



## **SECOND PARTY OPINION**

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**MITSUI O.S.K. LINES, LTD.**

**SUSTAINABLE FINANCE FRAMEWORK**

Prepared by: DNV Business Assurance Japan K.K.

Location: Kobe, Japan

Date: 22 December, 2023

Ref. Nr.: PRJN-658427-2023-AST-JPN-01



## Executive Summary

Mitsui O.S.K. Lines, Ltd. (hereinafter, "MOL") is one of the largest multimodal groups, which has approximately 140 years history, that meets diverse transport needs with one of the world's largest merchant fleets. As a full-line marine transport group, MOL operates around 800 diverse vessels. Specifically, MOL runs the dry bulker transport business, energy transport business, product transport business, as well as associated businesses, and other business (including cruise ships).

MOL has launched "MOL Group Environmental Vision 2.2" in April 2023 and is working to solve various environmental issues such as climate change, aiming for "Net Zero GHG Emissions by 2050."

In advancing the "MOL Group Environmental Vision 2.2," MOL is working with ambitious goals for reducing GHG emissions in line with the GHG emission reduction targets which comply with and are more ambitious than the International Maritime Organization (IMO), an international organization in the shipping industry, and the Ministry of Land, Infrastructure, Transport and Tourism. The MOL Group will implement the finance towards achievement of the ambitious targets for GHG emission reduction and transition strategy as the "Mitsui O.S.K. Lines, Ltd. Sustainable Finance (hereinafter, the 'MOL Sustainable Finance')."

MOL believes that it will be an opportunity to disseminate MOL's wide-ranging sustainability strategy initiative through the issuance of this finance.

MOL has established the Mitsui O.S.K. Lines, Ltd. Sustainable Finance Framework (hereinafter, the "Framework") in order to implement sustainable finance in a manner that conforms to the framework, which is established referring to international standards.

DNV Business Assurance Japan K.K. (hereinafter, "DNV"), as an external review organization, has evaluated the eligibility of the Framework.

Specifically, DNV provided an eligibility assessment for the Framework by applying frameworks centered on the following:

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



(Ministry of the Environment, hereinafter SLLGLs)

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

### <CTF eligibility assessment results>

DNV confirmed the following through the materials and information provided by MOL. Followings (CTF-1 ~ CTF-4) are findings and opinions of DNV against the four common elements of the CTFH and CTFBG.

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

The transition strategy of the Issuer, MOL, is consistent with the environmental goals set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., and has set long-term and medium-term targets with scientific evidence with regard to GHG emission reduction. Specifically, the following targets have been set.

- Long-term target: Net zero emission in the entire group by 2050
- Medium-term target: A 45% reduction in GHG emission intensity from transportation by 2035 (compared to 2019)

Concrete actions and investment plans towards achievement of these targets have been identified in the "MOL Group Environmental Vision 2.2." In addition, as governance and disclosure related to implementation of the finance, an internal system and an information disclosure process based on TCFD<sup>\*1</sup> has been established. These are disclosed within the Framework etc. 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 MOL's business model is associated with the results of the materiality analysis, which MOL evaluated business sustainability from both positive and negative perspectives. The transition strategy and transition pathway based on this are shown in the "MOL Group Environmental Vision 2.2," including initiatives for Scope 3, and the contribution to the SDGs, which will be described later, is also taken into consideration. In addition, the eligible projects and KPIs specified in the Framework focus on GHG emissions from ship operations and are consistent with MOL's transition strategy. These are disclosed within the Framework etc. and meet the disclosure elements of CTF-2.

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

MOL's transition strategy is defined by science-based targets and pathways. Specifically, MOL has indexed and quantified short-and medium-term targets in addition to long-term targets consistent with the targets set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc, described in CTF-1 and has identified the process of achieving the targets. Disclosed information on results toward achieving the target also includes base year and past absolute GHG emission reductions, which supports the science-based transition strategy toward achieving 2050 net zero emissions. The disclosed transition strategy also includes Scope 3 initiatives, CO<sub>2</sub> capture technologies, and the use of carbon credits for absorption/removal systems. These are disclosed within the Framework etc. or second party opinion and meet the disclosure elements of CTF-3.

#### CTF-4. Implementation transparency :

MOL outlines the basic investment plan for the implementation of the transition strategy and the outcomes and impacts of the implementation. The transition strategy identifies a plan to reduce GHG emissions from ship navigation through the introduction of clean energy as a pathway to net zero emissions. In addition, as an investment plan to realize this strategy, an environmental investment of 650 billion yen is planned over the three-year period from FY2023 to FY2025, with



environmental investment accounting for more than 50% of the total investment. These are disclosed within the Framework etc. or this Second Party Opinion and meet the disclosure elements of CTF-4.

### **<GBP/GLP eligibility assessment results>**

DNV confirmed the following through the materials and information provided by MOL. Followings (GBP/GLP-1 ~ GBP/GLP-4) are findings and opinions of DNV against the four common elements (disclosure elements) of the GBP, GLP, GBGLs, and GLGLs.

#### **GBP/GLP-1. Use of Proceeds :**

MOL defines the use of proceeds as new expenditure or refinancing of existing expenditure on green/transition-eligible projects that are consistent with the transition strategy and environmental strategy (hereinafter, "eligible projects"). Specifically, these are projects that contribute to the introduction of clean energy, further energy-saving technologies, efficient operations, building business models enabling net zero, and low-carbon and decarbonization projects. The proceeds will be allocated to one or more of these projects, such as capital expenditure, research and development or equity investment, either as new expenditure or as refinancing of existing expenditure. These projects have been assessed as having clear environmental benefits on the transition strategy and environmental strategy and are expected to contribute to the SDGs. These processes are consistent with GBP/GLP-1.

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

In addition to ensuring that eligible projects meet the requirements of GBP-1, MOL also assesses the potential for eligible projects to have negative environmental and social impacts, and implements mitigation measures for any identified negative impacts. Specifically, the Finance Division, taking into account the latest environmental vision and other environmental sustainability targets, and with the advice of the Corporate Planning Division, the divisions with jurisdiction over eligible projects, and the Technology Innovation Unit where necessary, selects projects for allocation through an appropriate process in accordance with the defined requirements for eligible projects. The Environment & Sustainability Strategy Division verifies and confirms the appropriateness and eligibility of the projects. These processes are consistent with GBP/GLP-2.

#### **GBP/GLP-3. Management of Proceeds :**

The proceeds are managed by the Finance Division, which manages the allocations for each eligible project using an internal system. The proceeds are allocated to eligible projects as soon as possible after they are raised and any unallocated proceeds are managed in cash or cash equivalents. The allocation status of proceeds is tracked by the Finance Division on a regular basis. These processes are consistent with GBP/GLP-3.

#### **GBP/GLP-4. Reporting :**

MOL will report on the allocation status and environmental benefits (impact) of the proceeds on the MOL website until the proceeds have been fully allocated, within the limits of confidentiality and as far as reasonably practicable. This will include allocated amount per project category (per action), amount of unallocated proceeds and the allocation policy, if any, summary of the target project, relevant indicators and quantified environmental benefits, focusing on the amount or percentage (%) of CO<sub>2</sub> emission reduction. Any significant changes to the transition strategy or environmental strategy, allocation plan or results will be reported in a timely manner or in the reporting. These processes are consistent with GBP/GLP-4.



**<SLBP/SLLP eligibility assessment results>**

DNV confirmed the following through the materials and information provided by MOL. Followings (SLBP/SLLP-1 ~ SLBP/SLLP-5) are findings and opinions of DNV against the five common elements of the SLBP and SLLP (including SLBGLs and SLLGLs).

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

Please see the Table-1 below. MOL’s environmental sustainability (transition) KPI (EEOI: Energy Efficiency Operating Indicator) is material to MOL’s overarching transition strategy. The rationale and process for KPI selection, as well as its definition, measurability and verifiability, are deemed to be robust, reliable and in accordance with the SLBP/SLLP.

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

DNV concludes that MOL’s SPTs (EEOI reduction rate based on FY2019) are meaningful and relevant in the context of MOL’s broader sustainability (transition) and business strategy and represent a material improvement over a predefined timeline. Please see the Table-1 below. The SPTs constitute the annual (cumulative) reduction rate of EEOI from FY2019 to FY2035. The SPTs are ambitiously set by using external standards set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. as benchmarks. In the evaluation of ambition, although there is a difference due to the difference between the external standard and MOL’s baseline (base year), it has been properly estimated and adjusted by MOL, and as a result, it has been demonstrated to be ambitious. In addition, DNV confirmed through a review that MOL's plans are realizable for achieving the annual SPT from 2023 to 2035.

**SLBP/SLLP-3. Finance Characteristics :**

The financial and structural characteristics of based on the Framework are impacted based on KPI performance under SPTs. This impact includes, but is not limited to, interest rate stepping up/down etc., and will be specifically identified in statutory disclosure documents of the bond or loan agreement documents for each transition linked finance under the Framework.

**SLBP/SLLP-4. Reporting :**

MOL plans to include the information required by SLBP/SLLP in reporting, and stipulates in the Framework that the reporting will be disclosed at an appropriate frequency.

**SLBP/SLLP-5. Verification :**

MOL will undergo independent verification of KPI-related data by an external evaluation body annually.

**Table-1 MOL Transition Linked Finance KPIs and SPT**

Item	Outline
KPI	<p><b>EEOI : Energy Efficiency Operational Indicator</b></p> <p>EEOI is an indicator to measure the CO<sub>2</sub>e (GHG) emission performance of ship operations. EEOI is an indicator/calculation method, which is widely used in the shipping industry. It is indicated that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions from ships.</p> $EEOI \text{ (gram – CO}_2\text{e/mile/tonne)} = \frac{\text{Emissions (gram – CO}_2\text{e)}}{\text{Distance sailed(mile)} \times \text{Cargo carried (tonne)}}$ <p><i>Emission (gram-CO<sub>2</sub>e):</i> CO<sub>2</sub>e (GHG) emissions from ships (gram)  <i>Distance sailed (mile):</i> Operating distance (miles)  <i>Cargo carried (tonne):</i> Cargo weight (tonne)</p> <p>The company-wide average is calculated in total in the following way, using a standardized methodology designed to compensate for the impact of the greater or lesser absolute intensity derived from the business characteristics of each segment on the calculation of the company-</p>

	<p>wide average, and to ensure that the efficiency gains achieved by each division are properly reflected in the company-wide average.</p> <ul style="list-style-type: none"> <li>• Base year: Calculated by dividing the total GHG emissions of all segments by the total tonne-miles of all segments</li> <li>• Target years after the base year: The EEOI reduction rate compared to the base year is calculated for each segment. The contribution rate to the total is then determined according to the project scale, calculated based on the energy consumption of each segment, and the EEOI reduction rate of each segment is then weighted and averaged with that contribution rate.</li> </ul> <p>GHG emissions cover the fuel combustion phase emissions (Scope 1) and part of the fuel production phase emissions (Scope 3/Category 3) on the MOL Group's self-operating ocean-going vessels.</p>
<p><b>SPT</b></p>	<p><b>Set annual EEOI reduction rate year-on-year as SPT to achieve 45% EEOI reduction by 2035 relative to a 2019 baseline.</b></p> <p>MOL performs calculation adjustments comparable to the target by 2030 and 2050 (both targets are compared to 2008 as the base year) defined in 2023 IMO GHG strategy, and then sets until 2035 in consistent with IMO's target level.</p>

On the basis of the information, including the Framework, provided by MOL and the work undertaken, DNV confirmed that the Framework formulated by MOL meets the criteria required by the relevant frameworks within CTFH, CTFBG, GBP, GLP, GBGLs, GLGLs, SLLP, and SLLGLs is eligible.

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### Revision history

Revision number	Date of issue	Remarks
0	26/10/2021	Initial published as Mitsui O.S.K. Lines, Ltd. Transition Linked Loan Framework Second Party Opinion
1	22/12/2023	<ul style="list-style-type: none"> <li>• Revised Second Party Opinion following the revision of the Transition Linked Loan Framework and the issuance of the Mitsui O.S.K. Lines, Ltd. Sustainable Finance Framework. This includes the following changes:</li> <li>• Revisions due to assessments based on the following added or revised criteria               <ul style="list-style-type: none"> <li>- New criteria added as assessment criteria: GBP, GLP, GBGLs, GLGLs, SLBP, and SLBGLs</li> <li>- Revised criteria: CTFH, SLLP, and SLLGLs</li> </ul> </li> <li>• Reflecting information on the MOL Group's revised Management Plan (MOL BLUE ACTION 2035) and Environmental Vision 2.2</li> </ul>

### 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 Conduct<sup>1</sup> 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.

<sup>1</sup> DNV Code of Conduct is available from DNV website ([www.DNV.com](http://www.DNV.com))



## I . Introduction

### i. About the Fundraiser

Mitsui O.S.K. Lines, Ltd. (hereinafter, "MOL") is one of the largest multimodal groups, which has approximately 140 years history, that meets diverse transport needs with one of the world's largest merchant fleets. As a full-line marine transport group, MOL operates around 800 diverse vessels. Specifically, MOL is developing the following businesses:

**Dry Bulk Business** : MOL's dry bulker fleets has a full line up of general-purpose bulk carrier for transporting various resources such as iron ore, coal and grains, and has specialized carriers designed and constructed to meet the specific characteristics, also provides flexible meeting various trades around the world and high-quality transport services.

**Energy Business** : MOL contributes to a stable worldwide energy supply through the transport crude oil, refined petroleum products, liquefied chemical products and liquefied natural gas (LNG), and the wind power energy business, offshore businesses. Also, MOL is moving into new businesses such as Floating equipment.

**Product Transport Business** : MOL transports a broad range of products, from industrial products to general consumer goods and automobiles, and provides extensive logistics services, drawing upon its ocean shipping know-how and specialized group companies to meet diversified logistics needs.

