Second-Party Opinion

Hanwha Energy USA Green Bond Framework

Evaluation Summary

Sustainalytics is of the opinion that the Hanwha Energy USA Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018. This assessment is based on the following:

USE OF PROCEEDS The eligible category for the use of proceeds – Renewable Energy – is aligned with those recognized by the Green Bond Principles. Sustainalytics considers that the solar energy projects will help to reduce total GHG emissions by increasing the renewable energy output in the United States and increase access to affordable and clean energy while advancing the UN Sustainable Development Goals, especially SDG 7.

PROJECT EVALUATION / SELECTION Hanwha Energy USA's eligible projects will be reviewed and evaluated by its Investment Committee, which is comprised of cross departmental representatives from Development, Engineering, Operating & Management, Legal and Project Financing Teams. Projects are selected following a three-step approach, including amongst others the evaluation of environmental impacts. Final approval of shortlisted projects is conducted by the Global Investment Committee. Hanwha Energy USA's Business Planning & Strategy team and Development Team will continuously monitor and check whether the project developments remain in line with the Framework. This process is in line with market practice.

MANAGEMENT OF PROCEEDS Proceeds of the green bond will be tracked and recorded by the company's Business Planning and Strategy Teams using a dedicated ledger which includes information on green bond details, the eligible green projects list, total project cost, amount allocated and amount of unallocated proceeds. Pending full allocation, the unallocated green bond proceeds will be held in cash or invested temporarily in short-term liquid money instruments, according to Hanwha's liquidity management policies. Sustainalytics views this process in line with market practice.

REPORTING Hanwha Energy USA will provide an annual allocation report on the company's corporate website as a separate green bond report, including allocated and unallocated proceeds as well as selected examples of projects financed. Where feasible, a description of the eligible green projects, including project location and amount allocated, may be added within the report. With regards to the impact report, Hanwha Energy USA commits to disclose data on impact indicators as well as calculation methodologies and key assumptions. Sustainalytics views Hanwha Energy USA's reporting practices as aligned with market practices.

SECOND-PARTY OPINION

Evaluation date	9 July, 2019
Issuer Location	California, USA

Report Sections

For inquiries, contact the Sustainable Finance Solutions project team:

Lili Hocke (Amsterdam)
Project Manager
lili.hocke@sustainalytics.com
(+31) 20 205 00 40

Begum Gursoy (Timisoara)
Project Support
begum.gursoy@sustainalytics.com
(+40) 0356 089 978

Nicholas Gandolfo (Singapore)
Client Relations
susfinance.apac@sustainalytics.com
(+852) 3008 2391

Introduction

Hanwha Energy USA Holdings Corporation ("Hanwha Energy USA" or the "Company") is a solar project development company affiliated by Hanwha Group, which is a South Korea based conglomerate with primary business in the chemical, aerospace, mechatronics and solar energy. Hanwha Energy USA was established in 2013 and is headquartered in California, USA.

Hanwha Energy USA has developed the Hanwha Energy USA Green Bond Framework (the "Framework") under which it intends to issue green bonds and use the proceeds to finance and refinance, in whole or in part, existing and future projects that provide clean and sustainable solar energy to surrounding locals through the utilization of affordable energy sources. The Framework defines eligibility criteria in one area:

1. Renewable Energy

Hanwha Energy USA engaged Sustainalytics to review the Hanwha Energy USA Green Bond Framework, dated July 2019, and to provide a second-party opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2018 (GBP).[1] This Framework has been published in a separate document.[2]

As part of this engagement, Sustainalytics exchanged information with various members of Hanwha Energy USA's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of Hanwha Energy USA's green bond. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Hanwha Energy USA Green Bond Framework and should be read in conjunction with that Framework.

[1] The Green Bond Principles are administered by the International Capital Market Association and are available at https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/
[2] The Hanwha Energy USA Green Bond Framework is available on Hanwha Energy USA's website at: https://www.174powerglobal.com/sustainability

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Hanwha Energy USA Green Bond Framework

Summary

Sustainalytics is of the opinion that the Hanwha Energy USA Green Bond Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2018. Sustainalytics highlights the following elements of Hanwha Energy USA's green bond framework:

