



POST ISSUANCE REVIEW¹

OF THE MANAGEMENT OF NYK'S GREEN BOND ISSUED IN
MAY 2018

March 2021

SCOPE

In May 2018, V.E was commissioned to provide an independent opinion (thereafter "Second Party Opinion" or "SPO") on the sustainability credentials and management of the Green Bond (the "Bond") proposed to be issued by Nippon Yusen Kaisha (the "NYK" or the "Issuer"). We issued our SPO in May 7th, 2018.

As of today, V.E has been commissioned by NYK to provide an independent opinion (or "Review") on the management of the 2018 Green Bond.

Our opinion is established according to our Environmental, Social and Governance ("ESG") exclusive assessment methodology² and to the latest version of the International Capital Market Association's Green Bond Principles ("GBP") voluntary guidelines edited in June 2018.

Our opinion is built on the review of the coherence between the Issuer's initial commitments and the Green Bond Principles with the following elements:

1. Bond processes actually implemented
2. Allocation process and results obtained from the use of Bond proceeds financing Eligible Projects
3. Reporting on the environmental benefits of the Eligible Projects

Our sources of information are multichannel, combining data from (i) public information gathered from public sources, press content providers and stakeholders, (ii) information from V.E' exclusive ESG rating database, and (iii) information provided by the Issuer through documents.

We carried out our due diligence assessment from February 18th, 2021 to March 16th, 2021. We consider that we were provided with access to all the appropriate documents we solicited. We consider that the information made available enables us to establish our opinion with a reasonable level of assurance on its completeness, precision and reliability.

V.E' OPINION

V.E is of the opinion that the Green Bond issued in 2018 by NYK remains aligned with the GBP 2018. We maintain a moderate level of assurance on the sustainability of the Bond.

- We express a reasonable assurance on the Issuer's capacity to use the Bond's proceeds to finance and refinance Eligible Projects in line with its initial commitments.
- We express a reasonable assurance on the Issuer's capacity to implement the evaluation and selection process in line with its initial commitments.
- We express a reasonable assurance on the Issuers' capacity to manage the proceeds, in line with its initial commitments.
- We express a reasonable assurance on the Issuer's capacity to implement the reporting process in line with its initial commitments.
 - First, we express a reasonable assurance on the Issuer's capacity to report on the fund allocation, in line with its initial commitments. The indicators used to report on the allocation of proceeds are complete and relevant at bond level.
 - We express a reasonable assurance on the Issuer's capacity to report on the environmental benefits and impacts of the financed Eligible Projects, in line with its initial commitments. The indicators used to report on the environmental benefits (outputs, outcomes and impacts) are relevant and complete.

¹ This Review is to be considered as the "Consultant review" described by the International Capital Market Association (www.icmagroup.org).

² Please see the Methodology section to learn more about V.E' scales of assessment.

Summary: level of assurance on the Issuer's/Borrower's capacity to:				
Use the proceeds to finance Eligible Projects	Allocation of the proceeds	Management of proceeds	Report on the allocation of proceeds	Report on the environmental benefits
Reasonable	Reasonable	Reasonable	Reasonable	Reasonable
Moderate	Moderate	Moderate	Moderate	Moderate
Weak	Weak	Weak	Weak	Weak

This Post-Issuance Review is based on the review of the Bond issued by NYK in May 2018 according to our exclusive assessment methodology and to the GBP voluntary guidelines (June 2018)

Paris, March 17th, 2021

Contact
Sustainable Finance Team | VEsustainablefinance@vigeo-eiris.com

DETAILED RESULTS

Use of Proceeds

We express a reasonable assurance on the Issuer's capacity to use the Bond's proceeds to finance and refinance Eligible Projects in line with its initial commitments.

According to the information provided by the Issuer, 100% of the net proceeds of the issuance have been used to finance Eligible Projects for a total amount of JPY 10.0 billion. V.E had access to the list of all projects financed by the Bond, also publicly available in NYK's Integrated Report 2020 (NYK Report 2020)³

In particular, the Bond's proceeds have been reported by the Issuer as used to finance or refinance Eligible Projects falling under the Pollution prevention and control and clean transportation Eligible Green Project Categories as defined by the Green Bond Principles;

- LNG-fuelled vessels.
- LNG Bunkering Vessels
- Ballast Water Management Systems
- SOx Scrubber Systems.

The Issuer reported that the refinancing rate was 24%.

The Eligible Projects effectively contribute to the environmental objectives initially defined by the Issuer namely: Water & Air Pollution Prevention and Control, Energy transition, Climate change mitigation.