**Wellbeing & Lifestyle Business** : MOL contributes to "people's wellbeing and lifestyles" centered on the ferry and coastal RORO vessel business, the cruise business, the real estate business and the foreign human resources business.

**Associated Business** : MOL's expertise encompasses not only ocean shipping-related businesses such as tugboat and maritime consulting services, but also travel, finance, trading, insurance, ICT systems, supporting a national oil stockpiling project, sales of nautical charts, CVC (Corporate Venture Capital), and human resource business.































## ii. Fundraiser’s initiatives for ESG/SDGs

The MOL Group has identified key issues for sustainable development together with society through the realization of the Group Vision as “sustainability issues” (materiality). In 2022, in order to accelerate initiatives to resolve sustainability issues, MOL has set targets, KPIs, and action plans for each issue and formulated the “MOL Sustainability Plan.” Since 2023, along with the formulation of the management plan “BLUE ACTION 2035”, MOL has reviewed the positioning of the “MOL Sustainability Plan” and incorporated it as part of the “BLUE ACTION 2035,” in order to further integrate it with management.

The MOL Group aims to improve its corporate value over the long term by minimizing the negative social impact of its business activities while striving to maximize its social value through contributions to the SDGs and other efforts. For this purpose, MOL has newly identified five “sustainability issues (materiality),” which are deeply connected with the management plan.

Table-1 Overview of MOL’s Sustainability Issues (Materiality)

Sustainability Issues (Materiality)	SDGs
Provide sustainable value through marine transport and social infrastructure business	     
Conservation for marine and global environment	    
Contributing to the growth and development of people and communities	    
Innovation for development in marine technology	     
Governance and compliance to support businesses	     

### iii. Fundraiser’s environmental initiatives

MOL established “MOL Group Environmental Vision 2.2” in April 2023. The Environmental Vision 2.2 sets out specific action policies, including the development of interim milestones and specific emission reduction pathways, in order to increase the effectiveness of initiatives to achieve net zero emissions by 2050.

The “MOL Group Environmental Vision 2.2” identifies risks and opportunities in response to climate change through three scenario analyses of 1.5°C, 2.0°C, and 2.6°C, and verifies the resilience of the MOL Group's transition plan based on the policy of implementing a transition plan consistent with the 1.5°C target. Based on the risks and opportunities identified in these scenario analyses, the MOL Group will accelerate its initiatives to address environmental issues by setting “medium- and long-term targets” and “five actions to achieve the medium- and long-term targets.”

The “medium-to long-term targets” and “five actions to achieve the targets” in the “MOL Group Environmental Vision 2.2” are as follows.

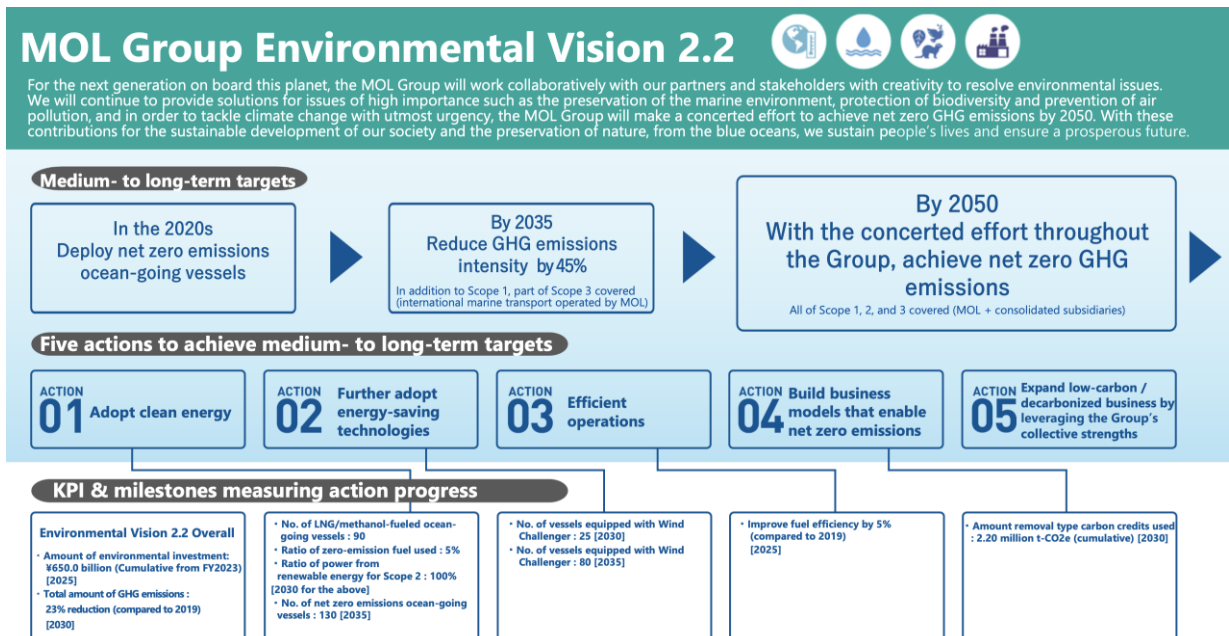


Figure-1 MOL Group Environmental Vision 2.2



#### **iv. About the Sustainable Finance Framework**

In advancing the “MOL Group Environmental Vision 2.2”, MOL is working with ambitious goals for reducing GHG emissions in line with the GHG emission reduction targets complied by the International Maritime Organization (IMO), an international organization in the shipping industry, and the Ministry of Land, Infrastructure, Transport and Tourism<sup>\*1</sup>.

The MOL group will set the ambitious GHG emission reduction target as a Sustainability Performance Target and raise part of the funds needed to achieve the target through bonds or loans, either as transition finance with specific use of proceeds or as transition linked finance, where the achievement of KPIs/SPTs and financial and structural incentives are linked without specifying the use of proceeds.

MOL believes that it will be an opportunity to disseminate MOL’s wide-ranging environmental strategy initiative through the implementation of finance.

MOL has established the Mitsui O.S.K. Lines, Ltd. Sustainable Finance Framework (hereinafter, the “Framework”) in order to implement the above-mentioned finance in a manner that conforms to the internationally established frameworks.

The criteria which this Framework specifically referred to is described in (3) of Section II below.

<sup>\*1</sup>: “Roadmap to Zero Emissions from International Shipping” formulated in collaboration with 2023 IMO Strategy on Reduction of GHG Emissions from Ships, the Ministry of Land, Infrastructure, Transport and Tourism, shipping, shipbuilding, and maritime industries, research institutes, and public institutions (Sponsored by the Japan Ship Technology Research Association)

**v. Fundraiser’s transition strategy for decarbonization**

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

Figure-2 shows the outlines of IMO’s GHG emission reduction targets and their pathway. IMO focuses on measures for emission reduction, by design and technology (reduction of fuel consumption), improvement of operation efficiency technological innovation and fuel conversion (introduction of low-carbon/zero-carbon fuel) and various technologies.

In Japan, in March 2020, MOL has collaborated with the Ministry of Land, Infrastructure, Transport and Tourism, as well as the shipping, shipbuilding, and marine maritime industries, research institutes, and public institutions to create a “Roadmap to Zero Emission from International Shipping” (Sponsored by the Japan Ship Technology Research Association). This roadmap shows Japan’s initiatives (international treaty formulation, technological development) in a manner consistent with the goals of the IMO.

MOL has set GHG emission reduction targets, including fuel conversion, as a low-carbon and decarbonization strategy for its core businesses, based on international and national policies, such as IMO and the Ministry of Land, Infrastructure, Transport and Tourism.

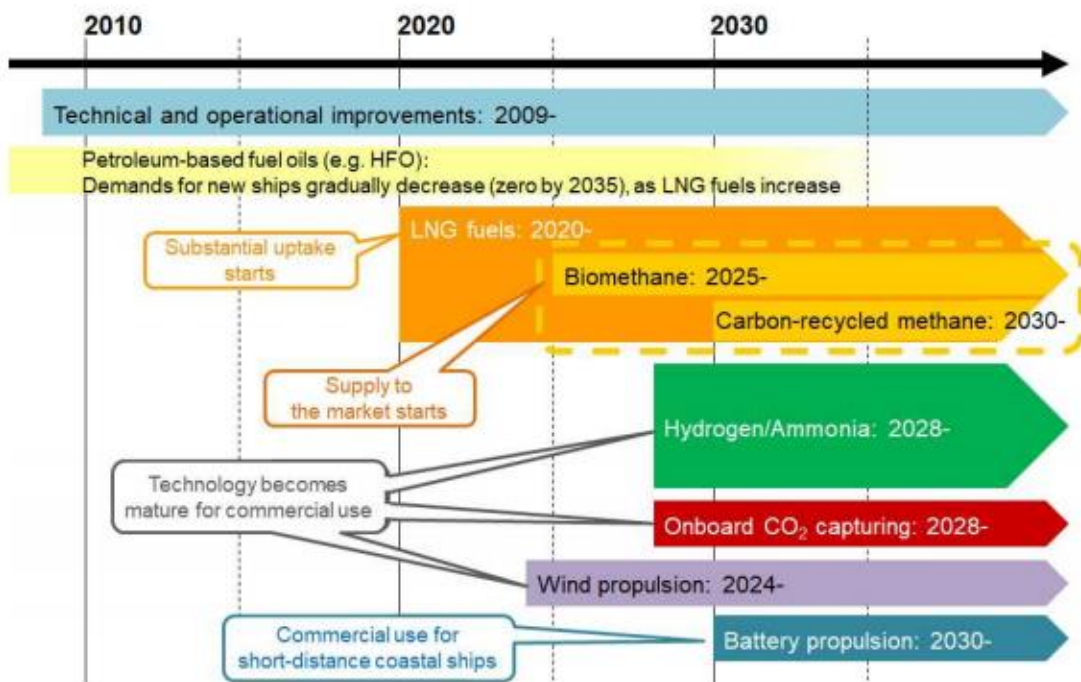


Figure-2 Roadmap to Zero Emission from International Shipping MLIT (maritime) website [https://www.mlit.go.jp/en/maritime/GHG\\_roadmap\\_en.html](https://www.mlit.go.jp/en/maritime/GHG_roadmap_en.html)

Furthermore, in July 2023, IMO revised the “IMO GHG Reduction Strategy (2018)” and adopted the “2023 IMO Strategy on Reduction of GHG Emissions from Ships,” which strengthened the GHG emission reduction target from international shipping to “zero GHG emissions by around 2050.”

## Addressing climate change

Over a decade of regulatory action to cut GHG emissions from shipping

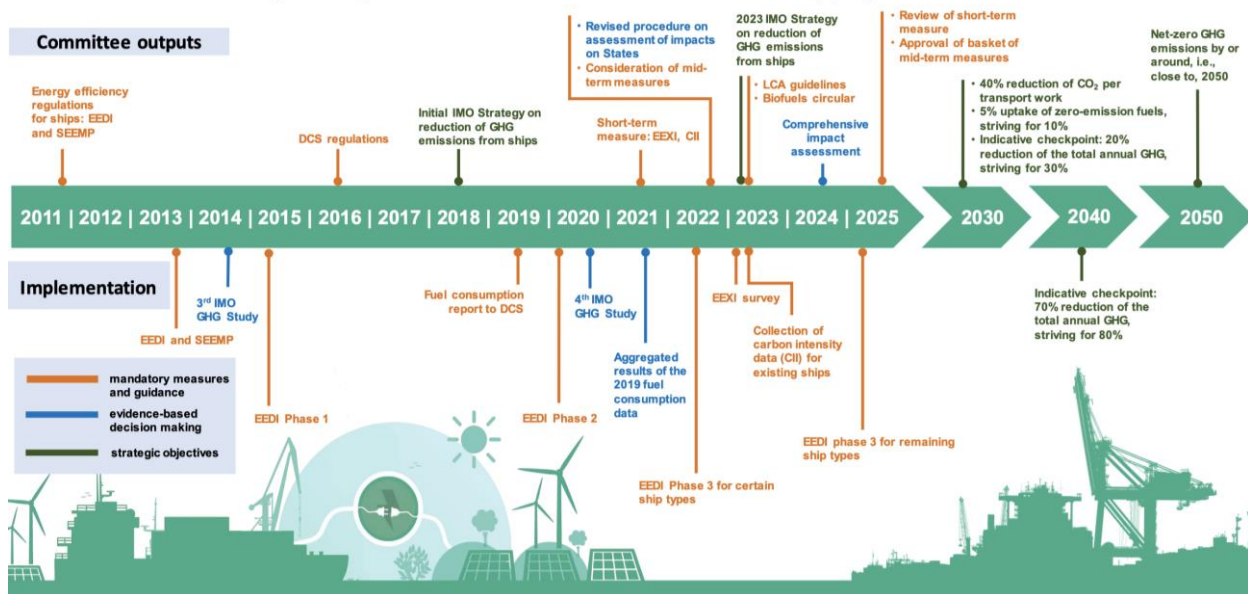


Figure-3 GHG emission reduction targets from ships based on the 2023 IMO GHG Strategy

<https://www.imo.org/en/MediaCentre/HotTopics/Pages/Cutting-GHG-emissions.aspx>

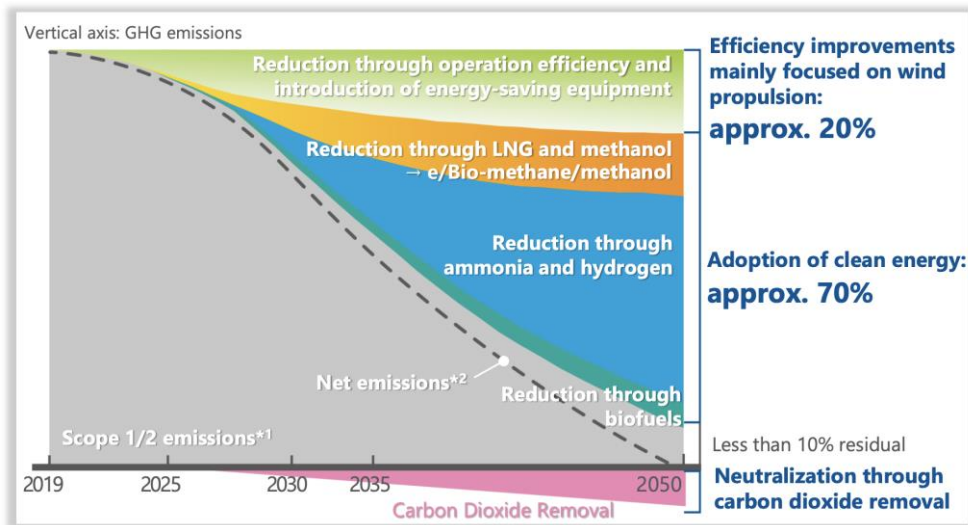
## (2) Transition strategies of the Fundraiser

The MOL Group positions the activities to contribute to the above-mentioned emission reduction targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., and the activities aimed at achieving the target defined by “MOL Group Environmental Vision 2.2” as transition strategies.

