



SECOND PARTY OPINION

MITSUI O.S.K. LINES, LTD. TRANSITION LINKED LOAN FRAMEWORK

Prepared by: DNV Business Assurance Japan K.K.

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Executive Summary

MOL is one of the largest multimodal groups, which has more than 130 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 2.1" in June 2021 and is working to solve various environmental issues such as climate change, aiming for "Net Zero GHG Emissions by 2050".

In advancing "MOL Group Environmental Vision 2.1", 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 of Japan. The MOL group will issue a "Mitsui O.S.K. Lines Ltd. Transition Linked Loan, hereinafter 'MOL-TLL'", which is linked to the achievement of the target, loan conditions and other financial incentives, setting the ambitious GHG emission reduction target as a Sustainability Performance Target.

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

MOL has established the Mitsui O.S.K. Lines Ltd. Transition Finance Framework (hereinafter, "Framework") in order to carry out transition 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 framework and the eligibility of MOL-TLL.

Specifically, DNV provided an eligibility assessment for the framework and MOL-TLL by applying frameworks centered on following.

- Climate Transition Finance Handbook

(International Capital Market Association 2020, hereinafter CTFH)

- Basic Guidelines on Climate Transition Finance

(Financial Services Agency of Japan, Ministry of Economy, Trade and Industry of Japan and Ministry of Environment of Japan 2021, hereinafter CTFBG)

- Sustainability Linked Loan Principles

(Loan Market Association (LMA) and others 2021, hereinafter SLLP)

- Sustainability Linked Loan Guideline

(Ministry of the Environment of Japan 2020, hereinafter SLLGLs)

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

<CTF assessment results>

DNV confirmed the following through the materials and information provided by MOL.

Followings (CTF-1 \sim CTF-4) are 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 transition strategy of the fundraiser MOL is based on a transition pathway that is consistent with the environmental goals set by IMO, the Ministry of Land, Infrastructure, Transport and



Tourism of Japan, etc. and SBTi methodology^{*1} which defines its target and pathway. In addition, as governance and disclosure related to execution of the finance, an internal system and an information disclosure process based on TCFD*² has been established. These are disclosed within the framework and meet the disclosure elements of CTF-1.

- *1: SBTi methodology for maritime sector is the draft guidance under consultation from March 2021
- *2: 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 2.1", and the contribution to the SDGs, which will be described later, is also taken into consideration. These are disclosed within the framework and meet the disclosure elements of CTF-2.

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

MOL's transition strategy is defined by science-based targets and pathways. Specifically, MOL applies the targets set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc, and SBTi methodology which defines its target and pathway which described in CTF-1, and indexes and quantifies short-and medium-term goals in addition to long-term goals, and clarifies the process of achieving the goals. These are disclosed through the framework or second party opinion and meet the disclosure elements of CTF-3.

CTF-4.Implementation transparency :

MOL outlines the basic investment plan for the execution of the transition strategy and the outcomes and impacts of the execution. For future overall and individual investment plans, it was confirmed that the investment required to execute the transition strategy is planned to be executed based on the internal management system and process in consideration of CTF-1 to CTF-3. These are disclosed through the Framework etc, or this Second Party Opinion and meet the disclosure elements of CTF-4.

<SLLP assessment results >

DNV confirmed the following through the materials and information provided by MOL.

Followings (SLLP-1 \sim SLLP-5) are findings and opinions of DNV against the five requirements of the SLLP (and SLLGLs).

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

Please see the Table-1. 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 SLLP.

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

DNV concludes that the MOL's SPTs (EEOI reduction rate based on 2019) 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. SPT constitute the annual cumulative % reduction of EEOI from 2019 to 2035. SPT is ambitiously set by using external standards set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism of Japan etc., and consistent with SBTi methodology 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 2021 to 2035.

SLLP-3.Loan Characteristics:

The financial characteristics of TLL issued under the framework are impacted based on KPI performance under SPTs. This impact is a fluctuation in lending rates or other financial incentives, and the impact is defined by a specific trigger event (SPT achievement status) in the period/date defined based on framework in the document of the loan-related arrangement.

SLLP-4.Reporting:

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

SLLP-5.Verification:

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

Table-1 MOL Transition Linked Loan KPIs and SPT

Item	Outline	Referenced criteria
KPI	EEOI : Energy Efficiency Operational Indicator EEOI is an indicator to measure the GHG emission performance of ship operations. EEOI is widely used in the shipping industry. EEOI calculation formula is an aggregation of EEOI as defined under Science Based Target Initiative criteria for the shipping sector under consultation (see referenced criteria right). The IMO guidelines indicate that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions from the ships. $EEOI (gram - CO2e/mile/tonne)$ $= \frac{Emissions (gram - CO2e)}{Distance sailed(mile) x Cargo carried (tonne)}$	- SBT setting for the Maritime Transport Sector DRAFT Guidance Document for Public Consultation V0.0 March 2021
SPT	Set annual EEOI reduction rate year-on-year as SPT to achieve 45% EEOI reduction by 2035 relative to a 2019 baseline. MOL performs calculation adjustments comparable to the target by 2030 and target by 2050 (both targets are compared to 2008) defined in initial IMO GHG strategy*, and then sets the annual EEOI reduction rate (as SPT), which is low compared to IMO's EEOI target reduction rate. Moreover, MOL set an ambitious EEOI using SBTi methodology as SPT until 2035. * Equivalent to the Roadmap to Zero Emissions from International Shipping (Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.)	- Initial IMO GHG Strategy (IMO), - Roadmap to Zero Emissions from International Shipping (Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.)

On the basis of the information, including framework, provided by MOL and the work undertaken, DNV confirmed that the framework formulated by MOL and MOL-TLL executed by this framework meets the criteria required by the relevant frameworks within CTFH, CTFBG, SLLP and SLLGLs is eligible.