The Issuer had initially committed to assess the following environmental benefits of the Eligible projects: improvement of vessel's air and water quality.

We consider the environmental benefits to be clearly assessed, in line with the Issuer's initial commitment.

We consider that the selected Eligible Projects contributed to the following United Nations' Sustainable Development Goal, namely Goal 9. Industry, innovation and infrastructure, 13. Climate Action, Goal 14. Life Below Water.

Eligible Category	SDG		SDG Targets
Water & Air Pollution prevention and control, Clean transportation;		SDG 9. Industry, innovation and infrastructure	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
		SDG 13. Climate Action	Adopting urgent measures to combat climate change and its effects.
		SDG 14. Life Below Water	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.

³ 2020_nykreport_all.pdf

Process for Project Evaluation and Selection

We express a reasonable assurance on the Issuer's capacity to implement the evaluation and selection process in line with its initial commitments

The evaluation and selection process of the Eligible Projects appears to be properly implemented, in line with its initial commitments.

- Finance Group, Corporate Planning Group and relevant Business Department were involved in the project evaluation and selection process.
- In addition, Environment Group and Technical Group checked environmental benefits of the Eligible Projects and confirmed these Eligible Projects do not have the negative impact which offsets the positive impact.
- These selected Eligible Projects have obtained confirmation from CFO.
- The materials used in the project evaluation and selection process were all stored in the Issuer's internal information system.

An area for improvement consists in having an external verifier view the compliance of the selection process with the Issuer's commitments.

Management of Proceeds

We express a reasonable assurance on the Issuers' capacity to implement the allocation and manage the proceeds in line with its initial commitments.

The management of proceeds has been made according to its initial commitment:

- The Bond proceeds have been managed by Finance Group and unallocated proceed are held in in cash or cash equivalent.
- CFO received reports on the status of allocated funds and the management of unallocated funds and approves them.
- The related data and materials are properly managed and saved in the NYK's internal reporting system.
- No change and divestment from eligible assets occurred during this period. V.E had access to the supporting documents in this review process.

An area for improvement consists in having an external verifier to review the tracking method and the allocation of the proceeds.

Reporting

We express a reasonable assurance on the Issuer's capacity to implement the reporting process in line with its initial commitments and with GBP 2018 requirements.

We express a reasonable assurance on the Issuer's capacity to report on the fund allocation in line with its initial commitments.

The indicators used for the fund allocation reporting are as follows:

- A brief description of each Eligible Project
- Total amount of proceeds allocated to Eligible Projects on sub-group level: (in JPY)
- Share of refinancing (in %)

We express a reasonable assurance on the Issuer's capacity to report on environmental benefits of the financed and refinanced Eligible Projects in line with its initial commitments.

Both the financial and environmental data have been efficiently monitored.

The issuer has committed to report annually until full allocation of the proceeds, and to make publicly accessible its reports on the Issuer's official website.

The total amount procured by the Bond was JPY 10.0 billion. At the end of October 2020, 100% of the net proceeds of the issuance, JPY 10.0 billion, was used to finance and refinance Eligible Projects and its refinance rate was 24%.

Due to confidentiality, the issuer reported the allocated amount on sub-group level, instead of individual project level. However, as initially agreed, the issuer reported the allocated amount on individual project level to V.E in this review process.

The fund allocation reporting and the impact reporting are both publicly available in NYK's Integrated Report 2020 (NYK

Report 2020) and on the Issuer's website.⁴

The indicators used for the impact reporting are as follow:

Eligible Projects categories	Reporting indicator at Eligible Project category level	V.E Analysis
LNG-fuelled vessels	- Number of LNG-fuelled vessels financed and entered into operations - GHG emission (mt/vessel/year) - GHG emission reduction (%) compared to HFO vessels - CO₂ emission reduction (%) compared to HFO vessels - NOx emission reduction (%) compared to HFO vessels - SOx emission reduction (%) compared to HFO vessels	- The Issuer has made impact reporting by using pre-committed reporting indicators. - The environmental benefits reported are in line with the initial objectives/targets.
LNG Bunkering Vessels	- Number of LNG Bunkering vessels financed and entered into operations - GHG emission (mt/vessel/year) - GHG emission reduction (%) compared to HFO vessels - CO₂ emission reduction (%) compared to HFO vessels - NOx emission reduction (%) compared to HFO vessels - SOx emission reduction (%) compared to HFO vessels	- The Issuer has made impact reporting by using pre-committed reporting indicators. - The environmental benefits reported are in line with the initial objectives/targets.
Ballast Water Management System	- Number of BWMS installed - Volume of treated ballast water (mt/vessel/year)	- The Issuer has made impact reporting by using pre-committed reporting indicators. - The environmental benefits reported are in line with the initial objectives/targets.
SOx scrubber system	- Number of systems installed - SOx emission reduction (%) compared to vessels not equipped with the system.	- The Issuer has made impact reporting by using pre-committed reporting indicators. - The environmental benefits reported are in line with the initial objectives/targets.