- Use of Proceeds:
  - The use of proceeds category of the Hanwha Energy USA Green Bond Framework, i.e. Renewable Energy, is recognized by the Green Bond Principles 2018 as project category having positive environmental benefits. Hanwha Energy USA's investments in solar energy projects will contribute to renewable energy development and thus to decarbonizing the energy sector.
  - Hanwha Energy USA intends to allocate the proceeds to expenditures related to the development, construction, installation and maintenance of solar energy production units and related transmission and distribution networks. Sustainalytics recognizes that CAPEX such as development, construction and installation is generally preferred by investors for funding the projects, however, it also believes that, given the nature to the eligible projects, OPEX will be important to maintain renewable energy projects and to sustain positive environmental impacts.
  - Hanwha Energy USA's look-back period for refinancing previous investments is 36 months prior to the issuance date of the bonds. Moreover, Hanwha Energy USA intends to report on the portion of financing vs refinancing in its annual allocation report. Sustainalytics views this practice as aligned with current market expectations.
  - Hanwha Energy USA clarified that all intended investments – solar energy production units, dedicated transmissions, distribution networks and the supporting infrastructures including inverters and transformers – will be exclusively for solar energy.
- Project Evaluation and Selection:
  - Hanwha Energy USA has a three-step project selection and evaluation process, which is in line with current market practices. Hanwha Energy USA confirmed that its project selection and evaluation process will be executed by its Investment Committee, which is a joint-collaboration of various representatives from the company's Development, Engineering, Operating & Management, Legal and Project Financing Teams. Upon Global Investment Committee's approval, selected projects will be monitored by the Business Planning & Strategy and the Development Team on a regular basis to ensure projects align with its green bond framework. This is aligned with market practice.
- Management of Proceeds:
  - Green bond proceeds will be monitored and tracked through a dedicated ledger. The register will include relevant transaction information on green bond details, the eligible green projects list, total project cost, amount allocated and amount of unallocated proceeds. Pending full allocation, the unallocated proceeds may be held in cash or invested temporarily in short-term liquid money instruments, according to Hanwha's liquidity management policies. This process is in line with current market practices.
- Reporting:
  - Hanwha Energy USA commits to provide an annual allocation and impact report, which will be made available to investors annually on the company's corporate website as a separate green bond report. The allocation report will include allocated amounts and selected examples of projects financed. In addition, where feasible, a description of the eligible green projects including project location and amount allocated, will be included in the report.
  - With regards to the impact report, Hanwha Energy USA will disclose data on impact indicators as well as calculation methodologies and key assumptions. Impact indicators will include installed capacity of renewable energy (MW), annual CO_2 emission reduced or avoided (tons) and annual renewable energy production (MWh). The company's reporting on allocation and impact is aligned with current market practices.

Alignment with Green Bond Principles 2018

Sustainalytics has determined that the Hanwha Energy USA's Green Bond Framework aligns to the four core components of the Green Bond Principles 2018. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Performance of the Issuer

Contribution of framework to issuer's sustainability performance

As an affiliate company of Hanwha Group that provides solar photovoltaic[3] systems in the USA, Hanwha Energy USA, along with the Group, established commitments to promote affordable and clean energy and integrated sustainability considerations into its business model. As part of its commitment to provide renewable energy, Hanwha Energy USA's solar energy portfolio includes 1 GW of solar power projects as of 2018 Q3.[4] Moreover, Hanwha Energy USA plays an important role in carrying the Group's sustainability strategy and commitment into effect. The Group has implemented sustainability measures in its operations and committed to reduce the company's energy use and GHG emissions.

Based on Hanwha Energy USA's and Hanwha Group's sustainability strategy, commitments and initiatives, Sustainalytics considers Hanwha Energy USA to be well positioned to issue green bonds, and that it will facilitate the advancement of the company's sustainability strategy.

Well positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes the positive impact of the use of proceeds, it is acknowledged that solar projects have environmental and social risks related to the impact of large renewable energy facilities and infrastructure on local communities and biodiversity, as well as workers' health and safety. Sustainalytics highlights the following risk mitigation processes of Hanwha Energy USA:

- As an affiliate company of the Group, the policies of the Group are also applicable to Hanwha Energy USA. Hanwha Group has integrated safety and health considerations into its key management mandate and established group-level guidelines on environment, safety and health policy. To improve its policies on an ongoing basis, the Group has established several key objectives such as: (i) minimizing pollutants through the reduction and effective treatment of pollutants, (ii) integrating the company's environmental management system into its corporate management, (iii) detecting and evaluating any hazards in work places through regular inspections and trainings, (iv) carrying out organized health management for individual workers, (v) establishment of health improvement programs, and (vi) adopting occupational disease prevention system.[5]
- To ensure the company's occupational health and safety, the Group established 11 safety rules including inspection of closed spaces by measurement of oxygen and gas concentrations, blocking of dangerous materials, inspection of electrical work by voltage detection, and prohibition of a single person work.[6]
- Hanwha Energy USA confirmed to Sustainalytics that all intended projects to be financed within the framework shall follow National Environmental Policy Act[7] (NEPA) as a requirement. The NEPA analysis is required by law in the USA for major renewable energy projects, including solar. Responsibility of conducting the NEPA analysis lies with the federal agency of the respective land and the local agency for environmental issue.[8] As part of the NEPA analysis, all federal agencies need to prepare an Environmental Impact Statement (EIS) and/or Environmental Assessment (EA) according to the project's impact on