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Revision history

Revision number	Issue Date	Remarks
0	26/10/2021	Initial

Disclaimer

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

Statement of Competence and Independence

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

 $^{^{\}mbox{\scriptsize 1}}$ DNV Code of Conduct is available from DNV website (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 more than 130 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 and services.

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 Transport 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 knowhow and specialized group companies to meet diversified logistics needs.

Associated Business: MOL's expertise encompasses not only ocean shipping-related businesses such as cruise ship, tugboat, land transport, warehousing, and maritime consulting services, but also travel, office building leasing, and property management, as well as finance, trading, insurance, ICT systems, supporting a national oil stockpiling project, sales of nautical charts, and more.



ii. Fundraiser's initiatives for ESG/SDGs

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 management plan.

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

Table 1 Overview of Fide 3	Sustainability 155des (Flateriality)			
Sustainability Issues (Materiality)	SDGs			
Value-added transport services	7 STREAMS AND PROFESSION OF STREAMS AND PROF			
Marine and global environmental conservation	7 AFTROMALI AND 13 GIMMTE 14 LIFE NAILY 15 UF ON LAND 17 FOR THE GALLS 17 FOR THE GALLS 18 ON LAND			
Innovation for development in marine technology	7 HITERANIA NO BECKIN MOOK AND 12 SECROSIAN DECEMPOR DECE			
Human resource cultivation and community development	4 DELANT HOUR AND THE RECORD RECORD TO THE BALLS 5 FEMALET BOOK RECORD TO THE BALLS 6 FEMALE BOOK RECORD TO THE BALLS 7 FEMALE BOOK RECORD TO THE BALLS			
Governance and compliance to support businesses	10 REGULATORS 16 AGE STRONG AGE			

^{*} Sustainability issue which Transition Finance is mainly related to is " Marine and global environmental conservation "

iii. Fundraiser's Environmental Initiatives

MOL established "MOL Group Environmental Vision 2.1" in June 2021, aiming for net zero GHG emissions by 2050 with full-scale efforts of the group.

In the "MOL Group Environmental Vision 2.1", MOL conducted the latest TCFD scenario analysis, and efforts to understand the risk and opportunities to respond to climate change, and take countermeasures. Based on the risks and opportunities extracted by the scenario analysis, MOL will set "medium-to long-term goals" and "five initiatives to achieve the targets" and accelerate its efforts to tackle environmental issues.

The "medium-to long-term goals" and "Five initiatives to achieve the targets" in the "MOL Group Environmental Vision 2.1" are as follows.

"MOL Group Environmental Vision 2.1"

Medium- to long-term targets

1.	Deploy net zero emissions ocean-going vessels in the 2020s
2.	Reduce GHG emissions intensity by approximately 45% by 2035 (versus 2019*)
3.	With the concerted effort throughout the Group, achieve net zero GHG emissions by 2050

Five initiatives to achieve the targets

1.	Adoption of Clean Alternative Fuels
2.	Enhancement of Energy-Saving Technologies
3.	Boost Operating Efficiency
4.	Building Business Models to Enable Net Zero GHG Emissions
5.	Expanding Low-Carbon and Decarbonization Projects through Use of the MOL Group's Concentrated Strengths





iv. About the Transition Finance Framework

In advancing "MOL Group Environmental Vision 2.1", 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 of Japan^{*1}.

The MOL group will issue a "MOL Transition Linked Loan, hereinafter 'MOL-TLL'", which is linked to the achievement of the target, loan conditions and other financial incentives, setting the ambitious GHG emission reduction target as a Sustainability Performance Target.

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

MOL has established the MOL Transition Finance Framework (hereinafter, "Framework") in order to carry out transition finance in a manner that conforms to the framework which internationally established.

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

*1: "Roadmap to Zero Emissions from International Shipping" formulated in collaboration with IMO, the Ministry of Land, Infrastructure, Transport and Tourism of Japan, shipping, shipbuilding, and maritime industries, research institutes, and public institutions. (Sponsor Japan Ship Technology Research Association)

v. Fundraiser's Transition strategy for decarbonization

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

Figure-1 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.

IMO has set a target to reduce CO_2 emissions per transport work, as an average across international shipping, by at least 40% by 2030 (short- and medium-term target), pursuing efforts towards 70% by 2050 (long-term target), compared to 2008.

In March 2020, MOL has collaborated with the Ministry of Land, Infrastructure, Transport and Tourism of Japan, 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 Japan Ship Technology Research Association).*1
This roadmap shows Japan's efforts (international treaty formulation, technological development) in a manner consistent with the goals of the IMO.

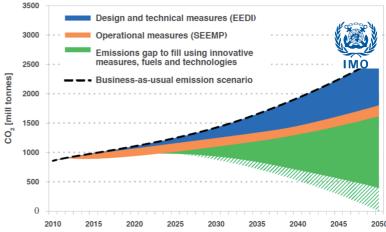
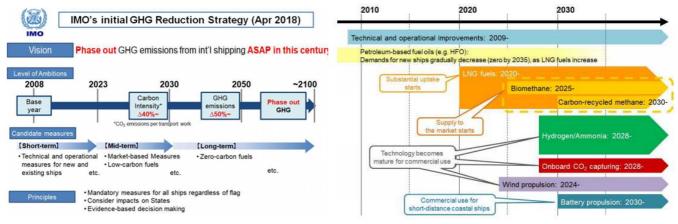


Figure-1 The GHG emission reduction targets and pathway of IMO International Maritime Organization

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 MLIT (Ministry of Land, Infrastructure, Transport and Tourism of Japan).



*1 Reference Figure: Roadmap to Zero Emission from International Shipping from MLIT website

https://www.mlit.go.jp/maritime/GHG_roadmap.html

Left figure: Overview of IMO Strategy

Right figure: Timeline for the Introduction of Alternative Fuels and Technologies Used in Emission Pathways





(2) Transition strategies of the fundraiser

The MOL Group positions the activities to contribute to the above-mentioned IMO and the MLIT GHG emission reduction target, and the activities aimed at achieving the target defined by "MOL Group Environmental Vision 2.1" and by SBTi certification to be acquired in the future as transition strategies.

