

JCR Climate Transition Finance Evaluation
By Japan Credit Rating Agency, Ltd.

Japan Credit Rating Agency Ltd.(JCR) announces results of the Climate Transition Finance Evaluation

JCR Assigned Green 1 (T) to Transition Loan of Kawasaki Kisen Kaisha, Ltd.

Subject	:	Long-term loan
Type	:	Long-term loan
Lender	:	Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited (Transition Structuring Agents)
Lease Arranger	:	Mizuho Securities Co., Ltd. (Transition Structuring Agent)
Borrowing Amount	:	Approx. JPY 5.9 billion
Execution Date	:	March 12, 2021
Repayment due date	:	September 12, 2035
Repayment method	:	Scheduled repayment
Use of proceeds	:	Fund for purchasing a Next-Generation Environmentally-Friendly LNG-fueled Car Carrier

<Climate Transition Finance Evaluation Results>

Overall Evaluation	Green 1(T)
Greenness/Transition Evaluation (Use of Proceeds)	gt1
Management, Operation and Transparency Evaluation	m1

Chapter 1: Evaluation Overview

[Company Profile]

Kawasaki Kisen Kaisha, Ltd. (K Line) is an integrated logistics company primarily operates shipping business. It was established in 1919 as a separate entity from Kawasaki Dockyard Co., Ltd. (now Kawasaki Heavy Industries), and is one of the three major domestic shipping companies. K Line and consolidated subsidiaries (collectively K Line Group) operate in three business segments: "Dry Bulk," "Energy Resource Transport," and "Product Logistics." K Line boasts one of the world's largest fleets of car carriers, dry bulkers, and LNG carriers, and has an excellent customer base at home and abroad. Among the major shipping companies, the scale of businesses other than oil tankers and marine transportation is small. For the fiscal year ended March 2020 (FY 2019), K Line's sales were broken down into by segment as 31.8% for Dry Bulk, 11.5% for Energy Resources Transport, and 52.3% for Product Logistics.

[Overview of Environmental Policy]

In 2015, K Line announced its long-term environmental vision up to 2050 (the "K" LINE Environmental Vision 2050) ahead of other companies in the industry. It set a goal of halving CO₂ emissions and eliminating serious accidents. In June 2016, K Line set a new target of reducing CO₂ emissions efficiency by 25% (compared to 2011 levels) by 2030, because it achieved its 2019 milestone of CO₂ reduction target of reducing CO₂ emissions by 10% compared to 2011 levels by 2019 earlier in fiscal 2015. In June 2020, the revised version of the "K" LINE Environmental Vision 2050 was announced. The mid-term milestones for 2030 and targets for 2050 related to low carbon are as follows:

- By 2030, improve CO₂ Emissions Efficiency (Volume of CO₂ Emissions per Shipping Volume) by 50% compared to 2008 levels.
- Halve GHG emissions by 2050 (improve CO₂ emissions efficiency by 70% compared to 2008 levels)

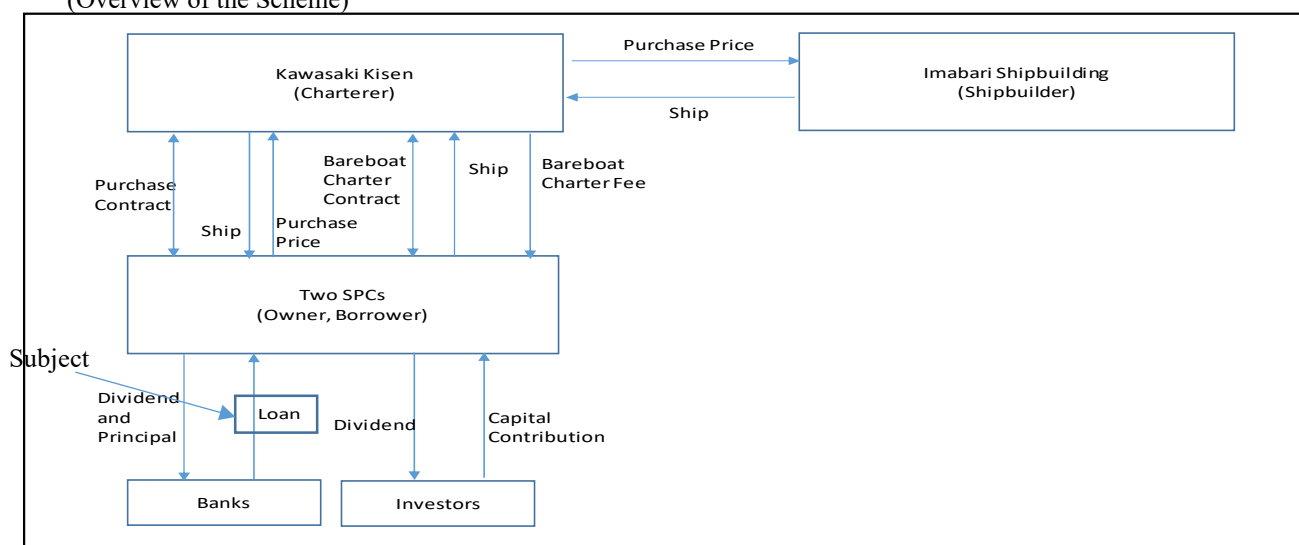
In addition, based on the same premise as achieving the above goals, the following Science Based Target¹ were set and SBT certification was obtained.²

- Improve CO₂ emissions efficiency by 25% by 2030 compared to 2011 levels

[Overview of Evaluation Targets]

The subject of this evaluation is the construction cost of a Next-Generation Environmentally-Friendly LNG-fueled Car Carrier procured by K Line using an operating lease scheme. The outline of the operating lease scheme is as follows.

(Overview of the Scheme)



¹ SBT (Science Based Target): Greenhouse Gas Emissions Reduction Targets set by the Company for five to 15 years into the future, consistent with the level demanded by the Paris Agreement (aimed at keeping global temperature increases well below 2°C and keeping them at 1.5°C compared to the pre-Industrial Revolution)

² Science Based Target Initiative(CDP, A mechanism certified as an SBT by the United Nations Global Compact, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

This LNG-fueled carrier reduces CO₂ emissions by approximately 45% on an EEDI basis compared to a specialized heavy oil mono fueled vessel. This is a reduction rate, which is consistent with the "45% reduction over 2013 by 2030" indicated in IPCC Special Report for achieving the 1.5°C target. In the long term, LNG fuel can be converted to net-zero fuel using carbon recycled methane and biomass, which have less CO₂ emissions. It is also a ship that can contribute to GHG zero emissions in international shipping by developing on-board CO₂ recovery technologies. This is one of the key measures in achieving the GHG emission reduction targets set out in "K" LINE Environmental Vision 2050.

[Appropriateness of Transition Strategy]

JCR confirmed that the Transition Loan is adequately established and disclosed (to be made) for all four elements required for Transition Financing in Climate Transition Finance Handbook issued by the International Capital Markets Associations in December 2020.

