MOODY'S RATINGS

ASSESSMENT

30 June 2025

Send Your Feedback

Contacts

Krister Koskelo Associate Lead Analyst – Sustainable Finance krister.koskelo@moodys.com

Alice Presotto Senior Sustainable Finance Associate alice.presotto@moodys.com

Amaya London AVP-Sustainable Finance amaya.london@moodys.com

Adriana Cruz Felix SVP-Sustainable Finance adriana.cruzfelix@moodys.com

Paprec Holding

Second Party Opinion – Green Bond Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 Sustainability Quality Score (very good) to Paprec Holding's (Paprec) green bond framework dated June 2025. The issuer has established its use-of-proceeds framework with the aim of financing projects in two eligible green categories — transport and collection of waste, and sorting and material recovery of non-hazardous waste. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2025, and the issuer has incorporated all Moody's Ratings identified best practices. The framework demonstrates a significant contribution to sustainability.

Sustainabi	lity quality so	ore	•		ເດເງ
SQS5 Weak	SQS4 Intermediate	SQS3 Good	SQS2 Very good	SQS1 Excellent	SQS2
Alignment with principles USE OF PROCEEDS Overall alignment			Contribution to sustainability		
	Partially Aligner aligned	d Best practices	Poor	Limited Moderate	Significant High
Use of proceeds			Preliminary contribution to sustainability Relevance and magnitude		
Management of Reporting	f proceeds	<u>v</u>	Additional	considerations	No adjustment
				POINT-IN	-TIME ASSESSMENT

Scope

We have provided a second party opinion (SPO) on the green credentials of Paprec's green bond framework, including the framework's alignment with the ICMA GBP 2025. Under its framework, the company plans to issue green bonds to finance projects across two green categories, as outlined in Appendix 3 of this report.

Our assessment is based on the last updated version of the framework received on 27 June 2025, and our opinion reflects our point-intime assessment¹ of the details contained in this version of the framework, as well as other public and non-public information provided by the financing institution.

We produced this SPO based on our Assessment Framework: Second Party Opinions on Sustainable Debt, published in March 2025.

Issuer profile

Paprec Holding (Paprec), founded in 1994 and headquartered in France, is a company specialising in waste services and waste management services. Paprec is the largest player in the French recycling market, and also a significant player in waste treatment in France (including composting, incineration, waste-to-energy, biogas, non-hazardous waste storage centers management). Paprec manages both non-hazardous and hazardous waste, including waste electrical and electronic equipment ("WEEE"). The group now has approximately 15,300 employees and operates more than 400 sites in France, Spain, Switzerland, Poland, the UK and Azerbaijan. Paprec Group reported revenue of €2.8 billion in 2024, having collected, recovered and recycled around 16.9 million tons of waste during the year. Paprec is an important firm for sorting and material recovery in France, as well as for waste-to-energy and organic waste recovery.

Paprec, as a company, is committed to sustainable development. On environmental issues, Paprec is committed to measuring and reducing its Greenhouse Gas (GHG) emissions footprint, to promoting the circular economy, to protecting biodiversity, and to controlling environmental and fire risks. On social issues, Paprec's health and safety strategy is a priority for the Group and is accompanied by a specific framework and targets for all employees through the "2023-2024 Health and Safety Roadmap", to improve occupational safety conditions.

Strengths

- » The company refers to the EU Taxonomy's substantial contribution criteria for some of the projects financed under this framework.
- » The framework is aligned with identified best practices for all four pillars of the green bond principles.

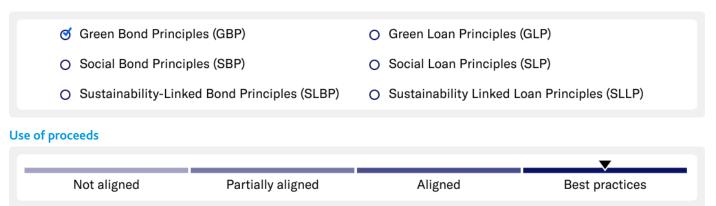
Challenges

» The financing of fossil fuel powered trucks for waste collection entails continuous GHG emissions.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Alignment with principles

Paprec's green bond framework is aligned with the four core components of the ICMA's GBP 2025. For a summary alignment with principles scorecard, please see Appendix 1.