Figure-2 shows a conceptual diagram of the MOL Group's Pathway to Net Zero Emissions associated with medium- to long-term goals. The MOL Group has set a target to reduce GHG emissions intensity by approximately 45% by 2035 (versus 2019). MOL applies SBTi methodology to determine its EEOI reduction rate consistent with a scenario of Well-Below 2 °C. In addition, Figure-3 shows an image of MOL Ocean-going Fleet Configuration by Fuel Type Going Forward from 2019 to 2050 and Milestones.

The MOL's Group's reduction rate is different from the IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan 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 of Japan 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 exceeds the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan.

In addition, the overview of MOL's environmental efforts, including climate change response, is disclosed on its website as " "MOL Group Environmental Vision 2.1".



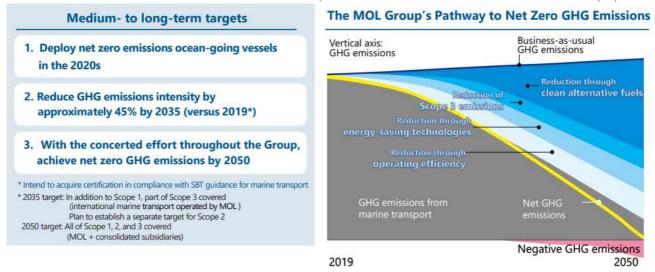


Figure-2 Medium- to Long-term GHG Reduction Targets and the Pathway to Net Zero Emissions By 2050

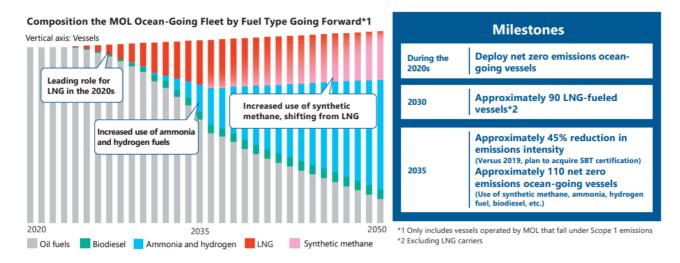


Figure-3 Composition the MOL Ocean-Going Fleet by Fuel Type Going Forward and Milestones



(3) Governance of the fundraiser (for environmental management)

Figure-4 shows MOL's environmental governance organization.

MOL has established a climate change management system led by the Corporate Planning Department, the Environment and Sustainability Strategy Department and the Technology Innovation Division.

In addition, MOL's Environmental and Sustainability Committee, which is under the Management Committee, promotes its efforts to address sustainability issues (materiality).



Figure-4 MOL's environmental governance organization

Issuer name: Mitsui O.S.K. Lines, Ltd.

Framework Name: Mitsui O.S.K. Lines, Ltd. Transition Linked Finance Framework

Review provider's name: DNV Business Assurance Japan K.K.

Publication date of review publication: October 19, 2021



II. Scope and Objectives

DNV has been commissioned by MOL to provide a pre-funding assessment on MOL's Transition Linked Loan "MOL-TLL". Our objective has been to implement an assessment on whether the MOL-TLL meets the criteria established on CTFH, CTFBG, SLLP and SLLGLs to provide a second party opinion on the eligibility of the MOL-TLL.

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 report, no assurance is provided regarding the financial performance of the MOL-TLL, the value of any investments in the loan, or the long-term environmental benefits of the transaction.

Standards/guidelines to be applied

No.	Standards/guidelines	Scheme owner
1.	Climate Transition Finance Handbook (CTFH)*1	International Capital Market Association
		(ICMA), 2020
		Financial Services Agency of Japan,
2.	Basic Guidelines on Climate Transition Finance	Ministry of Economy, Trade and Industry
۷.	(CTFBG) *1	of Japan and Ministry of Environment of
		Japan, 2021
3.	Sustainability Linked Loan Principles (SLLP)*2	Loan Market Association (LMA) and
		others, 2021
4.	Sustainability Linked Loan Guideline (SLLGLs) *2	Ministry of the Environment, 2020

^{*1} Climate Transition : The concept of climate transition focuses principally on the credibility of an issuer's climate change-related commitments and practices (Quoted from CTFH)

^{*2} Sustainability-Linked Loan: Sustainability linked loans are any types of loan instruments and/or contingent facilities (such as bonding lines, guarantee lines or letters of credit) which incentivise the borrower's achievement of ambitious, predetermined sustainability performance objectives. (Quoted from SLLP)





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 MOL-TLL 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 issuer, MOL as possible, we have adapted our MOL-TLL assessment methodologies, which incorporates the requirements of the CTFH, CTFBG, SLLP and SLLGLs, to create a MOL-TLL Eligibility Assessment Protocol (hereinafter, "Protocol"). Please refer to Schedule-2. The Protocol is applicable to MOL-TLL under the CTFH, CTFBG, 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 Climate Transition Finance should "provide an investment opportunity with transparent sustainability credentials" and "is important (as climate transitions) through KPIs and SPTs, quantitative, pre-determined, ambitious, and regularly monitored and externally validated and encourage the achievement of ESG (in terms of climate transitions) of borrowers"



As per our Protocol, the criteria against MOL-TLL to be reviewed is grouped into the following elements, represented by the CTFH, CTFBG, SLLP and SLLGLs:

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

Principle one: Issuer's climate transition strategy and governance

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

Principle two: Business model environmental materiality

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

Principle three: Transition is science-based including targets and pathway

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

Principle four: Implementation transparency

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

(2) Five elements of SLLP *1

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

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

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

The SPTs should be ambitious, meaningful and realistic. 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: Loan Characteristics.