Figure-4 shows a conceptual diagram of the MOL Group’s Pathway to Net Zero GHG Emissions associated with medium- to long-term targets. The MOL Group has set a target to reduce GHG emissions intensity by approximately 45% by 2035 (versus 2019). In addition, Figure-5 shows the quantitative KPIs and milestones that measure progress for each action to ensure achievement of net zero emissions by 2050.

The MOL’s Group’s reduction rate is different from the IMO and the Ministry of Land, Infrastructure, Transport and Tourism because the MOL Group's targets by 2035 are different from base year (2008) and target year (2030) set by the IMO and the Ministry of Land, Infrastructure, Transport and Tourism mentioned above. However, from the estimation results based on the SPT calibration results described later, it has been confirmed that the MOL Group’s GHG emission intensity reduction target is consistent with the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism.

In addition, the overview of MOL's environmental initiatives, including climate change response, is disclosed on its website as “MOL Group Environmental Vision 2.2.”



- \* Scope: all of Scopes 1, 2 and 3 in the entire MOL Group (consolidated scope).
- \* In the net-zero target year (2050), the net emissions are calculated by offsetting the remaining gross emissions by the quantity of negative emissions. However, for the calculation of annual emissions in earlier years, gross emissions will be used and no offsetting by negative emissions will be carried out.

Figure-4 Pathway to Net Zero Emissions associated with the medium- to long-term targets

MOL has established quantitative KPIs and milestones to measure progress for each action to ensure achievement of net zero emissions by 2050, as shown in the figure below (Figure-5). In addition, the followings have been set as KPIs and milestones for the Environmental Vision 2.2 as a whole.

- Environmental investment in 2025: 650 billion yen (cumulative total since FY2023)
- A 23% reduction in total GHG emissions in 2030 (compared to 2019)

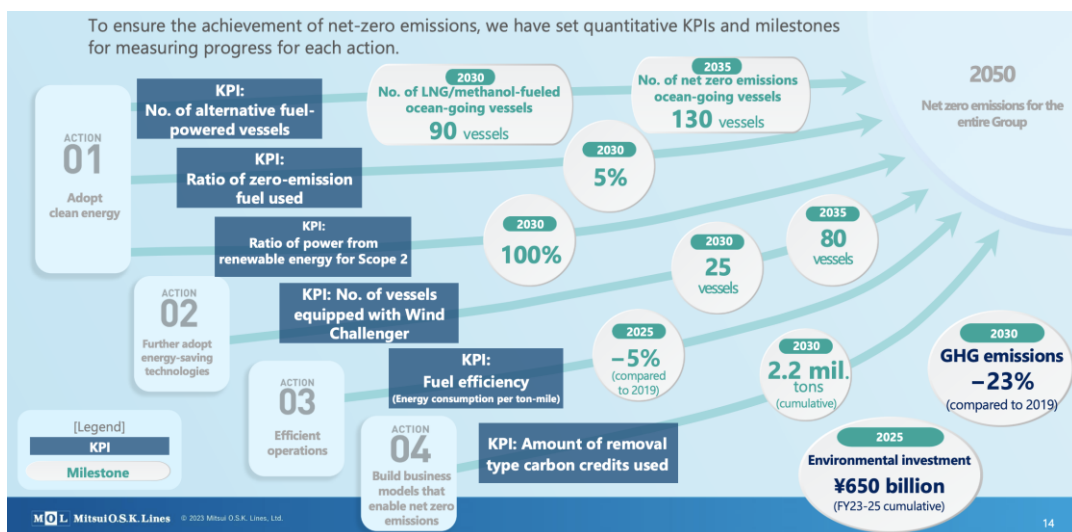


Figure-5 KPIs and milestones

### (3) Governance of the Fundraiser (for environmental management)

Figure-6 shows MOL's system for environmental initiatives.

MOL has established an environmental management system with the President & CEO as the chief executive, and environmental initiatives, including climate change measures as well as natural capital/biodiversity, are deliberated mainly by the Environment & Sustainability Committee, a subordinate body of the Executive Committee.

The Board of Directors is responsible for the supervision of environmental initiatives, and particularly important matters are decided by the Board of Directors. In addition, part of the assessment of the long-term target contribution variable remuneration (accounting for 20% of the total) for the CEO and CEO (Chief Environment and Sustainability Officer) and other executive directors reflects the progress made in addressing climate change and other sustainability-related initiatives.

The Environment & Sustainability Committee, with the Environment & Sustainability Strategy Division as its lead division, is responsible for regularly monitoring the status of response to climate change risks and opportunities based on TCFD scenario analysis, checking the impact on the business from a long-term perspective, and developing medium- and long-term environmental targets, as well as for the achievement status and the promotion of environmental and emission-free projects.

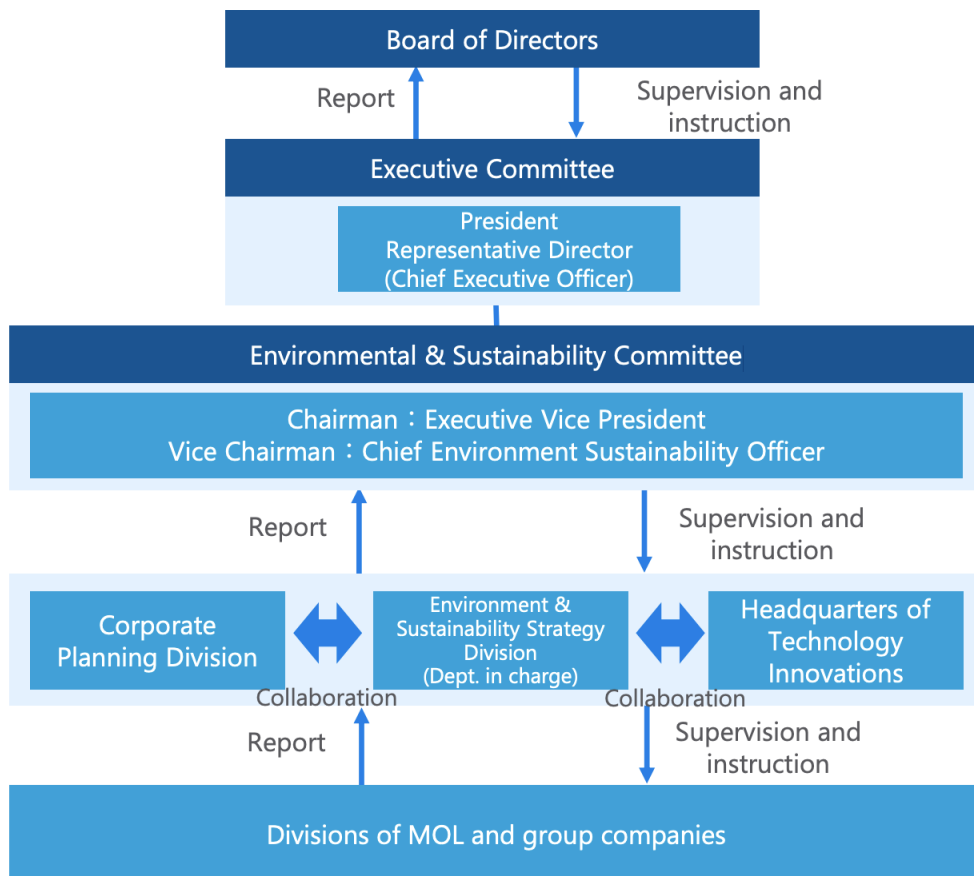


Figure-6 MOL's environmental governance organization (as of the end of April 2023)



## II. Scope and Objectives

MOL has commissioned DNV to conduct an eligibility assessment of the “Mitsui O.S.K. Lines, Ltd. Sustainable Finance Framework.” The objective of DNV’s assessment is to implement an assessment to confirm that the Framework meets the standards and guidelines described below (refer to the following), and to provide a second party opinion on the eligibility of the Framework.

DNV, as an external reviewer, assessed the eligibility of the Framework. Specifically, DNV applied frameworks (e.g., principles and guidelines) focusing on (3) below to provide an assessment of 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 MOL.

In this paper, no assurance is provided regarding the financial performance of the sustainable finance, the value of any investments, or the long-term environmental benefits of the transaction.

### Green finance and transition finance with specific use of proceeds

\* Items are listed around GBP, but will 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/GLP:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds        | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting                                    |

#### (2) Role(s) of review provider

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Second party opinion  | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification                     | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other ( <i>please specify</i> ): |  |

### Sustainability finance and transition finance with general corporate purpose

\* Items are listed around SLBP, but will be replaced with loan-specific items where appropriate.

#### (1) Structure of bonds at the time of issuance

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Stepping up the structure | <input checked="" type="checkbox"/> Changes in reimbursement structures |
|---|---|

\* Any of the above or set individually based on the Fundraiser's internal process at the time of finance implementation.

#### (2) Scope of review \*

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

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Assess all the following elements (all elements assessment) | <input type="checkbox"/> Assess only some elements (partial assessment) |
| <input checked="" type="checkbox"/> Selection of KPIs   | <input checked="" type="checkbox"/> Bond characteristics                |



- Calibration of SPTs
- Reporting
- Verification
- Furthermore, check consistency with SLBP

\* The scope of review is applied as the assessment part for transition finance with general corporate purpose.

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

### (3) Role(s) of review provider (general corporate purpose)

- Second party opinion
- Certification
- Verification
- Rating

### Standards/guidelines to be applied

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

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

\*2 They confirm compliance with the four core elements of transition (use of proceeds, process for project evaluation and selection, management of proceeds, reporting) etc., which should be met when implemented as a bond/loan with a specific use of proceeds (quoted and edited from CTFBG).

\*3 Sustainability Linked Loan: Sustainability linked loans are any types of loan instruments and/or contingent facilities (such as bonding lines, guarantee lines or letters of credit) which incentivize the borrower's achievement of ambitious, predetermined sustainability performance objectives. (quoted from SLLP. \*SLBP is also defined as the same and is assessed.) They confirm compliance with the five elements etc., which should also be met when implementing transition linked finance with general corporate purpose.



### III. Responsibilities of MOL and DNV

MOL 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 MOL and other interested stakeholders in the finance 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 MOL. 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 MOL'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, MOL as possible, we have adapted our sustainable finance assessment methodologies, which incorporates the requirements of the CTFH, CTFBG, GBP, GLP, GBGLs, GLGLs, SLBP, SLBGLs, SLLP, and SLLGLs, to create a Sustainable Finance Eligibility Assessment Protocol (hereinafter, the "Protocol"). Please refer to Schedule-2. The Protocol is applicable to finance under the CTFH, CTFBG, GBP, GLP, GBGLs, GLGLs, SLBP, SLBGLs, SLLP, and SLLGLs.

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 criteria is that a Green Finance and Climate Transition Finance with/without specific use of proceeds should:

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

"provide an investment opportunity with transparent sustainability credentials"

"be important (as climate transition) through KPIs and SPTs, quantitative, pre-determined, ambitious, regularly monitored, and encourage the achievement of ESG (in terms of climate transition) of the Fundraiser that can be externally validated"

As per our Protocol, the criteria against this sustainable finance to be reviewed is grouped into the following elements, represented by the CTFH, CTFBG, GBP, GLP, GBGLs, GLGLs, SLBP, SLBGLs, SLLP, and SLLGLs:

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

##### **Principle one: Issuer's climate transition strategy and governance**

It should be shown that the financing purpose is to enable the Fundraiser's climate transition strategy.

##### **Principle two: Business model environmental materiality**

The planned climate transition trajectory should be relevant to the environmentally materialities of the Fundraiser's business model.

##### **Principle three: Climate transition strategy and targets to be science-based**



The Fundraiser's climate transition 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 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 sustainable finance must use the proceeds to eligible activities. The eligible activities should produce clear environmental benefits.

**Principle Two: Process for Project Evaluation and Selection**

The Process for Project Evaluation and Selection criteria are guided by the requirements that a fundraiser of a sustainable finance should outline the process it follows when determining eligibility of an investment using sustainable finance 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 sustainable finance should be tracked within the fundraising organization, that separate portfolios should be created when necessary and that a declaration of how unallocated proceeds 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 and loan lenders should be made of the use of proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

\* GLGLs set out requirements for loan-specific elements (internal reviews).