The data used in the impact reporting are calculated by using an annual impact assumption model that were duly supervised internally by Technical Group and Environment Group. Technical Group validates the evidence data.

V.E had access to the supporting documents in this review process.

Area of improvement is to have an external verifier.

⁴ 2020_nykreport_all.pdf

METHODOLOGY

In V.E' view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organization activity or transaction. In this sense, V.E writes an opinion on the Issuer's Corporate Social Responsibility as an organization, and on the Issuance through the objectives, management and reporting of the assets/projects to be (re)financed.

V.E' methodology for the definition and assessment of the ESG performance is based on criteria aligned with public international standards, in compliance with the ISO 26000 guidelines, and organized in 6 domains: Environment, Human Resources, Human Rights, Community Involvement, Business Behaviour and Corporate Governance. The evaluation framework has been customized regarding material issues, based on our relevant sector ESG assessment frameworks and on specific issues considering the Issuer's business activity.

Our research and rating procedures are subject to internal quality control at three levels (analysts, heads of cluster sectors, and internal review by the audit department for second party opinions) complemented by a final review and validation by the Direction of Methods. A right of complaint and recourse is guaranteed to all companies under our review, including three levels: first, the team linked to the company, then the Direction of Methods, and finally V.E' Scientific Council. All collaborators are signatories of V.E' Code of Ethics.

Eligible Projects review

Our review covers both the implementation of the initial commitments made by the Issuer in the SPO, and the annual reporting made one year after the issuance:

- Fund allocation, reporting on the use of proceeds, considered as a primary component and mandatory to achieve reasonable level of assurance at Bond level; and
- Environmental benefits, reporting on outputs, outcomes and impact indicators, considered as a primary component and mandatory to achieve reasonable level of assurance at Bond level.

Bond process review

The analysis of the implementation of the Bond processes and commitments covers:

- The evaluation and selection process, i.e. assessment of the coherence and efficiency of the implemented process.
- The allocation process of the proceeds, based on the rules for management of proceeds defined prior to the issuance of the Bond.

Reporting review

The analysis of the existence and completeness of the reporting according to the Issuer's initial commitments, also covers two components:

- Fund allocation: reporting on the aggregated use of proceeds, considered as a primary component and mandatory to achieve a reasonable level of assurance at Bond level;
- Environmental benefits: reporting on impact indicators, considered as a primary component and mandatory to achieve a reasonable level of assurance at Bond level;

The reporting indicators in place for the allocation of proceeds and for the environmental benefits are evaluated according to the quality of the indicators (exhaustiveness and relevance), and considering the reporting nature and management (format, visibility, data collection, etc.).

VIGEO EIRIS' ASSESSMENT SCALES			
Performance evaluation		Level of assurance	
Advanced	Advanced commitment; strong evidence of command over the issues dedicated to achieving the objective of social responsibility. Reasonable level of risk management and using innovative methods to anticipate emerging risks.	Reasonable	Able to convincingly conform to the prescribed principles and objectives of the evaluation framework
Good	Convincing commitment; significant and consistent evidence of command over the issues. Reasonable level of risk management.	Moderate	Compatibility or partial convergence with the prescribed principles and objectives of the evaluation framework
Limited	Commitment to the objective of social responsibility has been initiated or partially achieved; fragmentary evidence of command over the issues. Limited to weak level of risk management.	Weak	Lack or unawareness of, or incompatibility with the prescribed principles and objectives of the evaluation framework
Weak	Commitment to social responsibility is non-tangible; no evidence of command over the issues. Level of insurance of risk management is weak to very weak.		