The loan 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 SLL's financial and/or structural characteristics. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner, should be explained.

Principle Four: Reporting:

Borrowers should publish and keep readily available and easily accessible up to date information on the performance of the selected KPI(s), as well as a verification assurance report (see Principle 5) outlining the performance against the SPTs and the related impact and timing of such impact on the loan's financial and/or structural characteristics, with such



information to be provided to those institutions participating in the loan or to investors participating in the loan at least once per annum.

Principle Five: Verification

The Borrower 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.

^{*}¹The Sustainability Linked Loan DNV Assessment Protocol consists of five requirements set under SLLP (2021) and includes SLLGLs. This is based on the idea that SLLGLs was created in consideration of consistency with SLLP (2019), and the idea that SLLGLs can be included by evaluating the requirements of SLLP (2021) since it is a standard in which the contents are added/reviewed while following the requirements of SLLP (2019).





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 issuer in good faith. In the pre-funding verification, we have not performed an audit or other tests to check the veracity of the information provided to us. After raising the funds, MOL plans to be verified by third part on information related to SPT after raising funds.

The work undertaken to form our opinion included:

i. Pre-funding assessment

- Creation of a MOL-specific Protocol, adapted to the purpose of the MOL-TLL, as described above and in Schedule-2 to this Assessment.
- Assessment of documentary evidence provided by MOL on the MOL-TLL 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 SPT assessment (*not included in this report)

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





VI. Findings and DNV's opinion

DNV's findings and opinion are as described in (1) and (2) 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 MOL-TLL.

Please see Schedule-2 for details.

From the SLLP 1 to 5 in (2) below are the findings and opinions of DNV against the requirement of the SLLP and SLLGLs as Sustainability (transition) Linked Loan*1 applied to MOL-TLL.

Please see Schedule-3 for details.

*1: 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 fundraiser's climate transition strategy and governance

- MOL formulated "MOL Group Environmental Vision 2.1" in June 2021. In the "MOL Group Environmental Vision 2.1", MOL has set five strategies as environmental corporate strategies that are important for the business model based on identification of risk and opportunity and scenario analysis using TCFD guidance. The "MOL Group Environmental Vision 2.1" shows transition strategy and pathway/trajectory as a medium- to long-term target from 2021 to 2050 and as a pathway to MOL Group's Net Zero Emissions.
- Based on the science-based evidence quantified by 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 incorporates environmental targets such as IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan, as well as targets aimed at acquiring SBTi certification.
- The MOL Group has established a system and mechanism to promote the transition strategy, at the management level.
- 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, "MOL Group Environmental Vision 2.1" and evaluation 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, CO₂ emissions (SCOPE-1) from ship operations account for about three quarters of the total. KPI set by MOL-TTL focuses on the GHG reduction utilizing EEOI (see SLLP-1 below) which is defined by CO2 emissions (SCOPE-1) generated by the ship operations.
- The MOL Group's GHG emission reduction plan is set with optimal solutions that exceed them and the possibility of further improvement, against the goals of the shipping industry set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.
- 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 improvement effects (impacts) from a qualitative and quantitative perspective.

CTF-3 Transition is science-based including targets and pathways

- 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 of Japan, etc., aiming to obtain SBTi certification.
- DNV confirmed that MOL Group's transition strategy is quantified based on consistent measurement methods, MOL seeks to obtain certification by SBTi once the maritime sector criteria are available for validation.
- DNV confirmed that the MOL Group's transition strategy has been established as milestones with short-term targets (mid-2020s), medium-term targets (2035) and long-term targets (2050) that exceed the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan.
- Approaches to reducing GHG emissions including SCOPE1-3 are considering in five strategies in the "MOL Group Environmental Vision 2.1". Among these, as a mediumterm target up to 2035, MOL has set a target value using EEOI as the GHG emission intensity in transportation. Please see Schedule-1 for information on EEOI.

CTF-4 Implementation transparency

- DNV confirmed that the investment and deployment plans associated with MOL Group's transition strategy include consensus building on future investment and expenditure. As a specific example, MOL has an investment plan expected to be about 200 billion yen over the three years from 2021 to 2023 and about 1.6 trillion to 2 trillion yen* by 2030. (*Since these businesses includes chartered vessels and vessels shared with business partners, MOL's investment is expected to be halved.)



- DNV also reviewed the framework and "MOL Group Environmental Vision 2.1" 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 five requirements *1 of the SLLP

*1including SLLGLs

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 strategy.
- 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-TLL is GHG emissions reduction centered on the Marine and global environmental conservation. Since share of the MOL's total GHG emissions (Scope 1 to 3) from ship operations is approximately 75%, EEOI is highly pertinent to choose as KPI. This is explained as three medium-to long-term targets and five strategies in "MOL Group Environmental Vision 2.1", being focused on emission reduction from MOL's own company and society toward Net Zero Emissions in 2050.
- The chosen KPI is outlined in more detail in Schedule-1, and entails:
 - •Energy Efficiency Operational Indicator (EEOI)

Unit: g-CO2e(GHG)/mile/tonne

 $EEOI (gram - CO2e/mile/tonne) = \frac{Emissions (gram - CO2e)}{Distance sailed(mile) x Cargo carried (tonne)}$

- EEOI selected as the KPI is an indicator to measure the GHG emission performance of ship operations. EEOI is widely used in the shipping industry. The IMO guidelines indicate that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions from the ships. In addition, MOL applies EEOI calculation formula defined by SBTi maritime sector. This includes not only GHG emission from Scope1, but also the part of Scope3 emissions which are related to the production of the fossil fuel combustion.
- The KPI is of high strategic relevance for MOL now and for the foreseeable future to measure relative carbon intensity reduction of its shipping operations.
- 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. As such, the EEOI KPI will also contribute to both the environmental sustainability targets and MOL's business strategy.