**(3) Five elements of SLBP/SLBGLs and SLLP/SLLGLs<sup>\*1</sup>**

**Principle one: Selection of Key Performance Indicators (KPIs)**

The Fundraiser of a sustainability linked finance or transition linked finance should clearly communicate its overall sustainability objectives, as set out in its sustainability strategy, and how these relate to its proposed SPTs to investors or lenders. The KPI should be reliable, material to the Fundraiser's core sustainability and business strategies, address relevant ESG challenges of the industry sector, and be under management control.

**Principle two: Calibration of Sustainability Performance Targets (SPTs)**



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

### **Principle Three: Finance Characteristics**

The finance will need to include a financial and/or structural impact depending on whether the selected KPIs reach (or not) the predefined SPTs. The finance documentation needs to require the definitions of the KPI(s) and SPT(s) and the potential variation of the financial and/or structural characteristics of the sustainable linked finance or transition linked finance. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner, should be explained.

### **Principle Four: Reporting**

The Fundraiser should publish and keep readily available and easily accessible up to date information on the performance of the selected KPI(s), as well as a verification assurance report (see Principle 5) outlining the performance against the SPTs and the related impact and timing of such impact on the finance's financial and/or structural characteristics, with such information to be provided to those institutions participating in the finance or to investors or lenders participating in the finance at least once per annum.

### **Principle Five: Verification**

The Fundraiser should have its performance against its SPTs independently verified by a qualified external reviewer with relevant expertise, at least once per annum. The verification of the performance against the SPTs should be made publicly available.

\*1: Sustainability Linked Finance: DNV's Protocol consists of five requirements set under SLBP (2023)/SLLP (2023) and includes SLLGLs.



## 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. In the verification of the Framework, we have not performed an audit or other tests to check the veracity of the information provided to us. In the case of implementing transition linked finance with general corporate purpose, MOL plans to be verified by a third-party organization on information related to SPT.

The work undertaken to form our opinion included:

### i. Pre-funding assessment

- Creation of a MOL-specific Protocol, adapted to the purpose of the Framework, as described above and after Schedule-3 to this Assessment;
- Assessment of documentary evidence provided by MOL on the Framework and supplemented assessment by a comprehensive desktop research. These checks refer to current assessment best practices and standards methodology;
- Discussions with MOL, and review of relevant documentation;
- Documentation of findings against each element of the criteria.

### ii. Post-funding assessment (*\*not included in this report*)

- Interview with MOL management, and review (or verification) of the relevant documentation;
- Field research and inspection (if necessary);
- Document creation of post-financing assessment observation result.



## VI. Findings and DNV's Opinion

DNV's findings and opinion are as described in (1), (2), and (3) below.

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 as Climate Transition Finance applied to the MOL Sustainable Finance.

Please see Schedule-3 for details.

From the GBP/GLP 1 to 4 in (2) below are the findings and opinions of DNV against the requirement of the GBP, GLP, GBGLs, and GLGLs as green/transition finance applied to the MOL Sustainable Finance.

Please see Schedule-4 for details.

From the SLBP/SLLP 1 to 5 in (3) below are the findings and opinions of DNV against the requirement of the SLBP, SLLP, SLBGLs, and SLLGLs as transition linked finance<sup>\*1</sup> applied to the MOL Sustainable Finance.

Please see Schedule-5 for details.

\*1: Bonds or loans with potential financial and structural changes linked to the achievement of future transition goals

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

#### **CTF-1 Issuer's climate transition strategy and governance**

- The MOL Group revised its Environmental Vision and formulated the "MOL Group Environmental Vision 2.2" in April 2023. In the "MOL Group Environmental Vision 2.2," MOL has set environmental corporate strategies based on identification of risk and opportunity and scenario analysis using TCFD guidance. The "MOL Group Environmental Vision 2.2" also shows transition strategy and pathway/trajectory as a medium- to long-term target from 2023 to 2050 and as a pathway to the MOL Group's Net Zero Emissions.
- Based on the science-based evidence quantified by the MOL Group, DNV reviewed and confirmed that MOL's targets are aligned with the goals of the Paris Agreement.
- The MOL Group's transition strategy has identified the medium-term target towards achievement of 2050 net zero emissions, which incorporates environmental targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. Specific GHG reduction targets of the MOL Group are shown below.
  - Long-term target: Net zero emission in the entire group by 2050
  - Medium-term target: A 45% reduction in GHG emission intensity from transportation by 2035 (compared to 2019)
- The MOL Group has established a system and mechanism to promote the transition strategy, at the management level. The transition strategy includes a clear investment plan and the technologies to be utilized to achieve net zero emissions. Specifically, the company plans to make environmental investments amounting to



650 billion yen over the three-year period from 2023 to 2025. These environmental investments will be allocated to activities that reduce GHG emissions from the company, such as the construction of alternative fuel vessels and wind power utilization equipment, and to the expansion of low-carbon and decarbonized energy businesses, including offshore wind power-related projects and clean energy production and transportation.

- The MOL Group has clarified its contributions to the SDGs, while minimizing the negative impact (negative external effects) on society through business activities.
- Based on the Framework, the “MOL Group Environmental Vision 2.2,” and assessment of the implementation plan, DNV confirmed that they are well aligned with the MOL Group’s transition strategy. DNV has confirmed that implementation plans based on transition strategies are reliable, ambitious, and achievable.



## **CTF-2 Business model environmental materiality**

- Of the MOL Group's business activities, CO<sub>2</sub> (GHG) emissions (Scope 1) from ship operations account for about three quarters of the total. KPI set by the MOL Sustainable Finance utilizes EEOI (see SLLP-1 below) and focuses on CO<sub>2</sub> (GHG) emission reduction generated by the ship operations.
- The MOL Group's GHG emission reduction plan covers from Scope 1 to Scope 3, is well aligned with the goals of the shipping industry set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., and aims to exceed them.
- DNV confirmed that the MOL Group's transition plan is the core business activity of the MOL Group, which contributes to the environment and supports commercial driving force. The MOL Group's planned transition strategies and transition pathway are associated with the priority themes and materials defined by the MOL Group, and contribute to important environmental benefits (impacts) from a qualitative and quantitative perspective.

## **CTF-3 Climate transition strategy and targets to be science-based**

- The MOL Group 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 IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc.
- DNV confirmed that the MOL Group's transition strategy is quantified based on consistent measurement methodology and has absolute meaning (meaning material reductions as total GHG emissions). Base year and past emission results are also disclosed in terms of GHG emissions results (in absolute terms), including Scope 3 material categories.
- DNV confirmed that the MOL Group's transition strategy has been established as milestones with short-term targets, medium-term targets, and long-term targets that exceed the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. The MOL Group's transition strategy also includes initiatives to address Scope 3, including the use of CO<sub>2</sub> capture technologies, absorption and removal systems carbon credits to offset the eventual remaining GHG emissions.
- Five actions in the "MOL Group Environmental Vision 2.2" are approaches to reducing GHG emissions including Scope 1 to Scope 3 and are applied in specific plans. Among these, as a medium-term target up to FY2035, MOL has set a target value using EEOI as the GHG emission intensity in transportation. Please see Schedule-2 for information on EEOI.

## **CTF-4 Implementation transparency**

- DNV confirmed that the investment and deployment plans associated with the MOL Group's transition strategy include consensus building on future investment and expenditure. As a specific example, MOL has an environmental investment plan expected to be about 650 billion yen over the three-year period from FY2023 to FY2025, which exceeds 50% of the total investment amount during the period. These investment plans have been drawn up taking into account the impact of risks and



opportunities based on the results of scenario analysis on the MOL Group's profit and loss, and the assumed internal carbon price.

- DNV also reviewed the Framework and the “MOL Group Environmental Vision 2.2” and confirmed that the implementation was highly transparent and that the MOL Group explained and agreed on the adequacy of the implementation.

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

### GBP/GLP-1. Use of Proceeds

- MOL defines eligible projects to which proceeds are allocated as those that meet the requirements of the transition strategy and related frameworks. Eligible projects relate to the five actions that underpin the MOL Group's transition strategy. See Table-2 on the next page for the specific eligible projects envisaged.
- DNV has confirmed that of the full amount of proceeds raised by MOL through green/transition finance, all of the net proceeds, excluding expenses, will be allocated to capital expenditure, research and development, equity investment, and investment in eligible projects that meet the MOL Group's investment plan to implement its transition strategy, both as new investment and refinancing. These projects have been assessed as providing clear environmental benefits to the transition strategy and are expected to contribute to the SDGs. These processes are consistent with GBP/GLP-1.

Table-2 Green/transition eligible projects

MOL's actions		Main envisaged eligible projects	Eligible project categories	
			Green <sup>*1</sup>	Transition <sup>*2</sup>
01	<b>Adopt Clean Energy</b>	• Capital investment, research and development, investment, etc. in LNG/methanol-fuelled vessels		○
		• Capital investment, research and development, investment, etc. related to ships with engines capable of using fuels that are recognized as zero emission	○	○
		• Capital investment etc. in the introduction of renewable electricity	○	○
02	<b>Further Adopt Energy-saving Technologies</b>	• Capital investment, research and development, investment, etc. related to Wind Challenger-equipped vessels		○
		• Capital investment, research and development, investment, etc. in the		○

		introduction of wind propulsion equipment and technology such as rotor sails other than Wind Challenger		
03	<b>Efficient Operations</b>	• Capital investment, research and development, etc. related to energy-saving/environmental protection technologies and equipment to be retrofitted to existing vessels		○
04	<b>Build Business Models that Enable Net Zero Emissions</b>	• Investment etc. in projects to remove and store CO <sub>2</sub> from the atmosphere in relation to negative emissions initiatives	○	○
05	<b>Expand Low-carbon/decarbonized Business by Leveraging the Group's Collective Strengths</b>	• Capital investment, research and development, investment, etc. in building ammonia and hydrogen supply chains		○
		• Capital investment, research and development, investment, etc. in offshore wind power-related projects	○	○
		• Capital investment, research and development, investment, etc. in CCS/CCUS projects	( ○ )	○
		• Capital investment, research and development, investment, etc. in marine clean energy projects	○	○

\*1 A typical green eligible project category exemplified by GBP/GBGLs and GLP/GLGLs. In addition to being eligible for inclusion in green finance, projects that qualify as green projects are permitted within the CTFBG to be included as part of transition finance.

\*2 Representative transition projects that are exemplified in the CTFBG as business transformations that meet the transition strategy of the Fundraiser and contribute to the realization of the Paris Agreement. Projects classified as transition-eligible projects at present may become green projects through the application of future technological innovations (e.g., application of green fuels, achievement of performance that meets CO<sub>2</sub> emission standards as a green project). The development and provision of products and services in new sectors is related to the overall projects listed in Table-1.

### Use of proceeds classified under GBP/GLP

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Renewable energy                          | <input type="checkbox"/> Energy efficiency (Energy savings)  |
| <input checked="" type="checkbox"/> Pollution prevention and control          | <input type="checkbox"/> Environmentally sustainable management of biological natural resources and land use |
| <input type="checkbox"/> Conservation of terrestrial and aquatic biodiversity | <input checked="" type="checkbox"/> Clean transportation   |



- Sustainable water resources and wastewater management
- Highly eco-efficient products, environmentally adapted products, environmentally friendly production technologies and processes
- Other (*please specify*): Projects based on the Fundraiser’s transition strategy (transition projects)
- Undecided at the time of financing implementation, but expected to fit into the GBP/GLP classification or other eligibility areas not currently listed in the GBP/GLP; projects based on the Fundraiser's transition strategy (transition projects)
- Adaptation to climate change
- Green buildings with locally, nationally, or internationally recognized standards or certifications

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

- MOL assesses that eligible projects meet the GBP/GLP-1 eligibility criteria and selects eligible projects. The Finance Division, taking into account the latest environmental vision and other environmental sustainability targets, and with the advice of the Corporate Planning Division, the divisions with jurisdiction over eligible projects, and the Technology Innovation Unit where necessary, selects projects for allocation through an appropriate process in accordance with the defined requirements for eligible projects. The Environment & Sustainability Strategy Division verifies and confirms the appropriateness and eligibility of the projects, then CFO gives the final approval.

**Evaluation and selection**

- Consistent with the achievement of the environmental contribution targets of the Fundraiser
- The project is an eligible use of green bond proceeds and is transparent.
- The evaluation and selection of projects are based on published criteria abstracts.
- Projects have been assessed and selected through a documented process that demonstrates that they meet the defined eligibility categories.
- Potential ESG risks associated with project implementation have been assessed and selected through a documented process to identify and manage them.
- Other (*please specify*):

**Information on responsibility and accountability**

- Evaluation/selection criteria based on advice or verification by external bodies
- Evaluation within the organization
- Other (*please specify*):



### GBP/GLP-3. Management of Proceeds

- The proceeds are fully tied to the selected eligible projects. Specifically, the Finance Division manages the allocation status using an internal system and shares this information with the relevant divisions.
- This internal system will allow tracking and confirmation over the redemption period or until loan maturity, and will ensure that the proceeds are properly managed.
- The proceeds are promptly allocated to eligible projects and, where unallocated proceeds arise, an amount equal to the unallocated proceeds is maintained as cash or cash equivalents.

#### Tracking and managing proceeds:

- Part or all of the proceeds from green finance that are planned to be allocated are systematically differentiated or tracked by the Fundraiser.
- The type of temporary investment and schedule of unallocated proceeds is disclosed.
- Other (*please specify*):

#### Additional disclosure:

- |   |   |
|---|---|
| <input type="checkbox"/> Allocated to new investments only                          | <input checked="" type="checkbox"/> Allocated to both existing and new investments  |
| <input checked="" type="checkbox"/> Allocated to individual (project) disbursements | <input type="checkbox"/> Allocated to portfolio disbursements   |
| <input type="checkbox"/> Disclose portfolio of unallocated proceeds                 | <input checked="" type="checkbox"/> Other ( <i>please specify</i> ): The amount of existing and new investments and loans in projects eligible for green/transition finance allocations will be disclosed annually (only in the case of bonds) or to lenders (only in the case of loans). |

### GBP/GLP-4. Reporting

- MOL will, so far as is reasonably practicable and within the limits of confidentiality obligations, disclose the following information on the allocation of proceeds from sustainable finance and environmental benefits, until the full amount of proceeds from sustainable finance has been allocated to eligible projects, on an annual basis on the website in the case of bonds, or to lenders in the case of loans.