Disclaimer

Transparency on the relation between V.E and the Issuer: V.E has executed one missions for NYK until so far (a Second Party Opinion provided in May 2018). No established relation (financial or commercial) exist between V.E and the Issuer. V.E's conflict of interest policy is covered by its Code of Conduct, which can be found at <http://vigeo-eiris.com/wp-content/uploads/2018/07/Code-of-Conduct-Vigeo-Eiris-EN.pdf>.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Bond, based on the information which has been made available to V.E. V.E has neither interviewed stakeholders out of the Issuer/Borrower's employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer/Borrower. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer/Borrower. The Issuer/Borrower is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by V.E neither focuses on the financial performance of the Bond, nor on the effective allocation of its proceeds. V.E is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

Restriction on distribution and use of this opinion: The deliverables remain the property of V.E. The draft version of the Second Party Opinion by V.E is for information purpose only and shall not be disclosed by the client. V.E grants the Issuer/Borrower all rights to use the final version of the Second Party Opinion delivered for external use via any media that the Issuer/Borrower shall determine in a worldwide perimeter. The Issuer/Borrower has the right to communicate to the outside only the Second Party Opinion complete and without any modification, that is to say without making selection, withdrawal or addition, without altering it in any way, either in substance or in the form and shall only be used in the frame of the contemplated concerned bond(s) issuance. The Issuer/Borrower acknowledges and agrees that V.E reserves the right to publish the final version of the Second Party Opinion on V. E's website and on V. E's internal and external communication supporting documents.

© 2021 Vigeo SAS and/or its licensors and subsidiaries (collectively, "V.E"). All rights reserved.

V.E provides its customers with data, information, research, analyses, reports, quantitative model-based scores, assessments and/or other opinions (collectively, "Research") with respect to the environmental, social and/or governance ("ESG") attributes and/or performance of individual issuers or with respect to sectors, activities, regions, stakeholders, states or specific themes.

V.E'S RESEARCH DOES NOT ADDRESS NON-ESG FACTORS AND/OR RISKS, INCLUDING BUT NOT LIMITED TO: CREDIT RISK, LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. V.E'S RESEARCH DOES NOT CONSTITUTE STATEMENTS OF CURRENT OR HISTORICAL FACT. V.E'S RESEARCH: (i) DOES NOT CONSTITUTE OR PROVIDE CREDIT RATINGS OR INVESTMENT OR FINANCIAL ADVICE; (ii) IS NOT AND DOES NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES; AND (iii) DOES NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. V.E ISSUES ITS RESEARCH WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

V.E'S RESEARCH IS NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE V. E'S RESEARCH WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. V.E'S RESEARCH IS NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT V.E'S PRIOR WRITTEN CONSENT.

ALL INFORMATION CONTAINED HEREIN IS OBTAINED BY V.E FROM SOURCES BELIEVED BY IT TO BE ACCURATE AND RELIABLE. BECAUSE OF THE POSSIBILITY OF HUMAN OR MECHANICAL ERROR AS WELL AS OTHER FACTORS, HOWEVER, ALL INFORMATION CONTAINED HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY, EXPRESS OR IMPLIED, OF ANY KIND, INCLUDING AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. V.E IS NOT AN AUDITOR AND CANNOT IN EVERY INSTANCE INDEPENDENTLY VERIFY OR VALIDATE INFORMATION IT RECEIVES.

To the extent permitted by law, V.E and its directors, officers, employees, agents, representatives, licensors and suppliers (together, "**V.E Parties**") disclaim liability to any person or entity for any (a) indirect, special, consequential, or incidental losses or damages, and (b) direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, wilful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded); on the part of, or any contingency within or beyond the control of any **V.E Party**, arising from or in connection with the information contained herein or the use of or inability to use any such information.

Additional terms For PRC only: Any Second Party Opinion or other opinion issued by V.E: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.



V.E is an independent international provider of environmental, social and governance (ESG) research and services for investors and public & private organizations. We undertake risk assessments and evaluate the level of integration of sustainability factors within the strategy and operations of organizations.

V.E offers a wide range of services:

— **For investors:** decision making support covering all sustainable and ethical investment approaches (including ratings, databases, sector analyses, portfolio analyses, structured products, indices and more).

— **For companies & organizations:** supporting the integration of ESG criteria into business functions and strategic operations (including sustainable bonds, corporate ratings, CSR evaluations and more).

V.E is committed to delivering client products and services with high added value: a result of research and analysis that adheres to the strictest quality standards. Our methodology is reviewed by an independent scientific council and all our production processes, from information collection to service delivery, are documented and audited. V.E has chosen to certify all its processes to the latest ISO 9001 standard. V.E is an approved verifier for CBI (Climate Bond Initiative). V.E' research is referenced in several international scientific publications.

With a team of more than 240 experts of 28 different nationalities, V.E is present in Paris, London, Brussels, Milan, Montreal, Hong Kong, Casablanca, Rabat and Santiago.

The V.E Global Network, comprising 4 exclusive research partners, is present in Brazil, Germany, Israel and Japan.

For more information: www.vigeo-eiris.com