[3] Solar Photovoltaic is a technology that converts sunlight into electricity by using semiconductors.
[4] Hanwha Energy USA's affordable and clean energy portfolio available at: https://174powerglobal.com/sustainability/
[5] Hanwha Group Eco-Yhes Guidelines at: https://hec.hanwha.co.kr/eng/enSustainability.do
[6] Hanwha Group Basic Safety Rules available at: https://hec.hanwha.co.kr/eng/enSustainability.do
[7] The National Environmental Policy Act of USA available at: https://www.whitehouse.gov/sites/whitehouse.gov/files/ceq/NEPA_full_text.pdf
[8] Introduction to NEPA available at: https://www.epa.gov/nepa/what-national-environmental-policy-act#NEPArequirements

human environment.[9] Moreover, agencies are required to execute public participation during the NEPA analysis as well as after the publication of NEPA document for public review and comment.[10]

Given Hanwha Energy USA's and Hanwha Group's internal processes for occupational health and safety, as well as its commitment to follow the NEPA assessment, Sustainalytics is of the opinion that Hanwha Energy USA is well positioned to mitigate environmental and social risks related to the eligible projects.

Section 3: Impact of Use of Proceeds

The eligible category for the use of proceeds, Renewable Energy, is recognized as impactful by GBP. Given that Hanwha Energy USA intends to use the proceeds to finance projects in the United States and Mexico, Sustainalytics has focused on below where the impact is specifically relevant in a local context.

Relevance of Solar Energy in the United States

Hanwha Energy USA intends to use its bonds' proceeds to provide clean electricity through the utilization of solar energy sources by using solar photovoltaic energy. Hanwha's intended investments include solar energy production units, dedicated transmissions, distribution networks and the supporting infrastructures such as inverters and transformers. Annual global energy demand rose by 2.3% in 2018 while the United States, India and China accounted for nearly 70% of the increase in energy demand across the globe. Since global energy demand is rapidly increasing due to growing population,[11]shifting towards clean energy plays an important role to mitigate climate change and limit temperature increase to 1.5 degrees Celsius as specified by the IPPC 2018 report.[12] Although the share of renewable energy in the global energy production increased by 7.9% in 2018,[13] fossil fuel energy still meets 70% of the global energy demand,[14] demonstrating the significance of increasing renewable energy's share in global energy portfolio.

In the USA, renewable electricity generation has doubled since 2008, accounting for 11% in the country's energy mix, in which solar energy contributed to only 2.3% of electricity generation in 2018.[15] According to the Department of Energy's National Renewable Energy Laboratory (NREL), 80% of the country's electricity can be generated from renewable energy, including solar photovoltaics and concentrating solar power, by 2050.[16] NREL also stated that a renewable energy-powered future can only be achieved with advance developments, especially transmission and the supporting infrastructure.

Based on above, Sustainalytics believes that fostering renewable energy projects, especially solar, will increase the share of renewable energy in the US's total electricity consumption.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

[9] NEPA Review Process available at: https://www.epa.gov/nepa/national-environmental-policy-act-review-process#CATEX
[10] NEPA Public Participation Process: https://www.epa.gov/nepa/how-citizens-can-comment-and-participate-national-environmental-policy-act-process#whenpublicnepa
[11] OECD Green Growth Studies, Energy available at: https://www.oecd.org/greengrowth/greening-energy/49157219.pdf
[12] IPPC Global Warming of 1.5 ºC, 2018: https://www.ipcc.ch/sr15/
[13] IRENA Renewable Energy Now Accounts for a Third of Global Power Capacity , April 2019: https://www.irena.org/newsroom/pressreleases/2019/Apr/Renewable-Energy-Now-Accounts-for-a-Third-of-Global-Power-Capaci
[14] UN Climate Change Renewable Energy Accounts for Third of Global Power Capacity – IRENA, April 2019: https://unfccc.int/news/renewable-energyaccounts-for-third-of-global-power-capacity-irena
[15] USA Renewable Electricity Generation: https://www.eia.gov/todayinenergy/detail.php?id=38752
[16] Information on NREL's study available at: https://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/renewable-energy-80-percent-us-electricity.html

Conclusion

Hanwha Energy USA has developed its Green Bond Framework to finance existing and future solar energy projects as well as related transmission and distribution networks. The eligible category – Renewable Energy – is recognized as impactful by the Green Bond Principles 2018 and Sustainalytics is of the opinion that the financed projects will contribute to renewable energy development and thus the decarbonization of the energy sector. Sustainalytics considers Hanwha Energy USA's project evaluation and selection process, management of proceeds and reporting to be aligned with market practice.