[Management System and Transparency]

JCR confirmed that the use of proceeds contribute to the K Line Environmental Charter and the "K" LINE Environmental Vision 2050, and relevant departments and management were appropriately involved in the selection process. In addition, the allocation plan, tracking management system, and reporting of the funds raised are properly planned. Furthermore, with regard to the organization's environmental initiatives, the management has positioned environmental issues as a high-priority issue, and the "K" LINE Environmental Vision 2050 is stipulated ahead of the companies in the industry under the Environmental Charter. In addition, the "K" LINE Environmental Vision 2050 has been reflected in the management plan. Through the establishment of a department that specializes in the environmental field or through collaboration with external organizations, the transition finance procurement policy and process, criteria for selecting green/transition projects are clearly positioned. Based on the above, JCR has evaluated that the framework for management and operating the proceeds from the loan is appropriate and transparency is also ensured.

Considering these results, based on the JCR Green Finance Evaluation Methodology, JCR assigned "gt1" for the "Greenness/Transition Evaluation (Use of Proceeds)", and "m1" for the "Management, Operation and Transparency Evaluation." Consequently, JCR assigned "Green 1 (T)" for and "JCR Climate Transition Finance Evaluation" for the Transition Loan. Detailed evaluation is discussed in the next chapter. The Loans are considered to meet the standards for items required by the Green Loan Principles, the Climate Transition Finance Handbook and the Green Loan and Sustainability Linked Loan Guidelines of Ministry of Environment.³⁴⁵

³ LMA (Loan Market Association), APLMA (Asia Pacific Market Loan Association), LSTA (Loan Syndications and Trading Association) Green Loan Principle 2021 <https://www.lma.eu.com/>

⁴ ICMA Climate Transition Finance Handbook <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Climate-Transition-Finance-Handbook-December-2020-091220.pdf>

⁵ Ministry of the Environment's Green Loan and Sustainability Link Loan Guidelines <http://www.env.go.jp/press/files/jp/113511.pdf>

Chapter 2: Current Status of the project on each evaluation factor and JCR's evaluations

Evaluation Phase 1: Greenness/Transition Evaluation

Based on the current situation and JCR's evaluation, as detailed below, JCR assessed that 100% of the use of funds under the Loans is for Green Project and/or Environmental Improvement Effect Project (climate transition project) to be implemented during the transition phase to mitigate climate change, and evaluated Phase 1: Climate Transition Assessment at the highest level ("gt1").

1. JCR's Key Consideration in This Factor

Items to be confirmed in this section

- ✓ Whether the proceeds be used for green projects with clear environmental improvement effects and/or for projects (climate transition project) with environmental improvement effects to be implemented at the transition stage?
- ✓ Where a negative impact on the environment is anticipated for the use of proceeds, whether the impact is sufficiently examined by a specialized internal department or an external third-party organization, and necessary avoidance and mitigation measures are taken?
- ✓ Whether the Borrower meets the four elements prescribed by ICMA's Climate Transition Finance Handbook (CTFH)?
- ✓ Consistency of use of the proceeds with the Sustainable Development Goals (SDGs)

2. Current status of evaluation targets and JCR evaluation

2-1. Overview of Use of Funds and Effects of Environmental Improvements

[Century Highway Green (next-generation environmentally friendly LNG-fueled Car Carrier)]

Item	Century Highway Green (Completed in March 2021, LNG fueled car carrier)	(Comparison) Drive Green Highway (Completed in February 2016, HFO fueled car carrier)
Overall length	Approx. 199.9 m	199.99m
Breadth (mld)	37.20m	37.50m
Depth(mld) Freeboard deck/accommodation deck	15.22m/36.51m	14.85m/38.23m
Air Draft (Height from the water surface to the forefront of the hull structure)	49.51m	45.20m
Design/Scant Draft (mld)	9.10m /9.70m	8.60m/9.90m
Car Load Capacity	7,080RT	7,550RT
Main Engine Type	MAN B&W 8S50ME-C9, 6-GI-EGR BP	MAN B&W 7S60ME-C8.2
Maximum Continuous Rating	-9,380kW×92.0min-1	-13,000 kW x 102.6 min-1
Normal Output Rating	-7,975kW×87.2min-1	-11,050 kW x 97.2 min-1
HFO Tank Capacity/Endurance	-	2,543 m ³ /Approx. 17,700 nm
MGO Tank Capacity/Endurance	Approx. 2,132m ³ /Approx. 16,000 nm	360m ³ /Approx. 2,900 nm
LNG Tank Capacity/Endurance	Approx. 2,439m ³ /Approx. 13,000 nm	-
EEDI (CO ₂ -g/ton-mile) EEDI reduction rate	12.4 44.6%	14.62 14.4%
Approximate CO ₂ Emissions When Carrying 1RT in 1nm (CO ₂ -g /RT- mile)	30	39

[Main environmental performance]

- (1) Use of LNG-fuel-operable dual-fuel-fired main engine (ME-GI) and auxiliary equipment
- (2) Equipped with NOx 3rd regulation device (main engine EGR*1, power generator SCR*2)

As a result,

- i. Reducing CO₂ Emissions: 44.6% Reduction in EEDI*³
- ii. Reduction of sulfur oxide (SO_x) emissions: 90-99% reduction (over heavy oil)
- iii. Reducing NO_x Emissions: Reducing NO_x Emissions by 80% or More*⁴
- iv. Minimum Methane Slip *⁵

*1: Abbreviation of Exhaust Gas Recirculation. A system that reduces NO_x by returning a portion of the exhaust gas with decreased oxygen concentration to the combustion chamber again using a circulation device to suppress the rise in combustion temperature.

*2: Abbreviation of Selective Catalytic Reduction. A device for decomposing NO_x in exhaust gas by reduction reaction of NO_x and reducing agent (urea water) on a catalyst.

*3: Energy-Efficiency Design Index. Represents CO₂ (g) emission when transporting a ton of cargo one mile. Reduction from the average value of vessels built over the past 10 years (1999-2008).

*4: Comparison between the values at the time of main engine EGR operation and the regulatory values (17.0g/kWh) for the launching ships after January 1, 2000.

*5: Unburned methane gas is discharged into the atmosphere.

2-2. Environmental Improvement Effects of Projects and the position in the Long-Term Environmental Strategy (Transition Strategy)

The proceeds of the loan is 100% used for the construction cost of a Next-Generation Environmentally-Friendly LNG-fueled Car Carrier. LNG-fueled vessels can reduce CO₂ emissions by 25-30% compared to heavy oil fueled vessels. In the long term, LNG-fueled vessels can contribute to GHG zero emissions in international shipping by substituting carbon recycled methane and biomethane fuel with low CO₂ emissions, and by developing on-board CO₂ capture technologies. It is one of the key measures in achieving CO₂ emission reduction target stated in "K" LINE Environmental Vision 2050.

[Overview of GHG Emission Reduction Strategies Published by the International Maritime Organization (IMO)]⁶⁷

In April 2018, in the IMO's 72nd Marine Environmental Protection Commission (MEPC72), the following medium and long-term goals for GHG reductions with 2008 as the base year were formulated.

1. Improve the fuel efficiency of all international shipping operations (CO₂ emissions per transport volume) by 40% or more by 2030
2. Reduce total GHG emissions from international shipping by 50% or more by 2050
3. Aiming for zero GHG emissions as early as possible during the current century

Improvement targets for 2030 have been established based on analyses of scientific feasibility, including from analyses of technological feasibility and the effectiveness of EEDI regulations. This reflects the results of the following proposals from Japan in the IMO's discussion.