#### <Allocation status>

- Allocated amount per action
- Amount and allocation policy of unallocated proceeds, if any



<Environmental benefits>

MOL's actions		Main envisaged eligible projects	Environmental benefits* (impact reporting indicators)
01	<b>Adopt Clean Energy</b>	<ul style="list-style-type: none"> <li>• Capital investment, research and development, investment, etc. in LNG/methanol-fuelled vessels</li> <li>• Capital investment, research and development, investment, etc. related to ships with engines capable of using fuels that are recognized as zero emission</li> <li>• Capital investment etc. in the introduction of renewable electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Number of LNG/methanol-fuelled vessels</li> <li>• Number of zero emission ocean-going vessels</li> <li>• CO<sub>2</sub> emission reduction rate (%) compared with heavy oil fuels</li> <li>• Share of renewable energy in electricity (%)</li> </ul>
02	<b>Further Adopt Energy-saving Technologies</b>	<ul style="list-style-type: none"> <li>• Capital investment, research and development, investment, etc. related to Wind Challenger-equipped vessels</li> <li>• Capital investment, research and development, investment, etc. in the introduction of wind propulsion equipment and technology such as rotor sails other than Wind Challenger</li> </ul>	<ul style="list-style-type: none"> <li>• Number of vessels equipped with Wind Challenger</li> <li>• Number of vessels with rotor sails etc.</li> <li>• Overview of wind propulsion systems</li> </ul>
03	<b>Efficient Operations</b>	<ul style="list-style-type: none"> <li>• Capital investment, research and development, etc. related to energy-saving/environmental protection technologies and equipment to be retrofitted to existing vessels</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel efficiency (megajoules/tonne mile)</li> </ul>
04	<b>Build Business Models that Enable Net Zero Emissions</b>	<ul style="list-style-type: none"> <li>• Investment etc. in projects to remove and store CO<sub>2</sub> from the atmosphere in relation to negative emissions initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Absorption and removal system carbon credit usage (tonnes CO<sub>2</sub>)</li> </ul>
05	<b>Expand Low-carbon/decarbonized Business by Leveraging the Group's Collective Strengths</b>	<ul style="list-style-type: none"> <li>• Capital investment, research and development, investment, etc. in building ammonia and hydrogen supply chains</li> <li>• Capital investment, research and development, investment, etc. in offshore wind power-related projects</li> <li>• Capital investment, research and development, investment, etc. in CCS/CCUS projects</li> </ul>	<ul style="list-style-type: none"> <li>• Overview of initiatives to build the ammonia and hydrogen supply chain</li> <li>• Offshore wind power generation capacity (MW)</li> <li>• Overview of the CCS/CCUS project</li> <li>• Overview of marine clean energy projects</li> </ul>

		<ul style="list-style-type: none"> <li>Capital investment, research and development, investment, etc. in marine clean energy projects</li> </ul>	<ul style="list-style-type: none"> <li>Electricity generation capacity from marine clean energy (MW)</li> </ul>
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\* Adopt appropriate indicators depending on the nature of the eligible project.

### (3) Findings and opinions of DNV against the five elements<sup>\*1</sup> of the SLBP/SLLP

\*1: Including SLBGLs/SLLGLs

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

- DNV has reviewed MOL sustainability KPI and confirmed that the chosen KPI is material and relevant to the company's core sustainability and business strategies.
- Core to MOL's business strategy is to play the role of social infrastructure, which is indispensable for maintaining people's activities through marine transportation services. Core to MOL's sustainability strategy is identified as five sustainability issues (materiality). Please see Table-1 in I (ii) for details.
- Among these, the material KPI for MOL Sustainable Finance is GHG emission reduction centered on the marine and global environmental conservation. Since the share of MOL's total GHG emissions (Scope 1 to Scope 3) from ship operations is approximately 75%, EEOI is highly adequate to be chosen as KPI. This is explained as three medium- to long-term targets and five actions in the "MOL Group Environmental Vision 2.2," being focused on emission reduction from the company and society towards net zero emissions in 2050.
- The chosen KPI is as follows:
  - Energy Efficiency Operational Indicator (EEOI)

Unit : g-CO<sub>2</sub>e(GHG)/mile/tonne

$$EEOI \text{ (gram – CO}_2\text{e/mile/tonne)} = \frac{\text{Emissions (gram – CO}_2\text{e)}}{\text{Distance sailed(mile) x Cargo carried (tonne)}}$$

Emission (gram-CO<sub>2</sub>e): CO<sub>2</sub>e (GHG) emissions from ships (gram)

Distance sailed (mile): Operating distance (miles)

Cargo carried (tonne): Cargo weight (tonne)

The company-wide average is calculated in total in the following way, using a standardized methodology designed to compensate for the impact of the greater or lesser absolute intensity derived from the business characteristics of each segment on the calculation of the company-wide average, and to ensure that the efficiency gains achieved by each division are properly reflected in the company-wide average.

- Base year: Calculated by dividing the total GHG emissions of all segments by the total tonne-miles of all segments
- Target years after the base year: The EEOI reduction rate compared to the base year is calculated for each segment. The contribution rate to the total is then

determined according to the project scale, calculated based on the energy consumption of each segment, and the EEOI reduction rate of each segment is then weighted and averaged with that contribution rate.

GHG emissions cover the fuel combustion phase emissions (Scope 1) and part of the fuel production phase emissions (Scope 3/Category 3) on the MOL Group's own ocean-going vessels.

- EEOI selected as the KPI is an indicator to measure the CO<sub>2</sub> emission performance of ship operations and is widely used in the shipping industry, of which calculation methodology is defined by IMO. The IMO guidelines indicate that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions from the ships.
- The KPI is to measure relative carbon intensity (GHG emission intensity) reduction of its shipping operations and is highly relevant to MOL's business strategy now and for the foreseeable future.
- In terms of MOL's broader business strategy, DNV acknowledges that reducing EEOI will be a key driver of lowering operational costs for the vessel operation. Therefore, the EEOI as a KPI will contribute to both the environmental sustainability targets and MOL's business strategy.
- DNV concludes that the EEOI as a KPI is measurable based on a consistent methodology, externally verifiable, and able to be benchmarked to external references. DNV concludes that EEOI is a robust and reliable indicator to measure GHG emission reduction for from the ships.
- IMO GHG Strategy on reduction of GHG emissions, adopted in 2018 and revised in 2023, can be used as external reference to benchmark of MOL's level of ambition. IMO has set GHG reduction targets for 2030 and 2040, with 2008 as the base year, to achieve zero GHG emissions in 2050. IMO's reduction target for 2030 calls for a 40% reduction in CO<sub>2</sub> emissions per transport volume and a 5-10% use of zero emission fuels etc. The Ministry of Land, Infrastructure, Transport and Tourism's "Roadmap to Zero Emissions from International Shipping" (sponsored by the Japan Ship Technology Research Association), which has referenced to IMO, sets goals that are consistent with IMO.
- MOL's targets and the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. have different base years. However, DNV confirmed that MOL has standardized to directly compare the two based on past performance data, public information, etc., and that the KPI was properly set as an indicator that can be directly compared with the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc.
- DNV confirmed that the KPI (EEOI) chosen by MOL provides a clear evaluation scope and calculation methodology. Please see Schedule-2 for details.



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

- DNV confirmed that SPT supports the three medium-to long-term targets and five actions set forth in the “MOL Group Environmental Vision 2.2,” has goals that are aligned with the goals of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., and has specific plans inherent. DNV therefore confirmed that the SPT is ambitious, realistic and meaningful. DNV also confirmed that the achievement of SPT is in line with MOL’s overall sustainability/ESG strategy.
- Based on MOL's fleet configuration transition plan provided to DNV, DNV concludes that SPT is realistic, the plan is feasible, and it is likely to achieve the SPT objectives outlined in the Framework. It was confirmed that the 45% reduction in EEOI by 2035 compared to the 2019 baseline set by MOL, when converted to the baseline of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., is an ambitious target aligned with the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. for the entire period from 2019 to 2035 and goes beyond “Business as Usual.” This target setting is expected to be a driving force for MOL's efforts to implement its sustainability strategy.
- DNV confirmed that the SPT target setting exercise has been based on an appropriate combination of benchmarking approaches.
  - DNV confirmed that the Framework provides guidance for target setting from 2023 to 2035 by the KPI information, which is based on the appropriate data and actual results, for more than three years from 2008 to 2022 by benchmarking approach.
  - DNV concludes that the SPT outlined in the Framework is aligned with the SPT of industry standard (target of IMO, Ministry of Land, Infrastructure, Transport and Tourism, etc.).
  - DNV concludes that the SPT is put in an appropriate context of international climate change mitigation efforts. The Framework highlights MOL’s ambition to “work on achieving the goals of the Paris Agreement”. The SPT can be seen as aiming to outperform IMO’s GHG emission reduction targets. The broader purpose adopted by MOL is supported by the three medium- to long-term targets and five actions in the “MOL Group Environmental Vision 2.2.” This includes national goals, Best Available Technology, or other close technologies.
- DNV has confirmed that the SPT target setting is properly disclosed as follows:
  - The timelines of SPT target achievement have clearly been disclosed, at an annual frequency leading up to 2035. MOL has set the corresponding target observation dates for specified trigger events for each fiscal year. DNV confirmed that the annual SPT is planned to be set over the entire financing period for 2035 and beyond through a benchmarking approach.
  - The baseline for SPT has been set as 2019 set using the latest available data of GHG emissions. This is different from the baseline (2008) of IMO, the





Ministry of Land, Infrastructure, Transport and Tourism, etc., but is standardized by MOL's appropriate trial calculation adjustment (intercomparison is possible).

- Through the Framework and the "MOL Environmental Vision 2.2," it is explained in detail how the progress of EEOI reduction will be achieved.

### **SLBP/SLLP-3 Finance Characteristics**

- DNV, based on statutory disclosure documents for certain bonds or loan agreements etc. issued under the Framework, confirmed that trigger events, with corresponding target observation date(s) and performance requirements will be linked to the achievement of the target, loan conditions, and other financial incentives.
- DNV confirmed that MOL has examined an appropriate fallback mechanism, and consequently MOL concluded that they would not set another SPT or calculation method at this time since the risk of being uncalculated or unobservable is negligible.
- MOL has explained that as a future fallback mechanism, MOL may change the KPI and SPT due to both/either external factors and/or MOL's management decision result, such as when the changes of MOL's business circumstances, change of business structures and KPI where reasonable demonstration.

### **SLBP/SLLP-4 Reporting**

- DNV confirmed that required information will be disclosed in a timely manner regarding the following required by SLBP/SLLP:
  - KPI performance for the SPT: The information will be disclosed on an annual basis on the website (only in the case of bonds) or to lenders (only in the case of loans). This will be reported annually until bond repayment or loan maturity.
  - SPT achievement status: It will be subject to annual verification by an independent reviewer and is used to determine financial characteristics (loan conditions or other financial incentives).
  - In case IMO targets change: Discuss the level of ambition of the SPT of MOL with investors or lenders and change it if necessary.

### **SLBP/SLLP-5 Verification**

- DNV confirmed that MOL plans to undergo independent validation of KPI-related data at least once a year by qualified external evaluation agency with relevant expertise in SPT trigger events.



## VII Assessment Conclusion

On the basis of the information provided by MOL and the work undertaken, it is DNV's opinion that the MOL's Framework meets the disclosure elements and requirements in the eligibility assessment protocol and that it is aligned with the stated definition and purpose of the CTFH, CTFBG, GBP, GLP, GBGLs, GLGLs, SLBP, SLBGLs, SLLP, and SLLGLs.

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

"provide an investment opportunity with transparent sustainability credentials"

"be important (as climate transition) through KPIs and SPTs, quantitative, pre-determined, ambitious, regularly monitored, and encourage the achievement of ESG (in terms of climate transition) of the Fundraiser that can be externally validated"

DNV Business Assurance Japan K.K.