- DNV concludes that the EEOI KPI is measurable on a consistent methodological basis, externally verifiable and able to be benchmarked to external references. DNV concludes that EEOI is a robust and reliable metric to measure GHG emission reduction for a vessel.
- IMO's Initial Strategy on reduction of GHG emissions from ships, adopted in 2018, can be used as external reference to benchmark of MOL's level of ambition. IMO states that the "carbon intensity of international shipping to decline"" by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008". The Ministry of Land, Infrastructure, Transport and Tourism of Japan's "Roadmap to Zero Emissions from International Shipping (Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.)" (Sponsored by Japan Ship Technology Research Association), which has referenced to the IMO, sets goals that are consistent with the IMO.
- MOL's targets and the targets of IMO and the Ministry of Land, Infrastructure,
 Transport and Tourism of Japan have different base years, but MOL has standardized
 to directly compare the two based on past performance data and public information.
 DNV therefore confirmed that KPI was properly set as an index that can be directly
 compared with the targets of IMO and the Ministry of Land, Infrastructure, Transport
 and Tourism of Japan.
- DNV confirmed that the KPI (EEOI) chosen by MOL provides a clear evaluation scope and calculation methodology. Please see Schedule-1 for more information.

SLLP-2 Calibration of Sustainability Performance Targets (SPTs)

- DNV confirmed that SPT supports the three medium-to long-term goals and five strategies set forth in the "MOL Group Environmental Vision 2.1", has goals that exceed the goals of the IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan; and the target defined using SBTi methodology 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 strategy/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 and the Ministry of Land, Infrastructure, Transport and Tourism of Japan, will exceeds the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan for the entire period from 2019 to 2035. This target setting is expected to be a driving force for MOL's efforts to implement its sustainability strategy.
- DNV confirmed that the chosen SPTs represent a material improvement of the KPI. This corresponds to a 43% reduction in 2030 vs. 2008 baseline. 43% EEOI reduction is more ambitious than the 40% reduction targets of the IMO and Ministry of Land, Infrastructure, Transport and Tourism of Japan and goes beyond "business as usual".



- 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 2021 to 2035 by the KPI information, which is based on the appropriate data and actual results, for more than three years from 2008 to 2020 by bench marking approach.
 - DNV concludes that the SPT outlined go beyond the SPT of industry standard (target of IMO, Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.) and SPT set by SBTi methodology.
 - 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 "MOL Group Environmental Vision 2.1" with the following three medium- to long-term goals and five strategies. 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 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. DNV confirmed that the annual SPT is set over the entire maturity date of the loan.
 - The baseline for SPT is 2019 set in accordance with SBTi methodology using
 the latest available data in terms of GHG. This is different from the baseline
 (2008) of IMO and the Ministry of Land, Infrastructure, Transport and Tourism
 of Japan, but it is standardized by MOL's appropriate trial calculation
 adjustment (intercomparison is possible).
 - Through the framework and "MOL Environmental Vision 2.1", it is explained in detail how the progress of EEOI reduction will be achieved. For details, please see Table-2 and Table-3 in v (2) in section I of this report.

SLLP-3 Loan Characteristics

- 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.
- 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.

SLLP-4 Reporting

- DNV concludes that required information will be disclosed in a timely manner regarding the following required by SLLP.
 - KPI performance for the SPT: The information will be reported to lenders once a year, in no later than 180 days after each fiscal year-end. This will be reported annually until loan maturity. The final year's reporting timing will be determined by discussions between the lender and the borrower.
 - SPT achievement status: Will be subject to annual verification from an independent reviewer and it is used to determine financial characteristics (loan conditions or other financial incentives)
 - In case SBTi or IMO targets change: Discuss the level of ambition of the SPT of MOL with the lender and change it if necessary.

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 and MOL-TLL executed by the framework meet the disclosure elements and requirements in the eligibility assessment protocol and that they are aligned with the stated definition and purpose of Climate Transition Finance which is used as general corporate purpose (Sustainability Linked Loan type) including asset financing which contribute to achieve the target.

"Climate Transition Finance provides an investment opportunity with transparent sustainability credentials"

"Climate Transition Finance is important (as climate transitions) through KPIs and SPTs, quantitative, pre-determined, ambitious, and regularly monitored and externally validated and encourage the achievement of ESG (in terms of climate transitions) of borrowers"

DNV Business Assurance Japan K.K.

26th Oct. 2021

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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 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 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 Key Performance Indicators (KPI) and Sustainability Performance Targets (SPT)

KPI Key Performance Indicators

EEOI : Energy Efficiency Operational Indicator Unit : *q-CO₂e(GHG)/mile/tonne*

MOL has selected the Energy Efficiency Operation Index (EEOI) as a KPI. The calculation method is shown in Equation-1. EEOI is an indicator to measure the $CO_2e(GHG)$ emission performance of ship operations. EEOI is widely used in the shipping industry, and IMO defines the calculation method. This is based on Guidance of SBTi Maritime Transport Sector. 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.

$$EEOI\ (gram-CO2e/mile/tonne) = \frac{Emissions\ (gram-CO2e)}{Distance\ sailed(mile)\ x\ Cargo\ carried\ (tonne)} \cdots$$
 Equation-1

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. Figure-1 and Table-1 show the MOL's EEOI target reduction rate compared to the IMO target.

Schedule-2 CLIMATE TRANSITION FINANCE ELIGIBILITY ASSESSMENT PROTOCOL

The checklists ($1\sim4$) below are DNV evaluation procedures created for MOL-TLL eligibility assessment based on the disclosure requirements of CTFH and CTFBG.