A combination of 17% improvement in efficiency of improved fuel efficiency of newly built vessels through

⁶ The International Maritime Organization (IMO) is a specialized organization of the United Nations established in 1958 to promote intergovernmental cooperation on various issues in the maritime area, such as maritime safety and prevention of marine pollution from vessels. As of June 2018, 177 countries and regions are participating.

⁷ Announced in April 2018. Initial IMO Strategy on Reduction of GHG Emissions from SHIPS (MEPC Resolution MEPC. 304 (72))

EEDI regulations and 28% improvement in efficiency of improved operations such as driving at slower speed operations and route optimization ($0.83 \times 0.72 = 0.60$)⁸

Global warming countermeasures are discussed in the United Nations Framework Convention on Climate Change (UNFCCC). Regarding countermeasures against GHG emissions from international shipping activities that transcend national boundaries, it is difficult to distinguish by ship nationalities and countries in operation, and they do not fall within the framework of country-specific measures to reduce global warming in UNFCCC. Therefore, their deliberation is entrusted to IMO, which is a specialized agency of the United Nations.

[Position in the Roadmap for Zero Emissions in International Shipping Announced in Japan]

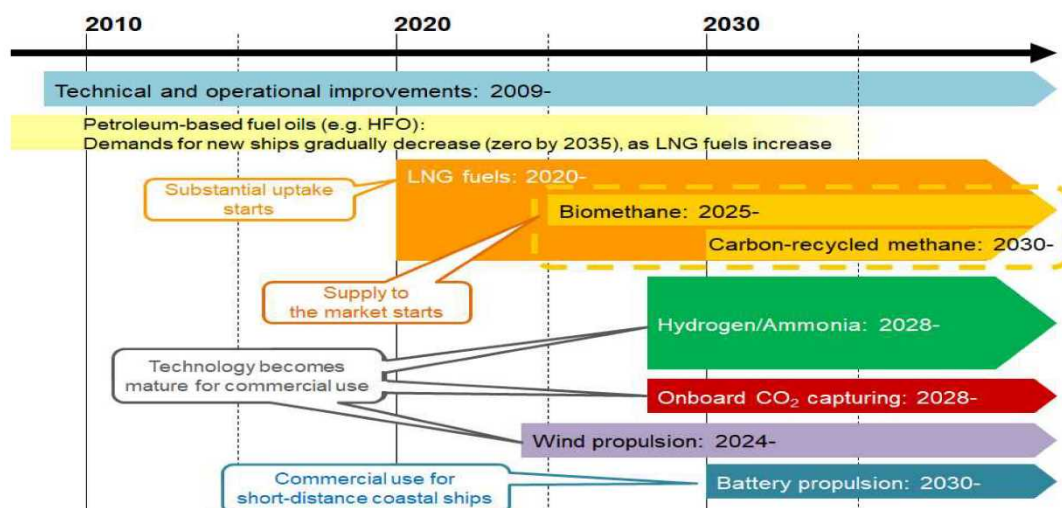
Vessels fueled by LNG cannot be said to be a completely clean means of transport because they use fossil fuels. However, CO₂ emissions of ships using LNG is the lowest among ship fuels currently available to use. CO₂ emission is less 25% to 30% compared to that of ships using conventional heavy oil. In addition, over the long term, there are options for alternative fuels and technologies that can be expected to result in the introduction of physical vessels achieving more than 90% efficiency improvements over 2008, such as hydrogen fuels, ammonia fuels, carbon recycled methane, biomethane fuels, and on-board CO₂ capture; however, LNG-fueled vessels can replace their infrastructure with carbon recycled methane and biomethane fuels in the future. In addition, it is considered that LNG-fueled vessels can be used as vessels contributing to zero emissions at a certain rate from 2050 onwards by considering the CO₂ capture on vessels.

The International Shipping GHG Zero Emissions Project published the "Roadmap for Zero Emissions in International Shipping" in March 2020, identifying key technologies and alternative fuel options for GHG reductions, and developing the following GHG reduction scenarios while considering the timing of their practical application. This Roadmap combines a number of technologies and elements, such as fuel, speed, designs, and CO₂ recovery, and considers specific responses and measures based on estimates of the volume of marine transportation by vessel type up to 2050 (for tankers and liquefied gas carriers, onshore oil and gas consumption forecasts under the Climate Change Forecast Scenario (RCP4.5), and other vessels are calculated based on economic growth forecasts). In this scenario, as of 2021, K Line's medium-to long-term vision is in line with the direction of the Roadmap, which aims to reduce CO₂ mainly by LNG fuel, and at the same time, to develop lower-carbon alternative fuels by 2028 and reduce carbon emissions through technological conversion such as wind power promotion.⁹

⁸ (MLIT website) IMO Strategy for Reducing Greenhouse Gases (GHGs) Emitted by Vessels.
<https://www.mlit.go.jp/common/001250101.pdf>

⁹ The International Shipping GHG Zero Emissions Project was launched by the Ministry of Land, Infrastructure, Transport and Tourism in collaboration with Japanese industry, academia, and government. This project comprehensively examines the technological development issues necessary to further enhance Japan's competitive advantage and the ideal form of international standards and incentive systems based on the impact on the market, while assessing the future trends of the world in the fields of energy conservation and decarbonization, etc., compiles the division of roles and work plans of the parties concerned to strategically promote them, and maneuvers the establishment of a new international framework. It also aims to further develop energy conservation and environmental technologies, which are the strengths of Japan's marine industry. In this project, a roadmap for the zero emission of the international shipping was decided in March, 2020. The roadmap is working to develop necessary international rules and promote technological development and verifications. It also aims to commercially operate the ultimate "zero-emission vessels" that do not emit greenhouse gases by 2028.

(Timeline for the Introduction of Alternative Fuels and Technologies Used in Emission Pathways)