22 December 2023

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### About DNV

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



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

#### Disclaimer

Responsibilities of the Management of the 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 Eligible Projects

MOL's actions		Main envisaged eligible projects	Eligible project categories		Impact reporting indicators (example)
			Green <sup>*1</sup>	Transition <sup>*2</sup>	
01	<b>Adopt Clean Energy</b>	<ul style="list-style-type: none"> <li>Capital investment, research and development, investment, etc. in LNG/methanol-fuelled vessels</li> </ul>		○	<ul style="list-style-type: none"> <li>Number of LNG/methanol-fuelled vessels</li> <li>Number of zero emission ocean-going vessels</li> <li>CO<sub>2</sub> emission reduction rate (%) compared with heavy oil fuels</li> <li>Share of renewable energy in electricity (%)</li> </ul>
		<ul style="list-style-type: none"> <li>Capital investment, research and development, investment, etc. related to ships with engines capable of using fuels that are recognized as zero emission</li> </ul>	○	○	
		<ul style="list-style-type: none"> <li>Capital investment etc. in the introduction of renewable electricity</li> </ul>	○	○	
02	<b>Further Adopt Energy-saving Technologies</b>	<ul style="list-style-type: none"> <li>Capital investment, research and development, investment, etc. related to Wind Challenger-equipped vessels</li> </ul>		○	<ul style="list-style-type: none"> <li>Number of vessels equipped with Wind Challenger</li> <li>Number of vessels with rotor sails etc.</li> <li>Overview of wind propulsion systems</li> </ul>
		<ul style="list-style-type: none"> <li>Capital investment, research and development, investment, etc. in the introduction of wind propulsion equipment and technology such as rotor sails other than Wind Challenger</li> </ul>		○	
03	<b>Efficient Operations</b>	<ul style="list-style-type: none"> <li>Capital investment, research and development, etc. related to energy-saving/environmental protection technologies and equipment to be retrofitted to existing vessels</li> </ul>		○	<ul style="list-style-type: none"> <li>Fuel efficiency (megajoules/tonne mile)</li> </ul>
04	<b>Build Business Models that Enable Net Zero Emissions</b>	<ul style="list-style-type: none"> <li>Investment etc. in projects to remove and store CO<sub>2</sub> from the atmosphere in relation to negative emissions initiatives</li> </ul>	○	○	<ul style="list-style-type: none"> <li>Absorption and removal system carbon credit usage (tonnes CO<sub>2</sub>)</li> </ul>

05	<b>Expand Low-carbon/decarbonized Business by Leveraging the Group's Collective Strengths</b>	• Capital investment, research and development, investment, etc. in building ammonia and hydrogen supply chains		○	<ul style="list-style-type: none"> <li>• Overview of initiatives to build the ammonia and hydrogen supply chain</li> <li>• Offshore wind power generation capacity (MW)</li> <li>• Overview of the CCS/CCUS project</li> <li>• Overview of marine clean energy projects</li> <li>• Electricity generation capacity from marine clean energy (MW)</li> </ul>
		• Capital investment, research and development, investment, etc. in offshore wind power-related projects	○	○	
		• Capital investment, research and development, investment, etc. in CCS/CCUS projects	( ○ )	○	
		• Capital investment, research and development, investment, etc. in marine clean energy projects	○	○	

\*1 A typical green eligible project category exemplified by GBP/GBGLs and GLP/GLGLs. In addition to being eligible for inclusion in green finance, projects that qualify as green projects are permitted within the CTFBG to be included as part of transition finance.

\*2 Representative transition projects that are exemplified in the CTFBG as business transformations that meet the transition strategy of the Fundraiser and contribute to the realization of the Paris Agreement. Projects classified as transition-eligible projects at present may become green projects through the application of future technological innovations (e.g., application of green fuels, achievement of performance that meets CO<sub>2</sub> emission standards as a green project). The development and provision of products and services in new sectors is related to the overall projects listed in Table-1.



## Schedule-2 Key Performance Indicators (KPI) and Sustainability Performance Targets (SPT)

### KPI (Key Performance Indicators)

**EEOI : Energy Efficiency Operational Indicator** Unit :  $g\text{-CO}_2\text{e(GHG)}/\text{mile}/\text{tonne}$

MOL has selected the Energy Efficiency Operational Indicator (EEOI) as a KPI. The calculation method is shown in Equation-1. EEOI is an indicator to measure the  $\text{CO}_2\text{e(GHG)}$  emission performance of ship operations. EEOI is widely used in the shipping industry, and IMO defines the calculation method. The data required for KPI evaluation is managed and evaluated by MOL's internal process. The IMO guidelines indicate that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions from the ships.

$$EEOI (\text{gram} - \text{CO}_2\text{e}/\text{mile}/\text{tonne}) = \frac{\text{Emissions (gram-CO}_2\text{e)}}{\text{Distance sailed(mile)} \times \text{Cargo carried (tonne)}} \dots \text{Equation-1}$$

Emission (gram- $\text{CO}_2\text{e}$ ):  $\text{CO}_2\text{e}$  (GHG) emissions from ships (gram)  
Distance sailed (mile): Operating distance (miles)  
Cargo carried (tonne): Cargo weight (tonne)

The company-wide average is calculated in total in the following way, using a standardized methodology designed to compensate for the impact of the greater or lesser absolute intensity derived from the business characteristics of each segment on the calculation of the company-wide average, and to ensure that the efficiency gains achieved by each division are properly reflected in the company-wide average.

- Base year: Calculated by dividing the total GHG emissions of all segments by the total tonne-miles of all segments
- Target years after the base year: The EEOI reduction rate compared to the base year is calculated for each segment. The contribution rate to the total is then determined according to the project scale, calculated based on the energy consumption of each segment, and the EEOI reduction rate of each segment is then weighted and averaged with that contribution rate.

GHG emissions cover the fuel combustion phase emissions (Scope 1) and part of the fuel production phase emissions (Scope 3/Category 3) on the MOL Group's own ocean-going vessels.



## **SPT (Sustainability Performance Targets)**

**MOL sets annual EEOI reduction rate year-on-year as SPT to achieve 45% EEOI reduction by 2035 relative to a 2019 baseline.**

The annual EEOI target reduction rate (SPT) set by MOL is performed trial calculation adjustment that can be compared with the 2030 target and 2050 target (base year: 2008) set by the IMO in the GHG initial reduction.



### Schedule-3 Climate Transition Finance eligibility assessment protocol

The checklists below are DNV evaluation protocol created for MOL Sustainable Finance eligibility assessment based on the disclosure requirements of CTFH2023.

The "Confirmed documents" in the Work Undertaken include public or private documents (the Fundraiser’s internal materials) etc., and are provided by MOL as evidence of eligibility judgment for DNV.

\* Please replace “Issuer”, “Investor” to “Fundraiser”, “Lender” in the context in the following requirements.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1	Issuer’s Climate Transition Strategy and Governance	<p>The green, sustainability- linked financing should be directed toward enabling an issuer’s GHG emissions reduction strategy in alignment with the goals of the Paris Agreement.</p> <p><i>Recommended information and indicators:</i></p> <ul style="list-style-type: none"> <li>• a long-term, science-based target to align with the goals of the Paris Agreement;</li> <li>• relevant and credible interim science- based targets in the short and medium-term on the trajectory towards the long-term goal, in line with the relevant regional, sector, or international climate change scenarios;</li> <li>• disclosure on an issuer’s transition plan or climate transition strategy. This should include specific itemization of the main levers</li> </ul>	<p>Confirmed documents</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>- MOL REPORT 2023</li> </ul> <p>Interviews with stakeholders</p>	<p>MOL has established the Framework and has introduced various plans and initiatives to manage and enhance the environmental sustainability and related performance of the organization in the MOL Group’s broad environmental strategy. MOL formulated the “MOL Group Environmental Vision 2.2” in April 2023. In the “MOL Group Environmental Vision 2.2,” MOL has set five actions as environmental corporate strategies that are important for the business model based on identification of risk and opportunity and scenario analysis using TCFD guidance. In addition, as a measure against climate change, the “MOL Group Environmental Vision 2.2” shows transition strategy and pathway/trajectory as a medium- to long-term target from 2023 to 2050 and as a pathway to MOL Group’s Net Zero Emissions. Based on the science-based evidence quantified by the MOL Group, DNV reviewed and confirmed that MOL's targets aligns with the goals of the Paris Agreement.</p> <p>i) The MOL Group has set a long-term target of 2050 Group-wide net zero emissions.</p>



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<p>towards GHG emissions reduction, such as a detailed capital expenditure (CapEx) plan and relevant technological implications (i.e., amounts to be spent, what carbon cost is considered for implementing such CapEx program, operational impacts, regulatory considerations, etc.);</p> <ul style="list-style-type: none"> <li>• clear oversight and governance of an issuer’s climate transition strategy, including management/board level accountability; and</li> <li>• evidence of a broader sustainability strategy to mitigate relevant environmental and social externalities, including ‘just transition’ considerations where appropriate, and contributions to the UN Sustainable Development Goals (UN SDGs).</li> </ul>		<p>ii) The MOL Group's transition strategy includes environmental targets set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. Specifically, the short- and medium-term targets include a 45% reduction in GHG emissions intensity from transportation in 2035 (compared to 2019), and the commencement of net-zero emission ocean-going vessels by the end of the 2020s.</p> <p>iii) The MOL Group's transition strategy is based on an analysis of investment plans to solve environmental issues, factors that cause fluctuations in profit and loss based on scenario analysis, and the impact on ordinary income. Specifically, the MOL Group plans to make environmental investments of 650 billion yen over the three-year period from FY2023 to FY2025.</p> <p>(iv) The MOL Group has established systems and mechanisms to promote the initiatives set out in the “MOL Group Environmental Vision 2.2,” including the transition strategy, at management level.</p> <p>v) In order to realize medium- and long-term improvements in corporate value by maximizing social value, including contributions to the SDGs, while minimizing negative impacts (negative external effects) on society through its business activities, the MOL Group has identified five “sustainability issues” (materialities) have been newly identified and it has been clarified which SDG contributions each relates to.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>Based on the assessment of the Framework, the “MOL Group Environmental Vision 2.2,” and the Implementation Plan, DNV confirmed that they are well aligned with the MOL Group’s transition strategy. DNV also confirmed that the Implementation Plan based on the transition strategy is credible, ambitious, and achievable.</p>
2	<p>Business model environmental materiality</p>	<p>The climate transition strategy should be relevant to the environmentally material parts of an issuer’s business model, taking into account potential future scenarios which may impact current determinations concerning materiality.</p> <p><i>Recommended information and indicators:</i></p> <p>Discussion on the materiality of the planned climate transition strategy may:</p> <ul style="list-style-type: none"> <li>• be disclosed in the form of a materiality matrix made publicly available by an issuer or be covered in an issuer’s annual reports; and</li> <li>• address the materiality of climate-related eligible projects and/or KPI(s) on the overall emissions profile of an issuer.</li> </ul> <p>Where Scope 3 emissions are expected to be material but are not yet identified or measured, a timeline for reporting should be disclosed.</p>	<p>Confirmed documents</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>- MOL REPORT 2023</li> <li>- MOL sustainability website</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV evaluated whether the major activities related to the MOL Group’s business activities correspond to the MOL Group’s transition strategy, which was evaluated as contributing to the environment.</p> <p>Of the MOL Group’s business activities, CO<sub>2</sub> (GHG) emissions (Scope 1) from ship operations account for about three quarters of the total. KPI set by the MOL Sustainable Finance focuses on the CO<sub>2</sub> (GHG) reduction from ship operations utilizing EEOI (see SLLP-1 below), and helps MOL mitigate the material impacts to the climate change.</p> <p>i) The MOL Group’s materialities are identified in light of changes in the social and business environment, including climate change and human rights issues, and with reference to the opinions of external stakeholders, and the materialities identified and the process for their identification are disclosed on the MOL sustainability website, MOL REPORT 2023, etc.</p> <p>ii) As mentioned above, ship operations account for three quarters of GHG emissions from the MOL Group’s business activities, and the eligible projects</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>and the set KPIs approach the reduction of GHG emissions from this ship operation.</p> <p>iii) The MOL Group's transition strategy also includes Scope 3 GHG emission reductions, including the major (assumed to be a large proportion) categories of Scope 3, which have been calculated and the information disclosed.</p>
3	Climate transition strategy and targets to be science-based	<p>An issuer's climate transition strategy should reference science-based targets and transition pathways. There is scientific guidance around the required rate of GHG emission reductions (the "GHG emissions reduction trajectory") to align the global economy with the goals of the Paris Agreement.</p> <p>The planned transition trajectory should:</p> <ul style="list-style-type: none"> <li>• be quantitatively measurable and aligned with the latest available methodology;</li> <li>• be aligned with, benchmarked, or otherwise referenced to recognized third-party, science-based trajectories, where such trajectories exist; when third-party trajectories are not available, consider industry peer comparison and/or internal methodologies/historical performance;</li> </ul>	<p>Confirmed documents</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>- MOL REPORT 2023</li> </ul> <p>Interviews with stakeholders</p>	<p>The MOL Group 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 IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc.</p> <p>The plan is a realistic achievement and pathway for GHG emission reduction in the absolute meaning and is to reduce GHG emissions to absolute GHG emissions to maintain defined levels in the future.</p> <p>i) The MOL Group's GHG emission reduction targets under the transition strategy are quantified based on consistent measurement methodology and are intended to reduce GHG emissions in absolute terms.</p> <p>ii) DNV confirmed that the GHG emission reduction targets under the MOL Group's transition strategy are built on milestones, with short-term (annually until 2030), medium-term (2035) and long-term (2050) targets that exceed those of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<ul style="list-style-type: none"> <li>• be publicly disclosed (ideally in mainstream financial filings), including interim targets; and</li> <li>• be supported by independent assurance or verification.</li> </ul> <p><i>Strongly recommended information and indicators:</i></p> <ul style="list-style-type: none"> <li>• short, medium, and long-term GHG emission reduction targets aligned with the Paris Agreement;</li> <li>• baseline year and historic emissions (including absolute emissions, where intensity metrics are the main indicator);</li> <li>• scenario utilized and methodology applied (e.g., ACT, SBTi, IEA etc.). When third-party trajectories are not available, industry peer comparison and/or internal methodologies/historical performance;</li> <li>• GHG emission objectives covering all scopes and most relevant sub-categories (Scopes 1, 2 and 3);</li> <li>• targets formulated in either intensity or absolute terms, noting, that where intensity targets are used, projections on the change to</li> </ul>		<ul style="list-style-type: none"> <li>iii) As mentioned above, annual reduction targets up to 2030, including medium-term targets for 2035, have been published.</li> <li>iv) The MOL Group's GHG emission results, which forms the basis of its GHG emission reduction targets, has been subject to third-party verification.</li> <li>v) The MOL Group's long-term GHG emission reduction target is 2050 net zero, with short-term (annual reduction targets to 2030) and medium-term (reduction targets for 2035) targets to achieve this goal, consistent with the Paris Agreement.</li> <li>vi) The actual GHG emissions in 2019 are used as the basis for disclosing the results, along with the total GHG emissions in the past.</li> <li>vii) The MOL Group's transition strategy has been developed based on the risks and opportunities resulting from analyses based on the IEA's three scenarios of 2.6°C, 2°C, and 1.5°C.</li> <li>viii) The MOL Group's transition strategy includes all scopes. GHG emissions are also calculated for the main sub-categories for Scope 3.</li> <li>ix) As mentioned above, the long-term target (2050) is set in absolute terms, including Scope 3, and emission intensity targets are set to achieve it, while information on actual results is disclosed in terms of GHG emissions (in total) as well as the progress in achieving emission intensity targets.</li> <li>x) The MOL Group's transition strategy is set up with a view to addressing negative emissions. The final remaining GHG emissions are assumed to be within 10% of the 2019 baseline, and it is planned to offset</li> </ul>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<p>absolute emissions should also be provided; and</p> <ul style="list-style-type: none"> <li>where applicable, use of carbon capture technology as well as of high-quality and high-integrity carbon credits, and their relative contribution to the GHG emissions reduction trajectory in line with best industry practices (e.g., SBTi, VCMi and ICVCM).</li> </ul>		<p>the remaining gross emissions by negative emissions in the net zero target year (2050).</p>
4	Implementation transparency	<p>Market communication regarding the offer of a GSS financing instrument intended to fund an issuer’s climate transition strategy should also be transparent, to the extent practicable, on the underlying investment program including capital and operational expenditures (CapEx and OpEx).</p> <p><i>Recommended information and indicators:</i></p> <ul style="list-style-type: none"> <li>CapEx roll-out plan consistent with the overall climate transition strategy and climate science and discussion of how it informs CapEx decision-making within the organization;</li> <li>phase-out plan regarding activities/products incompatible with the climate transition strategy (when such activities or products are significantly harmful or display</li> </ul>	<p>Confirmed documents</p> <ul style="list-style-type: none"> <li>Framework</li> <li>MOL Group Environmental Vision 2.2</li> <li>IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>MOL REPORT 2023</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV confirmed that the investment and deployment plans related to the MOL Group's transition strategy include agreement on future investment and expenditure.</p> <p>i) The MOL Group's transition strategy is based on the results of scenario analysis, calculation of factors that cause fluctuations in profit and loss, specific measures and their impact on ordinary income, etc., and formulation of investment plans to resolve environmental issues. Specifically, the company plans to make investments of 650 billion yen over the three-year period from FY2023 to FY2025 in order to solve environmental issues. This represents more than 50% of the total investment.</p> <p>ii) The MOL Group's transition strategy clarifies the pathway to net zero emissions, including plans for the adoption of alternative fuels and the phasing out of highly carbon intensive heavy oil fuels.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<p>levels of performance inconsistent with science-based GHG emission reduction trajectories);</p> <ul style="list-style-type: none"> <li>• green CapEx, for example those referenced under the eligible green project categories in the Green Bond Principles, as a percentage of total CapEx and how the ratio may be expected to evolve over time;</li> <li>• disclosure on the percentage of assets/revenues/ expenditures/divestments aligned to the various levers;</li> <li>• a qualitative and/or quantitative assessment of the potential locked-in GHG emission from an issuer’s key assets and products;</li> <li>• assumptions on the internal cost of carbon; and</li> <li>• disclosure on adverse impacts on the workforce, community and surrounding environment, and related strategies used to mitigate those negative impacts.</li> </ul>		<ul style="list-style-type: none"> <li>iii) The share of Green Capex in the overall Capex and how this share changes over time are clarified in the Environmental Vision 2.2 and the Pathway to Net Zero Emissions in the Framework, as well as in the KPIs &amp; Milestones.</li> <li>iv) As mentioned above, based on the results of the scenario analysis, factors that cause fluctuations in profit and loss, specific measures taken and their impact on recurring profit are calculated and reflected in the transition strategy, and this information is disclosed.</li> <li>v) As mentioned above, GHG emissions from the MOL Group’s business activities are attributable to ship operations, which account for three quarters of GHG emissions, and GHG emissions from ship operations are calculated for all Scopes.</li> <li>vi) The MOL Group started internal operation of Internal Carbon Pricing (ICP) in 2021 and uses this ICP for investment decisions. This ICP is also disclosed on the MOL Group website.</li> <li>vii) In the Framework, the negative environmental and social impacts of eligible projects and how they are addressed are identified and disclosed.</li> </ul>