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

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

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1	Issuer's Climate Transition Strategy and Governance	The financing purpose should be for enabling an issuer's climate change strategy. A 'transition' label applied to a debt financing instrument should serve to communicate the implementation of an issuer's corporate strategy to transform the business model in a way which effectively addresses climate-related risks and contributes to alignment with the goals of the Paris Agreement. Suggested information and indicators • A long-term target to align with the goals of the Paris Agreement (e.g. the objective of limiting global warming ideally to 1.5℃ and, at the very least, to well below 2℃); • Relevant interim targets on the trajectory towards the long-term goal;	Confirmed documents - Framework - "MOL Group Environmental Vision 2.1" - GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc. - MOL REPORT 2021 Interviews with stakeholders	MOL has established a 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 "MOL Group Environmental Vision 2.1" in June 2021. In the "MOL Group Environmental Vision 2.1", MOL has set five strategies 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 2.1" shows transition strategy and pathway/trajectory as a medium- to long-term target from 2021 to 2050 and as a pathway to MOL Group's Net Zero Emissions. Based on the science-based evidence quantified by MOL Group, DNV reviewed and confirmed that MOL's targets aligns with the goals of the Paris Agreement.



				Lines, Ltd. Transition Linked Loan Framework Second Party Opinion
Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 Disclosure on the issuer's levers towards decarbonisation, and strategic planning towards a long-term target to align with the goals of the Paris Agreement; Clear oversight and governance of transition strategy and, Evidence of a broader sustainability strategy to mitigate relevant environmental and social externalities and contribute to the UN Sustainable Development Goals. 		Specifically, the MOL Group's transition strategy incorporates environmental targets such as IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan, as well as targets aimed at acquiring SBTi certification. In addition, MOL plans to review the efforts required to achieve continuous emission reductions in the future. The MOL Group has established a system and mechanism to promote the efforts stipulated in the "MOL Group Environmental Vision 2.1", including the transition strategy, at the management level.
		Development doals.		By maximizing social value, including contributions to the SDGs, while minimizing the negative impact (negative external effects) on society through business activities, the MOL Group has newly identified five "Sustainability Issues (Materiality)" linked to the management plan in order to improve medium and long-term corporate value and has clarified which SDGs each contributes to.
				Based on the framework, "MOL Group Environmental Vision 2.1" and evaluation 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.
2	Business model environmental materiality	The planned climate transition trajectory should be relevant to the environmentally-material parts of the issuer's business model, taking into account potential future	Confirmed documents - Framework	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. Of the MOL Group's



			Lines, Ltd. Transition Linked Loan Framework Second Party Opinion	
Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		scenarios which may impact on current determinations concerning materiality.	 "MOL Group Environmental Vision 2.1" GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc. MOL REPORT 2021 Interviews with stakeholders 	business activities, CO2 emissions (SCOPE-1) from ship operations account for about three quarters of the total. KPI set by MOL-TTL focuses on the GHG reduction utilizing EEOI (see SLLP-1 below) which is defined by CO2 emissions (SCOPE-1) generated by the ship operations, and this helps MOL mitigate the material impacts to the climate change. The MOL Group's GHG emission reduction plan is set and quantified in the absolute sense that it must meet the goals of the shipping industry set by IMO, the Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc., with optimal solutions that exceed them and the possibility of further improvement. 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 improvement effects (impacts) from a qualitative and quantitative perspective.
3	Climate transition strategy to be science-based including targets and pathways	Issuer's climate strategy should reference science-based targets and transition pathways. The planned transition trajectory should: • be quantitatively measurable (based on a measurement methodology which is consistent over time);	Confirmed documents - Framework - "MOL Group Environmental Vision 2.1" - GHG emission reduction strategy of IMO,	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 of Japan, etc., aiming to obtain SBTi certification.



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 be aligned with, benchmarked or otherwise referenced to recognized, science-based trajectories where such trajectories exist; be publicly disclosed (ideally in mainstream financing filings), include interim milestones, and; be supported by independent assurance or verification Suggested information and indicators Short, medium, and long-term greenhouse gas reduction targets aligned with Paris Agreement; Baseline Scenario utilised, and methodology applied (e.g. ACT, SBTi, etc.); Greenhouse gas objectives covering all scopes (Scope 1, 2 and 3¹¹); and, Targets formulated both in intensity and absolute terms 	Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc MOL REPORT 2021 Interviews with stakeholders	The plan is a realistic achievement and pathway for GHG emission reduction in the absolute sense and a plan to reduce GHG emissions to absolute GHG emissions to maintain defined levels in the future. DNV confirmed that MOL Group's transition strategy is quantified based on consistent measurement methods, and in an absolute sense, it seeks to obtain specified SBTi certification for sustainable GHG emission reduction "well below the 2℃ target". Also, DNV confirmed that the MOL Group's transition strategy has been established as milestones with short-term targets (mid-2020s), medium-term targets (2035) and long-term targets (2050) that exceed the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan. Of the MOL Group's business activities, GHG emissions (SCOPE-1) from ship operations account for about three quarters of the total. The KPIs set in MOL-TLL focus on reducing GHG emissions from ships and mitigate the impact on climate change. In addition, approaches to reducing GHG emissions including SCOPE1-3 are considering in five strategies in the "MOL Group Environmental Vision 2.1". Among these, as a medium-term target up to 2035, MOL has set a target value using EEOI as the GHG emission intensity in transportation. These are disclosed through the framework and "MOL Group Environmental Vision 2.1".
4	Implementation transparency	Market communication in connection with the offer of a financing instrument which has the aim of funding the issuer's climate	Confirmed documents - Framework	DNV confirmed that the investment and deployment plans associated with MOL Group's transition strategy include consensus building on future investment and