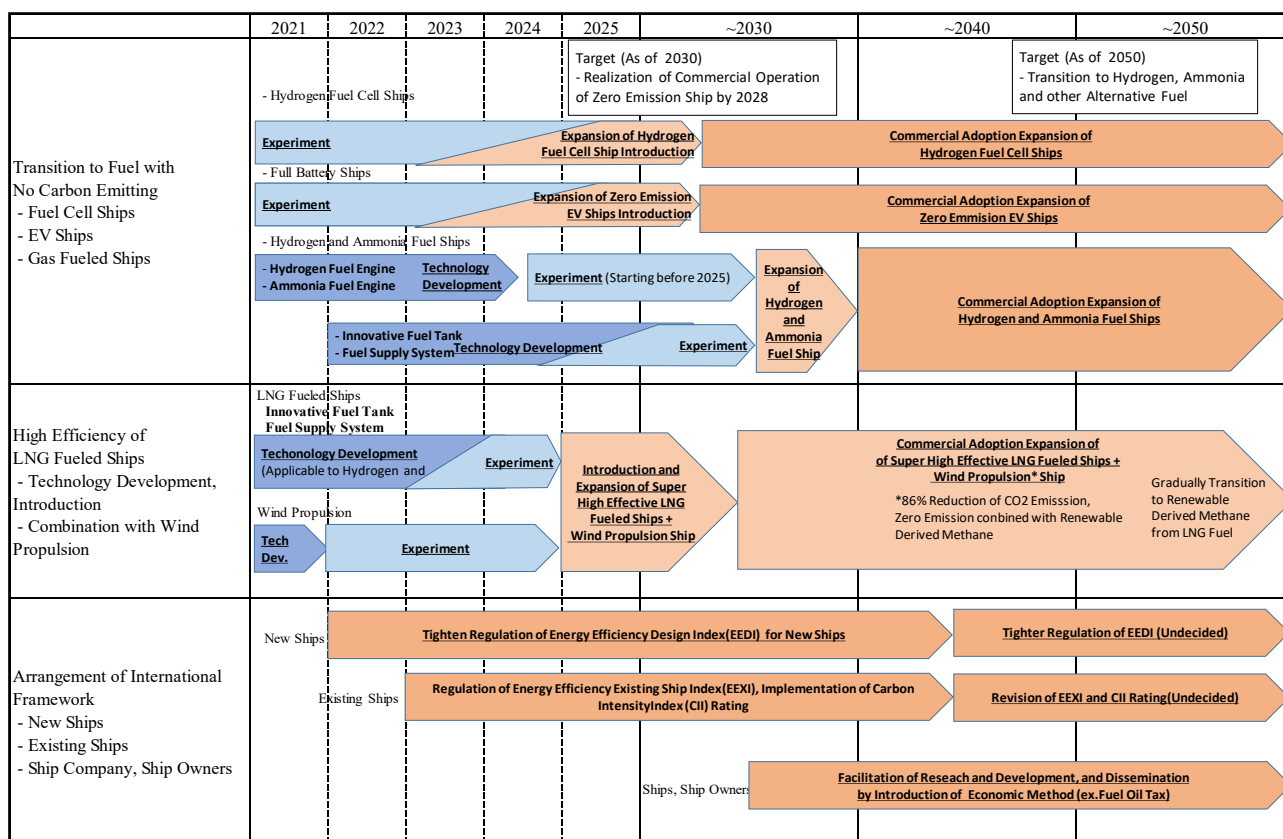


(Source: "Roadmap for Zero Emissions in International Shipping")

[Roadmap of Ships in Green Growth Strategy for Carbon Neutral]

In October 2020, Japan declared "Achieving carbon neutrality by 2050". To realize this, the Ministry of Economy, Trade and Industry collaborated with related ministries and agencies to formulate the "Green Growth Strategy through Achieving Carbon Neutrality (the "Green Growth Strategy")". This strategy is an industrial policy to link the challenge to "Achieving carbon neutrality by 2050" to "Virtuous Cycle of Economic and Environmental". In this context, for the ship industry, it is aiming to acquire technological capabilities related to the development of gas fuels such as LNG, hydrogen, ammonia, which are essential for achieving zero emissions, and also to lead the development of international standards, to strengthen the international competitiveness of Japan's shipbuilding and shipping industries, and to work toward carbon neutrality in marine transportation. The "schedule" up to 2050 presented in the Green Growth Strategy consists of the following three main measures: 1. conversion to carbon-free alternative fuels, 2. achieving higher efficiency of LNG fueled vessels, and 3. development of an international framework.

The construction of the LNG-fueled ship of K Line is also a consistent effort with the process chart of this Green Growth Strategy.



(Source: "Green Growth Strategy Through Achieving Carbon Neutrality")

[Overview of "K" LINE Environmental Vision 2050 and Position of LNG-fueled Carrier]

In 2015, K Line announced its long-term environmental vision up to 2050 ("K" LINE Environmental Vision 2050), ahead of the companies in the industry, and it set a goal of halving CO₂ emissions and eliminating serious accidents in it. Since CO₂ reduction target set as a milestone for 2019 was achieved ahead of schedule in fiscal 2017, the target was revised in 2020, and in June 2020, a revised version of "K" LINE Environmental Vision 2050 was announced. The mid-term milestones for 2030 and the target setting for 2050 related to low carbon are as follows:

- By 2030, CO₂ Emissions Efficiency (Volume of CO₂ Emissions per Shipping Volume) was improved by 50% over 2008.

- Halve GHG emissions by 2050 (improve CO₂ emissions by 70% over 2008)

These targets are ambitious exceeding the targets set by the IMO in 2018. In addition, based on the same premise as achieving the above goals, the following Science Based Target are set and SBT certification was obtained.¹⁰¹¹

- Improve CO₂ emissions efficiency by 25% by 2030 over 2011

In formulating the above targets, K Line conducts risk and opportunity analysis on the following assumptions for scenarios of less than 2°C.

- Impact on K Line including increased operating costs / responses to the shift in transportation demand to low-carbon raw materials and products.

¹⁰ SBT (Science Based Targets): Greenhouse Gas Emissions Reduction Targets set by the Company for five to 15 years into the future, consistent with the level demanded by the Paris Agreement (aimed at keeping global temperature increases well below 2°C and keeping them at 1.5°C compared to the pre-Industrial Revolution)

¹¹ Science Based Target Initiative(CDP, A mechanism certified as an SBT by the United Nations Global Compact, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

- Negative aspects such as an increase in operating costs / a decline in earnings caused by delayed in response to changes in transportation demand, etc.
- Things need to be done such as improving profitability by increasing operational efficiency / developing businesses for new energy supply and transportation and embarking on such businesses

[K Line's action plan up to 2030]

The Action Plan to achieve medium-term milestone in 2030 and efforts to introduce flagships aimed at realizing the Action Plan and the "K" LINE Environmental Vision 2050 are as follows. By 2030, strive for aiming to improve CO₂ emissions efficiency by 50% over 2008 through the following fleet-wide initiatives.

1. Introduction of next-generation environmentally friendly LNG-fueled car carriers:

In light of the recent increased awareness toward environment, K Line work on the plan in full scale to use the LNG-fueled vessel in practical operation, and complete constructing this vessel, which has been selected as a project for the "Model Project for Measures to Reduce CO₂ Emissions from Ships through the Use of Alternative Fuels," which is a collaborative project between the Ministry of the Environment and the Ministry of Land, Infrastructure, Transport and Tourism, in fiscal 2020.

2. Promoting Optimal Operations using K-IMS, Kawasaki Integrated Maritime Solutions:

Visualization of changes in performance, such as ship speed, output, and fuel consumption, for each vessel during arbitrary periods, such as before and after docking. This enables accurate and quick identification of deterioration of ship performance and identification of causes, which leads to optimal operation.

3. Introduction of an automated kite system named "Seawing" that uses renewable energy:

The kite mounted on the bow of the vessel will be stretched by operation from the bridge under a certain condition of wind force and wind direction, and assist the propulsive force of the Vessel by utilizing wind force.

[Efforts to realize K Line's vision by 2050]

Step1: Introduce flagships aiming to improve efficiency by 70% through the use of advanced technologies

Step2: Start introducing Zero Emissions flagships with Advanced Technologies

Based on the above, JCR confirmed that the next-generation LNG-fueled Car Carrier, which is the use of proceeds this time, has environment improvement effects, and is important initiative in achieving the 2030 milestones of K Line's targets for reducing CO₂.