Based on the above considerations, Sustainalytics is of the opinion that Hanwha Energy USA is well positioned to issue green finance and that the Hanwha Energy USA Green Bond Framework is robust, credible, transparent and in alignment with the Green Bond Principles.

Appendices

Appendix 1: Green Bond / Green Bond Programme - External Review Form
Section 1. Basic Information

Issuer name:	Hanwha Energy USA Holdings Corporation
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: ***[specify as appropriate]***	Hanwha Energy USA Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	July, 2019
Publication date of review publication: ***[where appropriate, specify if it is an update and add reference to earlier relevant review]***	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

☒	Use of Proceeds	☒	Process for Project Evaluation and Selection
☒	Management of Proceeds	☒	Reporting

ROLE(S) OF REVIEW PROVIDER

☒	Consultancy (incl. 2nd opinion)	☐	Certification
☐	Verification	☐	Rating
☐	Other *(please specify)*:		

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW ***(if applicable)***

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

The use of proceeds category of the Hanwha Energy USA Green Bond Framework, i.e. Renewable Energy, is recognized by the Green Bond Principles 2018 as project category having positive environmental benefits.
Sustainalytics recognizes that CAPEX such as development, construction and installation is generally preferred by investors for funding the projects, however, it also believes that, given the nature to the eligible projects, OPEX will be important to maintain renewable energy projects and to sustain positive environmental impacts.
Hanwha Energy USA's look-back period for refinancing previous investments is 36 months prior to the issuance date of the bonds. Moreover, Hanwha Energy USA intends to report on the portion of financing vs refinancing in its annual allocation report. Sustainalytics views this practice as aligned with current market expectations.
Sustainalytics highlights that Hanwha Energy USA's Renewable Energy category is limited to investments in solar energy projects and thus excludes investments associated with fossil fuel technologies, assets and activities.

Use of proceeds categories as per GBP:

☒	Renewable energy	☐	Energy efficiency
☐	Pollution prevention and control	☐	Environmentally sustainable management of living natural resources and land use
☐	Terrestrial and aquatic biodiversity conservation	☐	Clean transportation
☐	Sustainable water and wastewater management	☐	Climate change adaptation
☐	Eco-efficient and/or circular economy adapted products, production technologies and processes	☐	Green buildings
☐	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs	☐	Other *(please specify)*:

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Hanwha Energy USA has a three-step project selection and evaluation process, which is in line with current market practices. Hanwha Energy USA confirmed that its project selection and evaluation process will be

executed by its Investment Committee which is a joint collaboration of various representatives from the company's Development, Engineering, Operating & Management, Legal and Project Financing Teams. Upon Global Investment Committee's approval, selected projects will be monitored by the Business Planning & Strategy and the Development Team on a regular basis.

Evaluation and selection

- ☒ Credentials on the issuer's environmental sustainability objectives
- ☒ Defined and transparent criteria for projects eligible for Green Bond proceeds
- ☐ Summary criteria for project evaluation and selection publicly available
- ☒ Documented process to determine that projects fit within defined categories
- ☐ Documented process to identify and manage potential ESG risks associated with the project
- ☐ Other *(please specify):*

Information on Responsibilities and Accountability

- ☒ Evaluation / Selection criteria subject to external advice or verification
- ☐ In-house assessment
- ☐ Other (please specify):

3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)*:

Hanwha Energy USA confirmed that all green bond proceeds will be monitored and tracked through a dedicated ledger. The register will include relevant transaction information on green bond details, the eligible green projects list, total project cost, amount allocated and amount of unallocated proceeds. Pending full allocation, the unallocated proceeds may be held in cash or invested temporarily in short-term liquid money instruments, according to Hanwha's liquidity management policies. This process is in line with current market practices.