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		transition strategy should also provide transparency to the extent practicable, of the underlying investment program including capital and operational expenditure. This may include R&D-related expenditure where relevant, and details of where any such operating expenditure is deemed 'non-Business as Usual', as well as other relevant information indicating how this program supports implementation of the transition strategy, including details of any divestments, governance and process changes. Suggested information and indicators • Disclosure on the percentage of assets/revenues/ expenditures/divestments aligned to the various levers outlined in Element 1 above; • Capex roll-out plans consistent with the overall strategy and climate science	 "MOL Group Environmental Vision 2.1" "MOL Group Environmental Vision 2.1" (Briefing session Q & A summary) GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc. MOL REPORT 2021 Interviews with stakeholders 	expenditure. As a specific example, MOL plans to contribute to the reduction of GHG emissions from own company and the reduction of GHG emissions from society through an investment of approximately 200 billion yen over the three years from 2021 to 2023. It was confirmed that the MOL plans to implement the future investment plan (investment amount) along the timeline. In addition, the total amount including investment in other business such as LNG fueled ships and next-generation fueled ships is expected to be about 1.6 trillion to 2 trillion yen* by 2030. (*: Since these businesses includes chartered vessels and vessels shared with business partners, MOL's investment is expected to be halved). DNV also reviewed the framework and "MOL Group Environmental Vision 2.1" and confirmed that the implementation was highly transparent and that the MOL Group explained and agreed on the adequacy of the implementation.



Schedule-3 Sustainability-Linked Loan Eligibility Assessment Protocol

Since MOL-TLL is executed as a General Corporate Purpose loan, which does not specify the use of proceeds, it is evaluated by applying the five elements of SLLP required for eligibility evaluation of a loan that does not specify the use of proceeds defined by CTFH and CTFBG.

The checklist below (SLLP1~5) is a DNV evaluation procedure created for the MOL-TLL eligibility assessment based on the requirements of SLLP.

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

SLLP-1 Selection of Key Performance Indicators (KPIs)

DNV

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1 a	KPI – material to core sustainability and business strategy	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; 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 strategy.	Confirmed documents: - Framework - "MOL Group Environmental Vision 2.1" - MOL REPORT 2021 - IMO EEOI Guideline /12/MEPC.1/Circ.684 - MOL EEOI Estimated Results Interviews with stakeholders	DNV has reviewed MOL sustainability KPI and confirmed that the chosen KPI is material and relevant to the company's core sustainability and business strategy. 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). Value-added transport services Marine and global environmental conservation Innovation for development in marine technology Human resource cultivation and community development Governance and compliance to support businesses Among these, the material KPI for MOL-TLL is GHG emissions reduction centered on the Marine and global environmental conservation. This is explained as three medium-to long-term targets and five strategies in "MOL Group Environmental Vision



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				2.1", being focused on emission reduction from MOL's own company and society toward Net Zero Emissions in 2050. This is clearly communicated in the framework associated with
				MOL's sustainability strategy.
				The chosen KPI is outlined in more detail in Schedule-1, and entails:
				•Energy Efficiency Operational Indicator (EEOI)
				Unit : g-CO₂e(GHG)/mile/tonne
				EEOI, which is selected as KPI, is an indicator to measure the CO2 emission performance of ship operations, which has been formulated by the IMO. EEOI is widely used in the shipping industry. In addition, the IMO guidelines indicate that the use of EEOI is a recognized approach as a methodology for assessing GHG emissions on ships. EEOI is calculated based on the following indicators and formulas.
				$EEOI (gram - CO2e/mile/tonne)$ $= \frac{Emissions (gram - CO2e)}{Emissions (gram - CO2e)}$
				Distance sailed(mile) x Cargo carried (tonne)
				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



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				impacts MOL's own value creation as well as external stakeholders. The scope of EEOI is also a key element, reaching beyond scope 1 and including part of scope 3 emissions according to SBTi methodology. DNV believes that the focus on deploying one KPI will enable a targeted effort to deliver on MOL's overarching decarbonisation targets. The chosen KPI for emission reduction aligns with MOL's broader low carbonization and decarbonisation aims and facilitates the incorporation of tangible and transparent annual milestones that will facilitate measurable and transparent implementation of the broader MOL environmental sustainability strategy. 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). As such, the EEOI as KPI will also contribute to both the environmental sustainability targets and MOL's business strategy.
1b	KPI - Measurability	KPIs should be measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT's level of ambition. borrowers are encouraged, when possible, to select KPI(s) that they have already included in their previous annual reports, sustainability reports or other	Confirmed documents: - Framework - "MOL Group Environmental Vision 2.1" - MOL REPORT 2021 - GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land,	DNV concludes that the EEOI KPI is measurable on a consistent methodological basis, externally verifiable and able to be benchmarked to external references. DNV concludes that EEOI is a robust and reliable metric to measure GHG emission reduction for a vessel. The EEOI KPI is already an industry standard for reporting on GHG emissions in the shipping industry. The EEOI figures will be registered in the MOL's data collection system on fuel consumption and will therefore be collected on a consistent methodological basis and be externally verified. The KPI can therefore be benchmarked to external references.



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		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 externally verified KPI values covering at least the previous 3 years.	Infrastructure, Transport and Tourism of Japan, etc IMO EEOI Guideline MEPC.1/Circ.684 - MOL EEOI Estimated Results Interviews with stakeholders	IMO's Initial Strategy on reduction of GHG emissions from ships, adopted in 2018, can be used as external reference to benchmark MOL's level of ambition. IMO states that the "carbon intensity of international shipping to decline"" by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008". The Ministry of Land, Infrastructure, Transport and Tourism of Japan's "Roadmap to Zero Emissions from International Shipping (Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.)" (Sponsored by Japan Ship Technology Research Association), which has referenced to the IMO, sets goals that are consistent with the IMO. MOL's targets and the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan have different base years, but MOL has standardized to directly compare the two based on past performance data and public information. DNV therefore confirmed that KPI was properly reset as an index that can be directly compared with the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan.
1c	KPI – Clear definition	A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter as well as the calculation methodology		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-CO2e), emissions from ships (grams), Distance sailed (mile), Cargo carried (tonne). This is evaluated and reported for vessels that have been set and managed in advance. EEOI is already an industry standard and widely reported on, as outlined in 1b.