Among the use of proceeds exemplified under the "Clean Transportation" and "Pollution Prevention and Control" in the "Green Loan Principles," and in the "Green Loan and Sustainability Linked Loan Guidelines", the use of proceeds for this loan falls under the "Clean Transportation Business" and "Pollution Prevention and Control Business".

2-3. Negative impact on the environment

(1) K Line has identified and addressed measures to avoid or mitigate negative impacts as follows.

[Assumed risks]

- Adverse Impacts of Ballast Water to Ecosystems

- Air pollution caused by NOx emitted by LNG and heavy oil combustion

- Air contamination by consumption of fuels including CO₂, NOx

[Risk mitigation measures]

- Installation of ballast water treatment equipment

- Equip Selective Catalytic Reduction (SCR) Equipment on power Generator and Exhaust Gas Recirculation (EGR) on Main Engine

- Equip K-IMS

JCR confirmed that appropriate impact mitigation measure has been taken to mitigate the negative impact on the environment.

(2) Potential Lock-in to Fossil Fuels

Even though LNG is a relatively low CO₂ emissions fossil fuels, no ship fuel technologies to completely eliminate CO₂ emission has not yet been developed. 2025 onward, it is positioned as one of the plans to reduce the use of fossil fuels while developing biomethane, carbon recycled methane, hydrogen, ammonia, and on-board CO₂ recovery technologies, which are aimed at sequentially implementing in the actual operations. The Ship is designed to be able to convert to fuels with less CO₂ emissions when the development of alternative fuels are advanced. At the same time, study of on-board CO₂ recovery technologies will be continued. Thus, this is not a ship locked into fossil fuels.

(3) Do No Significant Harm Assessment¹²

The use of the proceeds of the Loans may not significantly be harmful to other Green Projects.

(4) Consideration for a Fair Transition

At present, there are no areas that require a "fair transition" in the development of low-carbon vessels, such as LNG carriers.

2-4. Fulfillment of Matters Required in the Climate Transition Finance Handbook

Element 1: Issuer's Transition Strategy and Governance

(1) Whether the use of funds is for a project and/or asset that contributes to the strategy for transition for climate change mitigation of the issuer?

In "K" LINE Environmental Vision 2050, the introduction of LNG-fueled Vessel is one of the three measures for achieving the milestones in 2030.

- Introduction of next-generation environmentally friendly LNG-fueled car carriers
- Promoting Optimal Operations through K-IMS
- Introduction of an automated kite system named Seawing that uses renewable energy

Under the measures for reducing GHG emission under IMO regulations, the road map for zero emission of international shipping and the Green Growth Strategy by the Ministry of Land, Infrastructure, Transport and

¹² To verify whether implementing the project will hinder other green-eligible projects (projects that contribute to climate change adaptation, pollution and pollution prevention, clean water and ocean conservation, recycle-oriented economies, energy conservation, and the protection of the ecosystem).

Tourism, scenarios of the transition from LNG fuel to carbon recycled methane are also being examined in the scenarios for using fuels and technologies that meet numerical target of IMO's GHG reduction strategy.

- (2) Whether the purpose of using the "Transition" label in procuring funds is to contribute to the realization of corporate strategies for issuances to move to a business model that can effectively address climate change-related risks and contribute to the achievement of the goals of the Paris Agreement?

Based on risk scenario analyses assuming contribution to the 2°C target of the Paris Agreement, the IMO's GHG emission reduction strategy has been formulated, but K Line aims to reduce CO₂ at a higher level. K Line has obtained SBTi for the 2030 goal, with 2011 as the base year,

- (3) Is a governance system established to ensure the effectiveness of the transition strategy?

K Line has established a governance system to ensure the effectiveness of its transition strategy as follows.

- The Social and Environmental Committee, chaired by the president, has been established and formulated policies for environmental conservation initiatives for the Group as a whole.
- The Environmental and Technical Committee, chaired by the Representative Director and Executive Vice President, was established to address specific efforts to decarbonization. In association with the commencement of various environmental regulations, the Committee has formulated policies and managing execution of the Group's comprehensive environmental response strategies, as well as policies for technological response including equipment selection and smooth operation preparation.
- On April 1, 2021, the GHG Reduction Strategy Group was established as a department focusing on formulating and executing GHG reduction strategies primarily for shifting to low-carbon fuels, and is promoting initiatives.
- With regard to achieving the 2030 milestones, in April 2020, K Line launched two company-wide project teams. The first is the Safety and Environmental Support Technical Project Team, which aims to consider the matters relating to the achievement of safety-related targets, such as the expansion of the introduction of K-IMS systems. The other one is the Alternative Fuels Project Team, a project team that promotes switching to alternative fuels to realize CO₂ reductions. The project team aims to promote R&D of next-generation fuels such as ammonia and hydrogen as well as LNG.

Element 2: Important environmental issues in a company's business model

According to IMOs, CO₂ emissions from the shipping industry amounted to approximately 800 million tons, or 2.2% of the global total, as of 2012. International shipping is an essential business category in which the International Maritime Organization (IMO) plays a central role in working to prevent pollution, such as de-carbon strategies. More than 95% of K Line's business segments are shipping business, which relate to drybulks, energy resources transportation, and product logistics. Therefore, initiatives to de-carbon in vessels are positioned as important issues. Since reducing environment effect has become one of the selecting criteria for vessels for their customers, K Line believes that efforts to de-carbon are an essential part of the company's efforts.

Element 3: Based on scientific evidence

Does the transition roadmap satisfy the following requirements?

- (1) Quantitatively measurable, covering SCOPE1, 2 (it is desirable that targets are set for SCOPE 3 to the feasible extent)

K Line has measured CO₂ emissions and obtained third-party certification. The figures covered cover 97% of SCOPE 1 and 95% of SCOPE1+2, so it can be said that they almost cover SCOPE 1 and 2. SCOPE 3 is not included in the target setting, but the figures are identified.

(2) Consistent with generally accepted scientific evidence-based target setting

It has been certified by SBTi as a SBT with the goal of improving CO₂ emission efficiency by 25% in 2030 over 2011.

Medium-to long-term targets compared to 2008 levels are in line with the assumption of IMO for reduction targets, but the targets were set with scientific and technical grounds at the time of formulation. In order to realize IMOs' GHG reduction strategies, the Global Maritime GHG Zero Emissions Project Team, led by the Ministry of Land, Infrastructure, Transport and Tourism, is considering concrete measures by combining a number of technologies and elements, such as fuels, speeds, designs, and CO₂ recovery, based on estimates of marine transport volume by ship type by 2050 (for tankers and liquefied gas carriers, estimates of oil and gas consumption on land are based on climate change scenarios (RCP4.5), and other ships are based on economic growth estimates). K Line's targets are higher than the IMO's targets by adding its specific decarbonization initiatives. Based on the above, it can be said that K Line's target for reducing CO₂ using 2008 as the base year, is also set based on scientific grounds.

(3) Published Information (including midpoint milestones)

"K" LINE Environmental Vision 2050 is published. It includes mid-term milestones for 2030.

