure. This may include R&D-related expenditure where relevant, and details of where any such operating expenditure is deemed 'non-Business as Usual', as well as other relevant information indicating how this program supports implementation of the transition strategy, including details of any divestments, governance, and process changes. <suggested and="" indicators="" information=""></suggested> 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 	Management Plan 2022-2025 - Toho Gas Group 2050 Carbon Neutrality Initiative - Project list Interviews with Toho Gas stakeholders	core projects to strategic projects out of the JPY 230 billion of investments in the medium-term management plan period covering FY2022 - FY2025, which includes projects implemented with green/transition finance. DNV has confirmed that the overall investment plan (investment amount) for the future will be carried out in accordance with the appropriate timeline, based on the internal management system and processes, taking into account CTF-1 to CTF-3. Toho Gas plans to allocate to the nominated green/transition eligible projects set out in Schedule-1 as R&D, capital investments, investments and loans, and other related expenditures. Through the assessment, DNV concluded that Toho Gas's transition strategy, in terms of directly and indirectly supporting the decarbonization of society as a whole, can be seen as a non-Business as Usual concept.



Schedule-3 Green Finance (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 Toho Gas Green/Transition Finance Eligibility Assessment (green/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 fundraiser and is provided by Toho Gas as evidence of eligibility judgment for DNV.

In Schedule-3, 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	Types of funds	 The types of green/transition finance are classified into one of the following types defined by GBP/GLP. (Standard) Green/transition Bond/loan Green/transition Revenue Bond/loan Green/transition Project Bond/loan Other 	Confirmed documents: - Framework Interviews with Toho Gas stakeholders	Through the evaluation work, DNV confirmed that Toho Gas Green/Transition Finance falls into the following categories. • (Standard) Green/transition bond/loan
1b	Green/transition Project Classification	The key to a transition finance is that the proceeds will be used for a transition project, which should be properly stated in the legal documents relating to the security/loan.	 Confirmed documents: Framework Toho Gas Group 2050 Carbon Neutrality Initiative Project list Interviews with Toho Gas stakeholders 	DNV confirms that Toho Gas Green/Transition Finance is intended to finance a wide range of green/transition projects focused on Toho Gas's environmental targets and transition strategy, as described in the Framework and Schedule-1. Specifically, all Green/Transition Finance Eligible Project Candidates listed in Schedule-1 are evaluated as conforming to the Transition Strategy, and the proceeds through Green/Transition Finance are planned to be financed one or more of the Green/Transition Finance Eligible Project Candidates. If a green/transition project is pre-selected before



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				the financing is implemented, this will be disclosed in legal documents. Through the assessment, DNV concludes that the Green/Transition eligible projects candidates will bring concrete and actual environmental benefits.
1c	Environmental benefits	All green/transition projects to which the funds are used should have clear environmental benefits, the effects of which should be assessed by the fundraiser and, where possible, quantitatively demonstrated.	Confirmed documents: - Framework - Toho Gas Group 2050 Carbon Neutrality Initiative - Project list	Green/Transition projects will contribute to goals based on Toho Gas's Transition Strategy and contribute to low-carbon or decarbonization that classified into the three business fields listed in Schedule-1. The environmental benefit is the reduction of CO ₂ emissions, which has been quantitatively or qualitatively evaluated by Toho Gas.
			Interviews with Toho Gas stakeholders	DNV confirmed that, prior to the implementation of green/transition finance, the project's environmental benefits evaluation method (calculation method) and the items to be disclosed are planned to be evaluated and reported quantitatively as indicators and CO ₂ emission reductions according to the project's characteristics in the annual report. (If it is difficult to evaluate the quantitative CO ₂ emission reductions due to the characteristics of the project, Toho Gas will report the project outline and the status of R&D and demonstration to the extent practicable).
1d	Refinancing rate	If all or part of the proceeds are used or may be used for refinancing, the fundraiser will indicate the estimated ratio of the initial investment to the refinancing and, if necessary. Therefore, it is recommended to clarify which	Confirmed documents: - Framework - Project list Interviews with Toho Gas stakeholders	Toho Gas plans to allocate all of the proceeds to new investment, refinancing, or both, in one or more of the eligible project candidates included in Schedule-1. If it is clear in advance, prior to the implementation of the financing, whether the financing will be used for new investments or refinancing, this will be disclosed in legal documents. If it is not yet clear, the fundraiser plans to disclose the estimated



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		investment or project portfolio is subject to refinancing.		amount (or percentage) of the proceeds used for refinancing through reporting (annual report).