Tracking of proceeds:

- ☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other *(please specify)*:

Additional disclosure:

- ☐ Allocations to future investments only
- ☒ Allocations to both existing and future investments

☐ Allocation to individual disbursements
☐ Allocation to a portfolio of disbursements
☒ Disclosure of portfolio balance of unallocated proceeds
☐ Other *(please specify)*:

4. REPORTING

Overall comment on section (if applicable):

REPORTING Hanwha Energy USA will provide an annual allocation report in company's corporate website as a separate green bond report, including allocated and unallocated amounts as well as selected examples of projects financed. Where feasible, description of the eligible green projects including project locations and amount allocated may be added within the report. With regards to the impact report, Hanwha Energy USA commits to disclose data on impact indicators such as capacity of renewable energy (MW), annual CO2 emission reduced or avoided (tons) and annual renewable energy production (MWh) as well as calculation methodologies and key assumptions. Sustainalytics views Hanwha Energy USA's reporting practices as aligned with market practices.

Use of proceeds reporting:

☐ Project-by-project
☒ On a project portfolio basis
☐ Linkage to individual bond(s)
☐ Other *(please specify):*

Information reported:

☒ Allocated amounts
☐ Green Bond financed share of total investment
☐ Other *(please specify):*

Frequency:

☒ Annual
☐ Semi-annual
☐ Other (please specify):

Impact reporting:

☐ Project-by-project
☒ On a project portfolio basis
☐ Linkage to individual bond(s)
☐ Other (please specify):

Frequency:

☒ Annual
☐ Semi-annual
☐ Other (please specify):

Information reported (expected or ex-post):

☒ GHG Emissions / Savings
☐ Energy Savings

☐ Decrease in water use

☒ Other ESG indicators (please specify): capacity of renewable energy (MW), annual renewable energy production (MWh)

Means of Disclosure

☐ Information published in financial report

☐ Information published in sustainability report

☐ Information published in ad hoc documents

☐ Other (please specify): annual and impact report likely to be reported in company's corporate website as a separate green bond report

☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

Hanwha Energy USA corporate website: https://www.174powerglobal.com/sustainability

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

☐ Consultancy (incl. 2nd opinion)

☐ Certification

☐ Verification / Audit

☐ Rating

☐ Other *(please specify):*

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

i. Second Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.

ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.

iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

Disclaimer

The Opinion was drawn up with the aim to provide objective information on why the analyzed bond is considered sustainable and responsible, and is intended for investors in general, and not for a specific investor in particular. Consequently, this Opinion is for information purposes only and Sustainalytics will not accept any form of liability for the substance of the opinion and/or any liability for damage arising from the use of this Opinion and/or the information provided in it.

As the Opinion is based on information made available by the client, the information is provided "as is" and, therefore Sustainalytics does not warrant that the information presented in this Opinion is complete, accurate or up to date, nor assumes any responsibility for errors or omissions. Any reference to third party names is for appropriate acknowledgement of their ownership and does not constitute a sponsorship or endorsement by such owner.

Nothing contained in this Opinion shall be construed as to make a representation or warranty, express or implied, regarding the advisability to invest in or include companies in investable universes and/or portfolios. Furthermore, nothing contained in this Opinion shall be construed as an investment advice (as defined in the applicable jurisdiction), nor be interpreted and construed as an assessment of the economic performance and credit worthiness of the bond, nor to have focused on the effective allocation of the funds' use of proceeds.

The client is fully responsible for certifying and ensuring its commitments' compliance, implementation and monitoring.

Sustainalytics

Sustainalytics is a leading independent ESG and corporate governance research, ratings and analytics firm that supports investors around the world with the development and implementation of responsible investment strategies. With 13 offices globally, the firm partners with institutional investors who integrate ESG information and assessments into their investment processes. Spanning 30 countries, the world's leading issuers, from multinational corporations to financial institutions to governments, turn to Sustainalytics for second-party opinions on green and sustainable bond frameworks. Sustainalytics has been certified by the Climate Bonds Standard Board as a verifier organization, and supports various stakeholders in the development and verification of their frameworks. In 2015, Global Capital awarded Sustainalytics "Best SRI or Green Bond Research or Ratings Firm" and in 2018 and 2019, named Sustainalytics the "Most Impressive Second Party Opinion Provider. The firm was recognized as the "Largest External Reviewer" by the Climate Bonds Initiative as well as Environmental Finance in 2018, and in 2019 was named the "Largest Approved Verifier for Certified Climate Bonds" by the Climate Bonds Initiative. In addition, Sustainalytics received a Special Mention Sustainable Finance Award in 2018 from The Research Institute for Environmental Finance Japan and the Minister of the Environment Award in the Japan Green Contributor category of the Japan Green Bond Awards in 2019.

For more information, visit www.sustainalytics.com

Or contact us info@sustainalytics.com