(4) Certification and verification by an independent third party

- From Science Based Target Initiative, the following objectives are certified as Science Based Target: SBTs:
⇒ "25% reduction in CO₂ emissions efficiency by 2030 over 2011"

- K Line has obtained third-party certification for actual CO₂ emissions.

Element 4: Transparency is assured in the investment plan for the transition

Among the investment plans to realize decarbonization, including the Next-Generation Environmentally-Friendly LNG-fueled Car Carrier, the plans, which are decided to be implemented at present are in total of JPY 30 billion.

The construction cost of the Next-Generation Environmentally-Friendly LNG-fueled Car Carrier was resolved by the Board of Directors in February 2019 as an initiative required to achieve the 2050 goal of improving CO₂ emission efficiency. In this case, the implementation of the transition strategy cannot be expected to have a negative effect on employment, the environment and society other than climate change, and therefore there is no investment plan for these expenditure.

Based on the above, JCR has evaluated that the Loans satisfy the four elements required by the Climate Transition Finance Handbook.

2-5. Consistency with SDGs goals and Targets

JCR has evaluated that the use of proceeds of the Borrowings will contribute to the following SDGs goals and targets, with reference to SDGs mapping of the International Capital Markets Association (ICMA).



Goal 3: Ensure healthy lives and promote well-being for all at all ages

Target 3.9. By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination



Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all.

Target 7.3. By 2030, double the global rate of improvement in energy efficiency.



Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Target 9.4. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities



Goal 13: Take urgent action to combat climate change and its impacts

Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.



Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Evaluation Phase 2: Management, Operations and Transparency Evaluation

JCR assigns "m1", the highest rating on JCR evaluation Phase 2: Evaluation on Management and Operation and Transparency.

Rationale: The project has allocated the funding and implemented the businesses as planned through a firmly equipped management and operation system and high transparency as described below.

1. Appropriateness and Transparency concerning selection standard and processes of the use of proceeds

1-1. JCR's Key Consideration in This Factor

This section confirms that the objectives to be achieved through the loan, the criteria for selecting green/transition projects, the appropriateness of the process, and the series of processes are appropriately disclosed to lenders.

1-2. Current status of evaluation targets and JCR's evaluation

(1) Goal

K Line Group is aware that its business activities have an impact on the global environment, and it set forth its determination here in the Environmental Charter in order to minimize this impact.

Core Concept

The "K" LINE Group is aware and recognizes that addressing environmental concerns is an issue shared by all mankind. Therefore, the "K" LINE Group is taking proactive measures as an essential condition for its existence and for conducting a business enterprise, striving to reduce the environmental impact of its business activities, and seeking to contribute to the development of a sustainable society.

Conduct Guidelines

1. We are setting objectives and targets for environmental preservation and making improvements on an ongoing basis to reduce the impact on the environment from our business activities. Furthermore, we are complying with all environmental treaties, laws and regulations as well as policies and voluntary standards to which the "K" LINE Group has consented.
2. We are striving to protect the global and marine environment through fleet-wide implementation of safe operation practices and are establishing the organizations and structures necessary for such implementation.
3. We are promoting research, development and introduction of ship facilities and equipment to improve ship energy efficiency and operating efficiency, which results in reduction of greenhouse gas emissions and the prevention of atmospheric pollution.
4. In consideration of biodiversity, we are maintaining an awareness of the impact that the transport of ballast water and living organisms that attach to ship hulls have on ecosystems and working to protect those ecosystems.
5. We are contributing to establish a recycle-based society by promoting the 3Rs (reduce, reuse and recycle) and promoting the effective re-use of resources, including ship recycling.
6. The entire "K" LINE Group is and will continue to support and participate in social contribution activities intended to protect the environment.

7. We are conducting education and training programs to elevate awareness and understanding of environmental preservation issues among each member of the entire "K" LINE Group.

JCR confirmed that the use of proceeds is one of the key measures for achieving the mid-term milestone of 2030 set forth in the "K" LINE Environmental Vision 2050, and that this is an initiative that contributes to the realization of K Line's core concept and conduct guidelines.

(2) Selection Criteria

K Line has established the following eligibility criteria in the Transition Loan Framework.

Projects to be funded shall be projects that are expected to operate soundly, subject to risk verification in light of our examination criteria, and meet the following eligibility criteria.

- (1) LNG-fueled vessels, which can reduce CO₂ emissions by about 25-30% compared to heavy oil, the conventional fuels for ships.
- (2) To contribute to the achievement of the 2030 medium term milestone set in our "K" LINE Environmental Vision 2050: "Improve CO₂ emissions efficiency by 50% compared to 2008 levels" and the 2050 goal "Halve total GHG emissions"
- (3) Cases publicly selected as "Model Projects to Reduce CO₂ Emissions from Ships through the Use of Alternative Fuels" by the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of the Environment

JCR evaluates that the above selection criteria are appropriate because numerical measurements of environmental improvement effects have been set and the position in K Line's long-term decarbonization strategy is clear.

(3) Processes

The project, for which procured funds are to be used, in K Line, each person in charge of the car carrier business group, ship technical group, and corporate planning group examined the project's conformity to the eligible criteria, and evaluated and selected. Subsequently, it was brought up to the Board of Directors meeting, and the final decision was made by the president after comprehensive analysis and deliberation. JCR evaluates that management is appropriately involved in the project selection process.

Since the goals, selection criteria, and the process relating to this loan are disclosed to lenders in the Transition Loan Framework and also through this report, the JCR has evaluated that transparency is ensured for lenders and others.

2. Appropriateness and Transparency of management of the proceeds

2-1. JCR's key consideration in this factor

The management method of the procured funds is usually assumed to be diverse by the borrower. JCR assesses whether the proceeds are surely allocated to the green/transition project, and also it has a framework and internal system that can easily track the status of allocation and management of the proceeds

JCR also attaches importance whether the funds procured through the loan is scheduled to be allocated to green/transition projects early and also evaluation of the management and operation of the unallocated funds.

2-2. Current status of evaluation targets and JCR's evaluation

K Line intends to cover a part of the construction cost of approximately 5.9 billion yen for this next-generation LNG-fueled car carrier by the funds to be raised through this loan. Proceeds from this loan are expected to be fully appropriated to the project on the same date following the loan execution. Therefore, unallocated funds are not expected. The absence of unallocated funds is disclosed to lenders and others in the Transition Loan Framework, in this Evaluation Report, etc.

- i. Based on the Loan Agreement, the proceeds are deposited into the accounts of two SPCs of leasing companies, the borrower, (handled by the Agent Business Administration Department of Mizuho Bank, which acts as an agent to perform administration work for the banks involve).
- ii. Based on the Memorandum of Agreement of K Line and the leasing company's two SPCs, the funds for purchasing the vessel are transferred from the accounts of the leasing company's two SPCs to K Line's bank account (Mizuho Bank Business Dept. No. 15 will handle the arrangement based on a fund transfer request from the leasing company's two SPCs)
- iii. K Line will transfer the funds to the account indicated on the invoice issued by the shipbuilding company based on the construction agreement and the agreement relating to amendments between the K Line and the shipbuilding company (K Line's Finance Group will handle the matter).
- iv. After receiving the funds to purchase the ship indicated under ②, K Line will link the funds to the asset, and The Finance Group and the Car Carrier Business Group will clearly distinguish and manage the funds' allocation status by using the K Line's accounting system.
- v. The head of the team belonging to each group check the content of the advance report, and K Line will approve the entry to the accounting system.
- vi. The books relating to the tracking of the above funds are properly kept by K Line and two SPCs until the end of the operating lease term and are subject to external or internal audits.