GBP/GLP-2 Process for Project Evaluation and Selection

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Project selection process	 Green/transition finance fundraisers should provide an overview of the process of qualifying projects for which green/transition finance funding will be used. This includes (but is not limited to): The process by which the fundraiser determines that the project in question is included in the business category of a qualified green/transition project. Creation of criteria for eligibility of projects for which green/transition finance funding will be used Environmental sustainability goals 	Confirmed documents: - Framework Interviews with Toho Gas stakeholders	DNV confirmed that the fundraiser has a process of determining the eligibility of projects for which the green/transition finance, and that the outline is specified in the framework. Specifically, the Finance Department will take the lead in selecting the eligible projects, in consultation with the Planning Department and the CSR & Environment Department, and after evaluating the environmental benefits of each project, the Finance Officer will make the final decision.
2b	Fundraisers' Environment al and Social Governance Framework	In addition to criteria and certifications, the information published by fundraisers regarding the green/transition finance process also considers the quality of performance of the fundraiser's framework and environmental sustainability.	Confirmed documents: - Framework - Toho Gas Group Medium-Term Management Plan 2022-2025 Interviews with Toho Gas stakeholders	Toho Gas complies with environment-related laws, ordinances and regulations, and considers that the effects of environmental benefits such as CO ₂ reduction are clear in the entire life cycle or each process when selecting green/transition projects to be implemented. In the operation and implementation of the project, each of the departments involved is committed to



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				the preservation of the surrounding environment. The following exclusion criteria have been set.
				• Inappropriate relationships such as unfair trade, bribery, corruption, extortion, embezzlement, etc. that do not comply with the laws and regulations of the country of the location
				 Transactions that could cause human rights, environmental, or other social issues
				DNV has confirmed that the green/transition projects implemented by Toho Gas are consistent with Toho Gas's management and environmental policies, as well as with the transition strategy, goals, and pathways.

GBP/GLP-3 Management of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Tracking procedure-1	The net proceeds from of green/transition finance should be managed in sub-accounts, included in sub-portfolio, or otherwise tracked. It should also be certified by the fundraiser in a formal internal process related to the fundraiser's investment and financing operations for the Transition Project.	Confirmed documents: - Framework - Allocated proceeds management list Interviews with Toho Gas stakeholders	DNV has confirmed that the proceeds by the green/transition finance can be tracked in line with Toho Gas's internal system, etc., and proved based on the review of systems actually in use and documents through the assessment.



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3b	Tracking procedure-2	During the green/transition finance 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 - Allocated proceeds management list Interviews with Toho Gas stakeholders	DNV confirmed that Toho Gas's Finance Department plans to review the outstanding balance of the green/transition finance by using the internal system and the allocated proceeds management list described in 3a on an annual basis during the period from the implementation of the green/transition finance to its redemption or repayment.
3с	Temporary holding	If no investment or payment has been made in a qualified green/transition project, the fundraiser should also inform the investor of the possible temporary investment method for the balance of unallocated proceeds.	Confirmed documents: - Framework - Allocated proceeds management list Interviews with Toho Gas stakeholders	DNV confirmed that the confirmation process through Toho Gas's internal system and the allocated proceeds management list are structured to ensure that the balance of unallocated proceeds is recognized sequentially. DNV confirmed through the framework and assessment that the balance of unallocated proceeds will be managed in cash or cash equivalents, and that in the unlikely event of a significant delay in the scheduled date of allocation, this would be reported in the reporting or otherwise, together with the reasons for the delay. DNV also confirmed that the balance of unallocated proceeds will be disclosed through reporting on the allocation status of proceeds.



GBP/GLP-4 Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings	
4a	Periodical Reporting	In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, the fundraiser will consider each project at least once a year for projects to which the Green/transition Finance 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 Interviews with Toho Gas stakeholders	DNV confirmed that Toho Gas will carry out green/transition finance reporting (annual reporting) and disclose information on the allocation status of proceeds, projects for which proceeds have been allocated, and environmental benefits. With regard to the allocation status of proceeds, the following items are disclosed until the full amount of proceeds has been allocated to eligible projects. For environmental benefits, any or all of the items in the table below will be disclosed for the period from the implementation of the green/transition finance to the completion of the redemption or repayment, as long as is reasonably practicable.	
				DNV also confirmed that, in the event of a material change in the project for which the proceeds are to be used, disclosure will be made promptly regarding such change and unallocated proceeds even after the completion of the allocation of proceeds.	
				The report will be published on the Toho Gas website. <allocation status=""> • Amount of allocated proceeds • Estimated amount of unallocated proceeds, estimated time of allocation • Estimated amount or percentage allocated to refinancing <environmental benefits=""> Business Category Impact Reporting Items Gas • Overview of each project</environmental></allocation>	



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings		
						 Progress in R&D, capital investment, etc. Annual CO₂ emission reductions from each project (t-CO₂/year)
					Hydrogen Electricity (Distributed energy systems,	 Overview of each project Progress in R&D, capital investment, etc. Annual CO₂ emission reductions from each project (t-CO₂/year) Overview of each project Progress in R&D, capital investment, etc.
					renewable energy, clean transportation) Electricity (Renewable energy)	 Installed capacity Annual CO₂ emission reductions from each project (t-CO₂/year) Overview of each project Progress in R&D, capital investment, etc. Installed capacity Annual power generation



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings		
						• Annual CO ₂ emission reductions from each project (t-CO ₂ /year)