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

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Target Setting - Meaningful	The SPTs should be ambitious, realistic and meaningful to the borrower's business and be consistent with the issuers' overall strategic sustainability/ESG strategy	Confirmed documents: - Framework - "MOL Group Environmental Vision 2.1" - MOL REPORT 2021 - MOL materials Overview of sustainability issues (materiality) - GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc. Interviews with stakeholders	DNV confirmed that SPT supports the three medium-to long-term goals and five strategies set forth in the "MOL Group Environmental Vision 2.1", has goals exceeds the goals of the IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan; and the target defined using SBTi methodology 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 strategy/ESG strategy. 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. MOL Group's three medium-to long-term goals and five strategies set out in the "MOL Group Environmental Vision 2.1" will work toward net zero emissions by 2050, and SPT will be provided as an annual goal until 2035 to measure progress. 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 and the Ministry of Land, Infrastructure, Transport and Tourism of Japan, will exceeds the targets of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan for the entire period from 2019 to 2035. Also, it is clear that the net zero emission by 2050 is ambitious compared to the goals 70% emission reduction of the IMO, Ministry of Land, Infrastructure, Transport and Tourism of

DNV

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				Japan, etc. This target setting is expected to be a driving force for MOL's efforts to implement its sustainability strategy.
2b	Target Setting - Meaningful	SPTs should represent a material improvement in the respective KPIs and be beyond a "Business as Usual" trajectory; where possible be compared to a benchmark or an external reference and be determined on a predefined timeline, set before (or concurrently with) the issuance of the loan.	Confirmed documents: - Framework - "MOL Group Environmental Vision 2.1" - GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc MOL EEOI Estimated Results 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 fueled 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. foreseen of IMO and Ministry of Land, Infrastructure, Transport and Tourism of Japan etc. 2008 baseline, considering the target of IMO and Ministry of Land, Infrastructure, Transport and Tourism of Japan etc. The annual SPT for 2021~2035 are direct reflection of the projected EEOI's 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	Target Setting – benchmarks	The target setting exercise should be based on a combination of benchmarking approaches:	Confirmed documents: - Framework - "MOL Group Environmental Vision 2.1"	DNV confirmed that the SPT target setting exercise has been based on an appropriate combination of benchmarking approaches: 1. DNV confirmed that the framework provides guidance for



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Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		 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 The SPTs relative positioning versus the borrower's peers where comparable or available, or versus industry or sector standards Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognised Best-Available-Technologies or other proxies 	- GHG emission reduction strategy of IMO, Roadmap to Zero Emission from International Shipping of Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc MOL EEOI Estimated Results Interviews with stakeholders	target setting from 2021 to 2035 by the KPI information, which is based on the appropriate data and actual results, for more than three years from 2008 to 2020 by bench marking approach. 2. DNV concludes that the SPT outlined go beyond the SPT of industry standard (target of IMO, Ministry of Land, Infrastructure, Transport and Tourism of Japan, etc.) and SPT set by SBTi methodology. highlighted in Ref 2b. 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. The broader purpose adopted by MOL is supported by the "MOL Group Environmental Vision 2.1" with the following three medium- to long-term goals and five strategies. This includes national goals, Best Available Technology or other close technologies. "Medium- to long-term targets" 1. Deploy net zero emissions ocean-going vessels in the 2020s 2. Reduce GHG emissions intensity by approximately 45% by 2035 (versus 2019*) 3. With the concerted effort throughout the Group, achieve net zero GHG emissions by 2050 "Five initiatives to achieve the targets" 1. Adoption of Clean Alternative Fuels 2. Enhancement of Energy-Saving Technologies 3. Boost Operating Efficiency



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
Ref.	Target setting – disclosures	Disclosures on target setting should make clear reference to: 1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs 2. Where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the	Work Undertaken	4. Building Business Models to Enable Net Zero GHG Emissions 5. Expanding Low-Carbon and Decarbonization Projects through Use of the MOL Group's Concentrated Strengths DNV has confirmed that the SPT target setting is properly disclosed as follows. 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 MOLTLL 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
		rationale for that baseline or reference point to be used 3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place 4. Where possible and taking into account competition and confidentiality considerations, how the borrowers intend to reach such SPTs		the entire maturity date of the loan. 2. The baseline for SPT is 2019 set in accordance with SBTi methodology using the latest available data in terms of GHG. This is different from the baseline (2008) of IMO and the Ministry of Land, Infrastructure, Transport and Tourism of Japan, but it is standardized by MOL's appropriate trial calculation adjustment (intercomparison is possible) 3. Same as 2. 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 2.1". After review of MOL's fleet configuration transition plan, DNV



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				concluded that the SPTs are realistic and that the plan is viable and possible to meeting the SPT targets outlined in the framework.

SLLP-3. Loan Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Loan Characteris tics - SPT Financial/st ructural impact	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 document: - Framework Interview 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	Loan Characteris tics – Fallback mechanism	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 document: - Framework Interview 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.





SLLP-4. Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Reporting	borrowers of SLLs should publish, and keep readily available and easily accessible: 1. Up-to-date information on the performance of the selected KPI(s), including baselines where relevant 2. A verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the loan's financial and/or structural characteristics 3. Any information enabling investors to monitor the level of ambition of the SPTs This reporting should be published regularly, at least annually, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLL's financial and/or structural characteristics.	Confirmed document:	 DNV concludes that required information, as required by SLLP, will be published in a timely manner and kept publicly available: KPI performance for the SPT: The information will be reported to lenders once a year, in no later than 180 days after each fiscal year-end. This will be reported annually until 2032. The final year's reporting timing will be determined by discussions between the lender and the borrower. SPT achievement status: Will be subject to annual verification from an independent reviewer and it is used to determine financial characteristics (loan conditions or other financial incentives) In case SBTi or IMO targets change: Discuss the level of ambition of the SPT of MOL with the lender and change it if necessary.



SLLP-5. Verification

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
5a	External Verificatio n	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 document: - Framework Interview with stakeholders	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.