From the above, JCR has evaluated that the fund management related to this loan is appropriate and highly transparent because the appropriation plan of the proceeds from this borrowing is properly formulated and the funds are certainly appropriated to the Green/Transition Project under it, the tracking and management of the appropriated status and its internal control are properly implemented, and there are no unappropriated funds.

3. Reporting

3-1 JCR's key consideration in this factor

This section assesses whether the disclosure system for lenders and others before and after the procurement of this loan is planned in detail and an effective manner.

3-2. Current status of evaluation targets and JCR's evaluation

(1) Reporting on the proceeds allocation

The fact that the proceeds from the Loans will be appropriated to the project on the same date as the fund procurement has been explained to the lenders. Although K Line intends to use the Vessel until the end of the operating lease term and has no plans to sell it to a third party until the final repayment date, reports will be promptly made to the lenders in the event of a major change in circumstances, such as a marine transportation accident, such as a loss.

(2) Reporting on environmental improvement effects

In terms of impact reporting to lenders, CO₂ savings by comparing the next-generation LNG-fueled car carrier with the same type of vessel, which is fueled by heavy oil, will be reported annually.

In addition, K Line plans to disclose on their website reports on the progress of CO₂ reduction plan (the status of achievement of medium to long-term goals).

JCR evaluates that K Line plans to properly disclose the appropriation of funds and the reporting of environmental improvement effects to lenders and others.

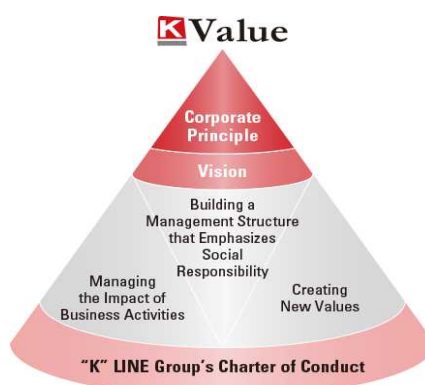
4. Organizational Efforts for the Environment

4-1. JCR's key consideration in this factor

This section assesses whether the borrower's management considers environmental issues to be of high priority in management, whether the transition finance procurement policy and process, criteria for selecting green/transition projects, etc. are clearly positioned by establishing a department that specializes in the environmental field or through collaboration with external organizations, etc.

4-2. Current status of evaluation targets and JCR's evaluation

The "K" LINE Group, including Kawasaki Kisen Kaisha, Ltd., as an integrated logistics corporate group primarily operates shipping business, states in its corporate philosophy that it will contribute to society so that people live well and prosperously. Based on the philosophy, the Group sees CSR in two major frameworks: "Managing the Impact of Business Activities" and "Creating New Values." Based on these frameworks, the Group aims to "Building a Management Structure that Emphasizes Social Responsibility."



(Source: K Line Website)

In the management plan announced in August 2020, issues to be tackled from FY2020 to FY2021 toward the mid-20s and beyond have been indicated. Specific business policies include Rationalize fleet size, Refocus investments, Expand and accelerate safety, environment, and quality initiatives, and Secure liquidity on hand and expand capital base. In the investment program for the next five years, the company plans to aggressively invest in green energy-related businesses as strategic growth areas. In addition, the company has established Shipping service-quality improvement vision and "K" LINE Environmental Vision 2050 as pillars of continuous improvement of corporate value over the medium to long term.



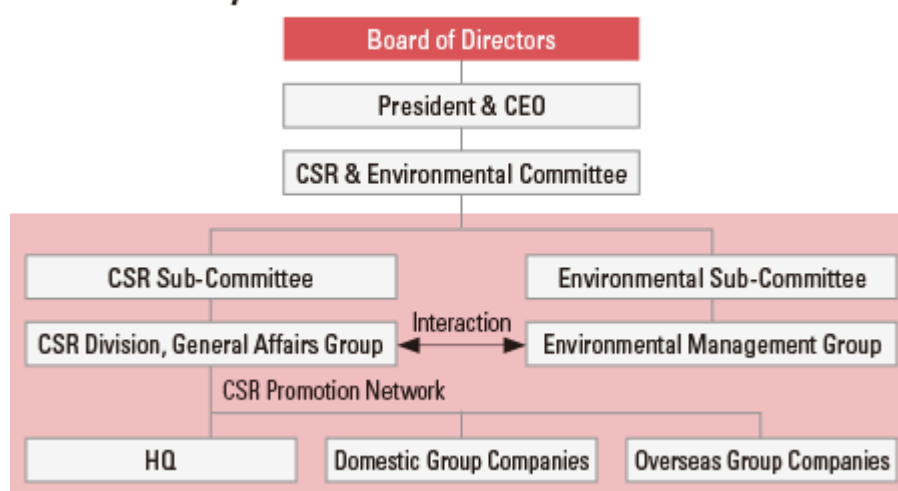
(Source: K Line Medium-term Management Plan)

"K" LINE Environmental Vision 2050 identifies four key issues "Promote zero emissions of Society," "reduce of environmental impact on the ocean and air," and "support for environmental improvement in society" In addition to "Low carbonization of the company", which relates to the transition strategies this time. Specific action plans are each established.

Based on K Line's environmental management system, K Line formulate environmental targets for a single fiscal year while maintaining consistency with the medium-to long-term targets of "K" LINE Environmental Vision 2050 and the Environmental Charter. K Line implements a PDCA cycle that it reviews the status of achievements of these targets and brings them to the targets for the following fiscal year. These Environmental Targets include specific measures at onshore offices, such as reducing waste and water consumption in addition to ones relating to vessel operations.

With regard to the internal sustainability promotion system, in order to ensure the promotion of environmental initiatives in accordance with the Environmental Charter, K Line have established the Social and Environmental Committee, chaired by the president, and established the CSR Expert Committee and the Environmental Expert Committee as subordinate organizations to deliberate and formulate the promotion system for our Group's CSR and environmental activities. The Environmental Expert Committee meets twice a year. Top management, environmental managers from each division within the company, environmental officers, and deputy environmental officers are participate in the meeting to formulate K Line group's basic plans and targets for environmental conservation, evaluate achievements and results, and reconfirm and review targets. In addition, in order to promote concerted efforts by all the people who work for K Line group, K Line holds a Group Environmental Liaison Meeting every year as a forum for K Line group companies to share awareness of the current status of environmental issues and exchange opinions.

CSR Promotion System



(Source: K Line Website)

K Line has obtained third-party certification from DNV GL and obtained SBT certification from Science Based Target Initiative for its medium-term targets for CO₂ emissions reduction, which is the core of its environmental objectives. In addition, K Line has also obtained CDP scores on its environmental policies, systems, risks and opportunities, and other general disclosures. In this way, K Line has asked for and verified the views of external environmental experts in a multifaceted manner.