## Schedule-4 Green Finance Eligibility Assessment Protocol

The checklist below (GBP/GLP-1 to GBP/GLP-4) is a DNV assessment protocol created for the MOL Green/Transition Finance Eligibility Assessment based on the requirements of GBP/GBGLs and GLP/GLGLs. The "Confirmed documents" in the Work Undertaken include documents inside the Fundraiser and are provided by MOL as evidence of eligibility judgment for DNV.

In Schedule-3, it is referred to as GBP/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 green and transition projects in transition finance that specifies the use of proceeds based on CTFH and CTFBG, including both green and transition contexts.

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

### GBP/GLP-1 Use of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	Types of funds	The types of green finance are classified into one of the following types defined by GBP/GLP. <ul style="list-style-type: none"> <li>• (Standard) Green/transition Finance</li> <li>• Green/transition Revenue Finance</li> <li>• Green/transition Project Finance</li> <li>• Other</li> </ul>	Confirmed documents - Framework  Interviews with stakeholders	Through the evaluation work, DNV confirmed that MOL Sustainable Finance falls into the following categories.  • (Standard) Green/transition Finance
1b	Green/transition Project Classification	The key to a green/transition finance is that the proceeds will be used for a green project, which should be properly stated in the legal documents relating to the security.	Confirmed documents - Framework  Interviews with stakeholders	DNV confirmed that the MOL Sustainable Finance is intended to fund green/transition projects focused on MOL's GHG emission reduction targets, as outlined in the Framework and Schedule-1.
1c	Environmental benefits	All green projects to which the funds are used should have clear environmental benefits, the effects of which should be	Confirmed documents - Framework	DNV confirmed that the green projects for which the proceeds will be used are focused on the MOL Group's GHG emissions reduction targets, as set out in Schedule-1, and

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		assessed by the issuer and, where possible, quantitatively demonstrated.	Interviews with stakeholders	that their effects will be disclosed in quantitative or qualitative information directly or indirectly related to GHG emissions.
1d	Refinancing rate	If all or part of the proceeds are used or may be used for refinancing, the issuer will indicate the estimated ratio of the initial investment to the refinancing and, if necessary. Therefore, it is recommended to clarify which investment or project portfolio is subject to refinancing.	Confirmed documents - Framework  Interviews with stakeholders	DNV confirmed that MOL plans to use all proceeds for either new investment or refinancing of eligible candidate projects included in Schedule-1.  The eligible projects and whether they are new allocations or refinancing are determined before the implementation of finance.



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

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Project selection process	<p>Green finance fundraisers should provide an overview of the process of qualifying projects for which green finance funding will be used. This includes (but is not limited to):</p> <ul style="list-style-type: none"> <li>• The process by which the issuer determines that the project in question is included in the business category of a qualified green project.</li> <li>• Creation of criteria for eligibility of projects for which green finance funding will be used</li> <li>• Environmental sustainability goals</li> </ul>	<p>Confirmed documents</p> <ul style="list-style-type: none"> <li>- Framework</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV confirmed that MOL has a process for determining the eligibility of projects to use the proceeds from sustainable finance, which is clearly outlined in the Framework.</p>
2b	Issuer's Environmental and Social Governance Framework	<p>In addition to criteria and certifications, the information published by issuers regarding the green finance process also considers the quality of performance of the issuer's framework and environmental sustainability.</p>	<p>Confirmed documents</p> <ul style="list-style-type: none"> <li>- Framework</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV confirmed that the eligible projects implemented by MOL are in line with the MOL Group's management and environmental policies and consistent with the transition strategy, targets, and pathways.</p> <p>DNV confirmed that MOL will identify possible negative environmental and social impacts in the operation and implementation of the project, and that it will seek to control negative impacts by conducting sea area surveys and environmental assessments.</p>

## GBP/GLP-3 Management of Proceeds

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Tracking procedure-1	The net proceeds from of green finance should be managed in sub-accounts, included in sub-portfolio, or otherwise tracked. It should also be certified by the issuer in a formal internal process related to the issuer's investment and financing operations for the Green Project.	Confirmed documents - Framework - Internal system output forms  Interviews with stakeholders	The net proceeds relating to proceeds from the MOL Sustainable Finance can be tracked on a project-by-project basis through an internal system.  DNV confirmed that the system actually in use and its output forms can be verified and that the management of proceeds can be proven on this basis.
3b	Tracking procedure-2	During the green 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  Interviews with stakeholders	DNV confirmed that the proceeds from sustainable finance are managed by the Finance Division, which shares the allocation status to eligible projects with the relevant divisions.
3c	Temporary holding	If no investment or payment has been made in a qualified green project, the issuer should also inform the investor of the possible temporary investment method for the balance of unallocated proceeds.	Confirmed documents - Framework  Interviews with stakeholders	DNV confirmed that the proceeds from the MOL Sustainable Finance are promptly allocated to eligible projects and, where unallocated proceeds arise, the unallocated balance is managed in cash or cash equivalents and disclosed through allocation status reporting.

## GBP/GLP-4 Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Periodical Reporting	<p>In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, the issuer will consider each project at least once a year for projects to which the green finance proceeds have been allocated, taking into account the following: A list of each project should be provided.</p> <ul style="list-style-type: none"> <li>- Confidentiality and competitive considerations</li> <li>- Outline of each project, expected sustainable environmental and social effects</li> </ul>	<p>Confirmed documents - Framework</p> <p>Interviews with stakeholders</p>	<p>DNV confirmed that MOL will disclose the allocation status of proceeds from sustainable finance and the environmental benefits as set out below annually on its website (only in the case of bonds) or to lenders (only in the case of loans), within the limit of confidentiality obligations and as far as reasonably practicable, until the full amount of the proceeds from sustainable finance is allocated to eligible projects.</p>





## Schedule-5 Sustainability Linked Finance Eligibility Assessment Protocol

Since the MOL Sustainable Finance is implemented as finance with general corporate purpose, the five elements of SLLP required for the eligibility assessment of finance with specific use of proceeds as defined in the CTFH and CTFBG are applied to the assessment.

The checklist below (SLBP/SLLP-1 to SLBP/SLLP-5) is a DNV assessment protocol created for the MOL Sustainable Finance Eligibility Assessment based on the requirements of SLBP/SLLP. The "Confirmed documents" in the Work Undertaken include public or private documents (the Fundraiser's internal materials) etc., and are provided by MOL as evidence of eligibility judgment for DNV.

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

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

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	<b>KPI – material to core sustainability and business strategy</b>	<p>The borrower's sustainability performance is measured using sustainability KPIs that can be external or internal. The KPIs should be material to the borrower's core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector and be under management's control. The KPI should be of high strategic significance to the borrower's current and/ or future operations;</p> <p>It is recommended that borrowers communicate clearly to investors the rationale and process according to which the KPI(s) have been selected and how the KPI(s) fit into their sustainability</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- MOL REPORT 2023</li> <li>- IMO EEOI Guideline /12/MEPC.1/Circ.684</li> <li>- MOL EEOI estimated results</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV has reviewed MOL's sustainability KPI and confirmed that the chosen KPI is material and relevant to the company's core sustainability and business strategies.</p> <p>Core to MOL's business strategy is to play the role of social infrastructure, which is indispensable for maintaining people's activities through marine transportation services. Core to MOL's sustainability strategy is identified as five sustainability issues (materiality).</p> <ul style="list-style-type: none"> <li>• Provision of additional values through safe transportation and social infrastructure businesses</li> <li>• Marine and global environmental conservation</li> <li>• Human activity and development of local society</li> <li>• Innovation for development in marine technology</li> <li>• Governance and compliance to support businesses</li> </ul>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		strategy.		<p>Among these, the material KPI for the MOL Sustainable Finance is GHG emission reduction centered on the marine and global environmental conservation. This is explained as three medium-to long-term targets and five actions in the “MOL Group Environmental Vision 2.2,” being focused on emission reduction from the company and society towards net zero emissions in 2050.</p> <p>This is clearly communicated in the Framework associated with MOL's sustainability strategy.</p> <p>The chosen KPI is as follows:</p> <ul style="list-style-type: none"> <li>• Energy Efficiency Operational Indicator (EEOI)</li> </ul> <p>Unit: g-CO<sub>2</sub>e(GHG)/mile/tonne</p> <p>EEOI selected as the KPI is an indicator to measure the GHG emission performance of ship operations and is widely used in the shipping industry, of which calculation methodology is defined by IMO.</p> <p>The IMO guidelines indicate that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions from the ships. EEOI is calculated based on the following indicators and formula.</p> $EEOI \text{ (gram – CO}_2\text{e/mile/tonne)} = \frac{\text{Emissions (gram – CO}_2\text{e)}}{\text{Distance sailed(mile) x Cargo carried (tonne)}}$ <p>Emission (gram-CO<sub>2</sub>e): CO<sub>2</sub>e (GHG) emissions from ships (gram)  Distance sailed (mile): Operating distance (miles)  Cargo carried (tonne): Cargo weight (tonne)</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>The company-wide average is calculated in total in the following way, using a standardized methodology designed to compensate for the impact of the greater or lesser absolute intensity derived from the business characteristics of each segment on the calculation of the company-wide average, and to ensure that the efficiency gains achieved by each division are properly reflected in the company-wide average.</p> <ul style="list-style-type: none"> <li>• Base year: Calculated by dividing the total GHG emissions of all segments by the total tonne-miles of all segments</li> <li>• Target years after the base year: The EEOI reduction rate compared to the base year is calculated for each segment. The contribution rate to the total is then determined according to the project scale, calculated based on the energy consumption of each segment, and the EEOI reduction rate of each segment is then weighted and averaged with that contribution rate.</li> </ul> <p>GHG emissions cover the fuel combustion phase emissions (Scope 1) and part of the fuel production phase emissions (Scope 3/Category 3) on the MOL Group's own ocean-going vessels.</p> <p>The KPI is therefore of high strategic relevance for MOL now and for the foreseeable future to measure relative carbon intensity reduction of its shipping operations. All elements which make up the EEOI are under MOL's management control. The KPI is material, as GHG emission intensity impacts MOL's own value creation as well as external stakeholders.</p> <p>The scope of EEOI is also a key element, reaching beyond Scope 1 and including part of Scope 3 emissions.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>DNV believes that the focus on deploying one KPI will enable a targeted effort to deliver on MOL’s overarching decarbonization targets. The chosen KPI for GHG emission reduction aligns with MOL’s broader low carbonization and decarbonization aims and is measurable, transparent, and recognizable as an annual assessment.</p> <p>In terms of MOL’s broader business strategy, DNV acknowledges that reducing EEOI will be a key driver of MOL’s core business (maritime business). Therefore, the EEOI as a KPI will also contribute to both the environmental sustainability targets and MOL’s business strategy.</p>
1b	<b>KPI - Measurability</b>	<p>KPIs should be measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT’s level of ambition.</p> <p>borrowers are encouraged, when possible, to select KPI(s) that they have already included in their previous annual reports, sustainability reports or other non-financial reporting disclosures to allow investors to evaluate historical performance of the KPIs selected. In situations where the KPIs have not been previously disclosed, borrowers should, to the extent possible, provide historical</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- MOL REPORT 2023</li> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>- IMO EEOI Guideline MEPC.1/Circ.684</li> <li>- MOL EEOI estimated results</li> </ul>	<p>DNV concludes that the EEOI as a KPI is measurable based on a consistent methodology, externally verifiable, and able to be benchmarked to external references. DNV concludes that EEOI is a robust and reliable indicator to measure GHG emission reduction from ships. The EEOI as a KPI is already an industry standard for reporting on GHG emissions in the shipping industry. Since the EEOI figures will be registered in the MOL’s data collection system on fuel consumption, it will be collected based on a consistent methodology, be externally verified, and be benchmarked to external references.</p> <p>The IMO GHG Strategy, adopted in 2018 and revised in 2023, can be used as external reference to benchmark MOL’s level of ambition. IMO has set GHG reduction targets for 2030 and 2040, with 2008 as the base year, to achieve zero GHG emissions in 2050. IMO's reduction target for 2030 calls for a 40% reduction in CO<sub>2</sub> emissions per transport volume and a 5-10% use of zero emission fuels etc. The Ministry of Land, Infrastructure, Transport and Tourism's “Roadmap to Zero Emissions from International Shipping” (sponsored by the</p>



