



POST ISSUANCE REVIEW¹

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

March 2020

SCOPE

In May 2018, Vigeo Eiris was commissioned to provide an independent opinion (thereafter "Second Party Opinion" or "SPO") on the sustainability credentials and management of the Green Bond² (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, Vigeo Eiris 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 methodology 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 multichanneled, combining data from (i) public information gathered from public sources, press content providers and stakeholders, (ii) information from Vigeo Eiris' exclusive ESG rating database, and (iii) information provided by the Issuer through documents.

We carried out our due diligence assessment from September 6th, 2019 to March 31st, 2020. 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.

VIGEO EIRIS' OPINION

Vigeo Eiris is of the opinion that the Green Bond issued in 2018 by NYK remains aligned with the GBP 2018. We maintain a moderate³ 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.

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

² The "Green Bond" is to be considered as the bond issued, subject to the discretion of the Issuer. The name "Green Bond" has been decided by the Issuer: it does not imply any opinion from Vigeo Eiris.

³ Definition of Vigeo Eiris' scales of assessment (as detailed in the Methodology section):

- Level of Evaluation: Advanced, Good, Limited, Weak.
- Level of Assurance: Reasonable, Moderate, 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 31st, 2020

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Disclaimer

Transparency on the relation between Vigeo Eiris and the Issuer: Vigeo Eiris 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 Vigeo Eiris and the Issuer.

This opinion aims at providing a post-issuance independent review on the sustainability credentials and management of the Bond, based on the information which has been made available to Vigeo Eiris. Vigeo Eiris has neither interviewed stakeholders out of the Issuer's employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. Providing this review does not mean that Vigeo Eiris certifies the effectiveness, the excellence or the irreversibility of the assets financed by the Bond. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by Vigeo Eiris neither focuses on the financial performance of the Bond, nor on the effective allocation of its proceeds. Vigeo Eiris 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 opinion is provided by Vigeo Eiris to the Issuer and can only be used by the Issuer. The distribution and publication are at the discretion of the Issuer, submitted to Vigeo Eiris approval.

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.

The proceeds of the Bond have been used to finance and refinance, in whole or in part, Eligible Projects, namely LNG-fuelled vessels, LNG Bunkering Vessels, Ballast Water Management Systems and SOx Scrubber Systems. These Eligible Projects correspond with the initially defined Eligible Project Categories.

Vigeo Eiris had access to the supporting documents in this review process.

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 Project does 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.

Vigeo Eiris had access to the supporting documents in this review process.

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.

Vigeo Eiris had access to the supporting documents in this review process.

Reporting

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

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 JP¥)
- Share of refinancing (in %)

The total amount procured by the Bond was JPY 10.0 billion. At the end of June 2019, 42% of the net proceeds of the issuance, JPY 4.2 billion, was used to finance and refinance Eligible Projects and its refinance rate was 57%.

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 Vigeo Eiris in this review process.

The fund allocation reporting and the impact reporting are both publicly available in NYK's Integrated Report 2019 (NYK Report 2019) and on the Issuer's website.

Vigeo Eiris had access to the supporting documents in this review process.

Area of improvement is to report usage of the vessels financed to the extent that the confidentiality agreement allows.

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.

The indicators used for the impact reporting are as follow:

Eligible Projects categories	Reporting indicator at Eligible Project category level	Vigeo Eiris Analysis
LNG-fuelled vessels	<ul style="list-style-type: none"> - 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 - NO_x emission reduction (%) compared to HFO vessels - SO_x emission reduction (%) compared to HFO vessels 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 - NO_x emission reduction (%) compared to HFO vessels - SO_x emission reduction (%) compared to HFO vessels 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Number of BWMS installed - Volume of treated ballast water (mt/vessel/year) 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Number of systems installed - SO_x emission reduction (%) compared to vessels not equipped with the system. 	<ul style="list-style-type: none"> - 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.

Vigeo Eiris had access to the supporting documents in this review process.

METHODOLOGY

In Vigeo Eiris' 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, Vigeo Eiris 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.

Vigeo Eiris' 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 Vigeo Eiris' Scientific Council. All collaborators are signatories of Vigeo Eiris' 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.		



Vigeo Eiris 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.

Vigeo Eiris 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).

Vigeo Eiris 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. Vigeo Eiris has chosen to certify all its processes to the latest ISO 9001 standard. Vigeo Eiris is an approved verifier for CBI (Climate Bond Initiative). Vigeo Eiris' research is referenced in several international scientific publications.

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

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

For more information: www.vigeo-eiris.com