JCR evaluates that the management of K Line has positioned environmental issues as a high priority, and that the Transition Loan Procurement Policy and Process, Green/Transition Project Selection Criteria are clearly positioned by establishing a department that specializes in the environmental field or cooperating with external organizations.

■Evaluation Result

Based on the JCR Green Finance Evaluation Methodology, JCR assigned "gt1" for "Greenness/Transition Evaluation (Use of Proceeds)" and "m1" for the "Management, Operation, and Transparency Evaluation." Consequently, JCR assigned "Green 1(T)" for the "JCR Climate Transition Finance Evaluation" for this loan. The Loans are considered to meet the standards for items required by the Green Loan Principles, the Climate Transition Finance Handbook and the Green Loan and Sustainability Linked Loan Guidelines.

[JCR Climate Transition Finance Evaluation Matrix]

		Management, Operation and Transparency Evaluation				
		m1	m2	m3	m4	m5
Greenness/Transition Evaluation	gt1	Green 1 (T)	Green 2 (T)	Green 3 (T)	Green 4 (T)	Green 5 (T)
	gt2	Green 2 (T)	Green 2 (T)	Green 3 (T)	Green 4 (T)	Green 5 (T)
	gt3	Green 3 (T)	Green 3 (T)	Green 4 (T)	Green 5 (T)	Not qualified
	gt4	Green 4 (T)	Green 4 (T)	Green 5 (T)	Not qualified	Not qualified
	gt5	Green 5 (T)	Green 5 (T)	Not qualified	Not qualified	Not qualified

■Subject

Charterer: Kawasaki Kisen Kaisha, Ltd. (Security code: 9107)

[Assignment]

Subject	Amount	Execution Date	Repayment Due Date	Evaluation
Long-term loan	Approx. JPY 5.9 billion	Mar. 12, 2021	Sept. 12, 2035	JCR Climate Transition Finance Evaluation: Green1(T) Greenness/Transition Evaluation: gt1 Management, Operation and Transparency Evaluation :m1

(Analysts in charge of this evaluation): Atsuko Kajiwara and Kosuke Kajiwara

Important explanation of the Climate Transition Finance evaluation

1. Assumptions, Significance, and Limitations of JCR Climate Transition Finance Evaluation

JCR Climate Transition Finance Evaluation, which is assigned and provided by the Japan Credit Rating Agency (JCR), represents JCR's overall opinion at the present time as to the extent to which funds procured from the Transition Financing, which are subject to evaluation, are appropriated for the Green/Transition Projects as defined by JCR, and the extent to which JCR's efforts to manage, operate and ensure transparency of such Transition Financing, etc., and does not fully represent the extent of management, operations and transparency efforts related to the appropriation of funds procured from the Transition Financing and the use of funds, etc.

JCR Climate Transition Finance evaluation evaluates plans or circumstances, such as the appropriation of funds at the time of funding plans or at the time of funding of the Transition Financing, and there is no guarantee that funds will be appropriated or otherwise in the future. In addition, JCR Climate Transition Finance Evaluation does not demonstrate the effect of Transition Finance on the environment and is not responsible for its effect on the environment. JCR confirms that the effects of the funds procured from transition Finance on the environment are measured quantitatively and qualitatively by the borrower or by a third party requested by the borrower, but in principle it does not directly measure the effects.

2. Methods used in the conduct of this evaluation

The methods used in this evaluation are listed on JCR website (Sustainable Finance & ESG in <https://www.jcr.co.jp/en>) as JCR Green Finance Evaluation Methodology.

3. Relationship with Acts Related to Credit Rating Business

JCR Climate Transition Finance Evaluation is determined and provided by JCR as an ancillary business, which is different from the activities related to the credit rating business.

4. Relationship with Credit Ratings

The Evaluation differs from credit ratings and does not promise to provide or make available for inspection a predetermined credit rating.

5. Third Party character of JCR

There is no conflict of interest related to capital or human resources relationships between the subject of this evaluation and JCR.

■ Disclaimers

The information contained in this document has been obtained by JCR from the Borrower and from accurate and reliable sources. Provided, however, that such information may be erroneous due to human, mechanical or other reasons. Accordingly, JCR makes no representation or warranty, express or implied, as to the accuracy, results, accuracy, timeliness, completeness, marketability, or fitness for a particular purpose of such information, and JCR assumes no responsibility for any error, omission, or result of using such information. In no event shall JCR be liable for any special, indirect, incidental or consequential damages of any kind, including opportunity loss, monetary loss, which may arise from any use of such information, whether contractual, tort, negligence or other cause of liability, and whether or not such damages are foreseeable or unforeseeable. The JCR Climate Transition Finance Evaluation does not express an opinion on various risks (credit risk, price fluctuation risk, market liquidity risk, price fluctuation risk, etc.) related to transition finance, which is the subject of evaluation. Furthermore, the JCR Climate Transition Finance Evaluation Finance Evaluation represents JCR's comprehensive opinion as of the date of this report and is not a representation of the facts. It does not constitute a recommendation in any way as to the decision of risk or the purchase, sale or holding of individual bonds, commercial paper, etc. The JCR Climate Transition Finance Assessment Finance Assessment may be changed, interrupted, or withdrawn due to changes in information, a lack of information, or other reasons. All rights to this document, including data from JCR Climate Transition Finance Assessment Finance Assessment, are reserved by JCR Climate Transition Finance Assessment. Any reproduction, translation, modification, etc. without the permission of JCR Climate Transition Finance Assessment is prohibited, regardless of the part or all of this document, including data from JCR Climate Transition Finance Assessment Finance Assessment.

■ Glossary

JCR Climate Transition Finance Evaluation: The evaluation assesses the extent to which funds raised through transition financing will be allocated to green/transition projects as defined by JCR, as well as the degree of management, operations, and transparency initiatives related to the use of such transition financing, etc. The evaluation is on a five-point scale, from top to top, and is displayed using the rating symbols Green1 (T), Green2 (T), Green3 (T), Green4 (T), and Green5 (T).

■ Status of registration as an external assessor of green finance

- Ministry of the Environment's external green bond reviewer registration
- ICMA (registered as an observer with the International Capital Markets Association)
- Members of UNEP FI Positive Impact Financial Principles Working Groups
- Climate Bonds Initiative Approved Verifier (Climate Change Initiative Accreditation Verification Organization)

■ Status of registration as a credit rating agency, etc.

- Credit Rating Agency: the Commissioner of the Financial Services Agency (Rating) No.1
- EU Certified Credit Rating Agency
- NRSRO: JCR has registered with the following four of the five credit rating classes of the Securities and Exchange Commission's NRSRO (Nationally Recognized Statistical Rating Organization). (1) Financial institutions, broker dealers, (2) insurance companies, (3) general business corporations, and (4) government and local governments. If the disclosure is subject to Section 17g-7(a) of the Securities and Exchange Commission Rule, such disclosure is attached to the news releases posted on the JCR website (<https://www.jcr.co.jp/en/>).

■ For further information, contact

Information Service Dept. TEL:03-3544-7013 FAX :03-3544-7026

Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026

Copyright © Japan Credit Rating Agency, Ltd. All rights reserved.