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		externally verified KPI values covering at least the previous 3 years.	Interviews with stakeholders	Japan Ship Technology Research Association), which has referenced to IMO, sets goals that are consistent with IMO. MOL's targets and the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. have different base years. However, DNV confirmed that MOL has standardized to directly compare the two based on past performance data, public information, etc., and that the KPI was properly set as an indicator that can be directly compared with the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc.
1c	<b>KPI – Clear definition</b>	A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter as well as the calculation methodology	Confirmed documents: <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- MOL REPORT 2023</li> <li>- IMO EEOI Guideline /12/MEPC.1/Circ.684</li> <li>- MOL EEOI estimated results</li> </ul> Interviews with stakeholders	DNV confirmed that the KPI (EEOI) chosen by MOL provides a clear evaluation scope and calculation methodology. The EEOI is calculated based on the data of emission (gram-CO <sub>2</sub> e), CO <sub>2</sub> e(GHG) emissions from ships (grams), distance sailed (mile), and cargo carried (tonne).  This is evaluated and reported for ships that have been set and managed in advance. EEOI is already an industry standard and widely reported on, as outlined in 1b.

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

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	<b>Target Setting - Meaningful</b>	The SPTs should be ambitious, realistic and meaningful to the borrower’s business and be consistent with the issuers’ overall strategic sustainability/ESG strategy	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- MOL REPORT 2023</li> <li>- MOL materials Overview of sustainability issues (materiality)</li> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV confirmed that SPT supports the three medium-to long-term targets and five actions set forth in the “MOL Group Environmental Vision 2.2,” has goals that are aligned with the goals of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., and has specific plans inherent. DNV therefore confirmed that the SPT is ambitious, realistic and meaningful. DNV also confirmed that the achievement of SPT is in line with MOL’s overall sustainability/ESG strategy.</p> <p>Achievement of SPT is a necessary response to GHG emission reduction, which is closely related to the environmental issues of the shipping industry, and is meaningful for MOL’s Business. The MOL Group’s three medium-to long-term targets and five actions set out in the “MOL Group Environmental Vision 2.2” will work toward net zero emissions by 2050, and SPT will be provided as an annual target until 2035 to measure progress.</p> <p>Based on MOL's fleet configuration transition plan provided to DNV, DNV concludes that SPT is realistic, the plan is feasible, and it is likely to achieve the SPT objectives outlined in the Framework. It was confirmed that the 45% reduction in EEOI by 2035 compared to the 2019 baseline set by MOL, when converted to the baseline of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., is an ambitious target aligned with the targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. for the entire period from 2019 to 2035 and goes beyond “Business as Usual.” This target setting is expected</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				to be a driving force for MOL's efforts to implement its sustainability strategy.
2b	<b>Target Setting - Meaningful</b>	SPTs should represent a material improvement in the respective KPIs and be beyond a "Business as Usual" trajectory; where possible be compared to a benchmark or an external reference and be determined on a predefined timeline, set before (or concurrently with) the issuance of the loan.	Confirmed documents: <ul style="list-style-type: none"> <li>- Framework</li> <li>- "MOL Group Environmental Vision 2.1"</li> <li>- GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.</li> <li>- MOL EEOI Estimated Results</li> </ul> Interviews with stakeholders	DNV confirmed that the chosen SPTs represent a material improvement of the KPI. This corresponds to a 43% reduction in 2030 vs. 2008 baseline. In order to achieve the SPT, an overall 43% reduction goes beyond "Business as Usual," as MOL will not achieve the targets without the deployment of new technology introduction and construction such as the introduction of net zero emission ocean-going vessels, the introduction of about 90 LNG fuelled vessels, and the introduction of biodiesel fuel. Comparing MOL's SPT for 2030 to the external reference from IMO described under 1b, DNV concludes that MOL's target of 43% reduction vs. its own 2008 baseline is more ambitious than the envisaged -40% vs. targets of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc. The annual SPT for 2023 to 2035 are direct reflection of the projected EEOI under MOL's fleet configuration plan and operation efficiency, meaning that only a full implementation of the fleet configuration plan is expected to result in meeting the annual SPTs.
2c	<b>Target Setting – benchmarks</b>	The target setting exercise should be based on a combination of benchmarking approaches:	Confirmed documents: <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> </ul>	DNV confirmed that the SPT target setting exercise has been based on an appropriate combination of benchmarking approaches. <ol style="list-style-type: none"> <li>1. DNV confirmed that the Framework provides guidance for</li> </ol>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<ol style="list-style-type: none"> <li>1. The borrower’s own performance over time for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is recommended and when possible forward-looking guidance on the KPI</li> <li>2. The SPTs relative positioning versus the borrower’s peers where comparable or available, or versus industry or sector standards</li> <li>3. Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognised Best-Available-Technologies or other proxies</li> </ol>	<ul style="list-style-type: none"> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>- MOL EEOI estimated results</li> </ul> <p>Interviews with stakeholders</p>	<p>target setting from 2023 to 2035 by the KPI information, which is based on the appropriate data and actual results, for more than three years from 2008 to 2022.</p> <ol style="list-style-type: none"> <li>2. DNV concludes that the outlined SPT goes beyond that of the industrial standard (target of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc.) and SPT set by SBTi methodology. highlighted in 2b.</li> <li>3. DNV concludes that the SPT is put in an appropriate context of international climate change mitigation efforts. The Framework highlights MOL’s ambition to “work on achieving the goals of the Paris Agreement.” The SPT can be seen as aiming to outperform IMO’s GHG emission reduction targets.</li> </ol> <p>The broader purpose adopted by MOL is supported by the “MOL Group Environmental Vision 2.2” with the following three medium- to long-term targets and five actions. This includes national goals, Best Available Technology, or other close technologies.</p> <p>“Medium- to long-term targets”</p> <ol style="list-style-type: none"> <li>1. Deploy net zero emissions ocean-going vessels in the 2020s</li> <li>2. Reduce GHG emissions intensity by approximately 45% by 2035 (versus 2019*)</li> <li>3. With the concerted effort throughout the Group, achieve net zero GHG emissions by 2050</li> </ol> <p>“Five actions to achieve the targets”</p> <ol style="list-style-type: none"> <li>1. Adopt Clean Energy</li> <li>2. Further Adopt Energy-saving Technologies</li> <li>3. Efficient Operations</li> <li>4. Build Business Models that Enable Net Zero</li> </ol>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>Emissions</p> <p>5. Expand Low-carbon/decarbonized Business by Leveraging the Group’s Collective Strengths</p>
2d	<p><b>Target setting – disclosures</b></p>	<p>Disclosures on target setting should make clear reference to:</p> <ol style="list-style-type: none"> <li>1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs</li> <li>2. Where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used</li> <li>3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place</li> <li>4. Where possible and taking into account competition and confidentiality considerations, how the borrowers intend to reach such SPTs</li> </ol>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> <li>- MOL Group Environmental Vision 2.2</li> <li>- IMO GHG Strategy, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism etc.</li> <li>- MOL EEOI estimated results</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV confirmed that the SPT target setting is properly disclosed.</p> <ol style="list-style-type: none"> <li>1. The timelines of SPT target achievement are clearly disclosed, at an annual frequency leading up to 2035. MOL has set the corresponding target observation dates for specified trigger events for each fiscal year for the MOL Sustainable Finance issued under the Framework, and it is necessary to provide the lender with the timely SPT achievement status. DNV confirmed that the annual SPT is set over the entire maturity date of the loan.</li> <li>2. The baseline for SPT is 2019. This is different from the baseline (2008) of IMO, the Ministry of Land, Infrastructure, Transport and Tourism, etc., but is standardized by MOL’s appropriate trial calculation adjustment (intercomparison is possible).</li> <li>3. Same as 2.</li> <li>4. The Framework provides sufficient information on how EEOI reduction progress will be achieved, highlighting how progress to date has been achieved and the likely measures implemented to meet the EEOI trajectory outlined leading up to 2035. These are explained in detail in the “MOL Group Environmental Vision 2.2.”</li> </ol> <p>Based on MOL’s fleet configuration transition plan, DNV concluded that the SPTs are realistic and that the plan is viable and possible to meeting the SPT targets outlined in the Framework.</p>



## SLBP/SLLP-3 Finance Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	<b>Loan Characteristics – SPT Financial/structural impact</b>	The SLL will need to include a financial and/or structural impact involving trigger event(s) based on whether the KPI(s) reach the predefined SPT(s).	Confirmed documents: - Framework  Interviews with stakeholders	DNV confirmed that the inclusion of trigger event(s) under the Framework is in line with the requirements outlined by SLLP.  DNV confirmed that trigger events, with corresponding target observation date(s) and performance requirements under specific SPTs, as outlined in each specific loan issued under the Framework, will be linked to the achievement of the target, loan conditions, and other financial incentives.
3b	<b>Loan Characteristics – Fallback mechanism</b>	Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained.  borrowers may also consider including, where needed, language in the loan documentation to take into consideration potential exceptional events.	Confirmed documents: - Framework  Interviews with stakeholders	DNV confirmed that MOL has examined an appropriate fallback mechanism, and consequently MOL concluded that they would not set another SPT or calculation method at this time since the risk of being uncalculated or unobservable is negligible.  MOL explained that as a future fallback mechanism, MOL may change the KPI and SPT due to both/either external factors and/or MOL's management decision result, such as when the changes of MOL's business circumstances, change of business structures and KPI where reasonable demonstration.

## SLBP/SLLP-4 Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	<b>Reporting</b>	<p>borrowers of SLLs should publish, and keep readily available and easily accessible:</p> <ol style="list-style-type: none"> <li>1. Up-to-date information on the performance of the selected KPI(s), including baselines where relevant</li> <li>2. A verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the loan's financial and/or structural characteristics</li> <li>3. Any information enabling investors to monitor the level of ambition of the SPTs</li> </ol> <p>This reporting should be published regularly, at least annually, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLL's financial and/or structural characteristics.</p>	<p>Confirmed documents:</p> <ul style="list-style-type: none"> <li>- Framework</li> </ul> <p>Interviews with stakeholders</p>	<p>DNV concludes that the following information, as required by SLLP, will be published in a timely manner and kept publicly available:</p> <ol style="list-style-type: none"> <li>1. KPI performance for the SPT: The achievement status of KPI towards SPT will be disclosed annually on the website (only in the case of bonds) or to lenders (only in the case of loans).</li> <li>2. SPT achievement status: It will be subject to annual verification by an independent reviewer and is used to determine financial characteristics (loan conditions or other financial incentives).</li> <li>3. In case IMO targets change: Discuss the level of ambition of the SPT of MOL with investors or lenders and change it if necessary.</li> </ol>



## SLBP/SLLP-5 Verification

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
5a	<b>External Verification</b>	Borrowers should have its performance against each SPT for each KPI independently verified by a qualified external reviewer with relevant expertise, at least once a year and for each SPT trigger event.	Confirmed documents: - Framework  Interviews with stakeholders	DNV confirmed that MOL plans to undergo independent validation of KPI-related data at least once a year by qualified external evaluation body with relevant expertise in SPT trigger events.