Clarity of the eligible category – BEST PRACTICES

Paprec has clearly communicated the nature of the expenditures, and has set clear eligibility and exclusion criteria for all the eligible categories. The company disclosed that the eligible projects are located in France, Spain and Switzerland.

Clarity of the environmental or social objectives - BEST PRACTICES

The issuer has clearly outlined the environmental objective as transition to a circular economy, which is relevant for the eligible categories and is coherent with recognized international standards, including the EU Taxonomy and the United Nations' (UN) Sustainable Development Goals (SDGs).

Clarity of expected benefits – BEST PRACTICES

The expected environmental benefits are clear and relevant for all the eligible categories. These benefits are measurable and will be quantified in the impact report. The issuer's framework specifies that all issuances will exclusively involve refinancing. The issuer has clarified in the framework that there will be a maximum look back period of three years for capital expenditures and one year for operational expenditures.

Process for project evaluation and selection



Transparency and clarity of the process for defining and monitoring eligible projects – BEST PRACTICES

Paprec has established a clear and structured decision-making process for determining the eligibility of projects and assets, which is detailed in the available framework, available to bond holders.

The issuer has established specific committees to oversee the selection and evaluation of the eligible assets, ensuring coordination among functional departments. These committees include members from the Petithuguenin family, legal team, local project teams, and heads of relevant regions, activities, or subsidiaries. The Quality, Safety, and Environment (QSE) team participates in certain committees.

Committees conduct regular reviews of the eligible assets against eligibility criteria, including exclusion criteria to ensure social and environmental compliance. Projects that no longer meet the eligibility criteria, face significant Environmental, Social and Governance (ESG) controversies, or have been disposed of will be excluded to maintain compliance with the framework's requirements. The company's process for identifying and managing environmental and social (E&S) risks is described in its framework.



Allocation and tracking of proceeds – BEST PRACTICES

Paprec has outlined in its framework that the proceeds will be placed in the company's general account, tracked, and managed by the Finance & Treasury Department. The balance of the proceeds will be periodically adjusted. The allocation process is detailed within the framework, with the aim to achieve full allocation within 24 months. Any unallocated proceeds will be invested in cash, cash equivalents or other liquid marketable investments.

Reporting

		\mathbf{v}
Partially aligned	Aligned	Best practices
	Partially aligned	Partially aligned Aligned

Reporting transparency – BEST PRACTICES

Paprec has committed to providing annual reporting until full allocation for the allocation report, or in the event of material developments. Additionally, the issuer will continue reporting until the instruments reach maturity for the impact report. These reports will be publicly available on the company's website and will cover clear, relevant and exhaustive information about the allocation of proceeds and the expected sustainable benefits of the projects.

The company has identified relevant indicators for each project sub-category. The methodology for quantifying the indicators, where necessary, is publicly disclosed. A limited assurance external review will be conducted on both the allocation of funds and impact reporting.

Contribution to sustainability

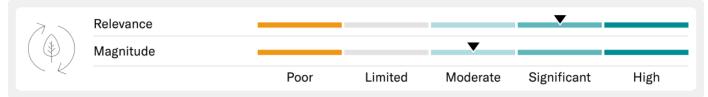
The framework demonstrates a significant overall contribution to sustainability. This reflects a preliminary contribution to the sustainability score of significant, based on the relevance and magnitude of the eligible project categories, and we have not made any adjustments to the preliminary score based on additional contribution to sustainability considerations.



Preliminary contribution to sustainability

The preliminary contribution to sustainability is significant, based on the relevance and magnitude of the single eligible project category. On the basis of the information provided by the issuer, the two categories are expected to account for approximately equal shares of allocation. A detailed assessment is provided below.

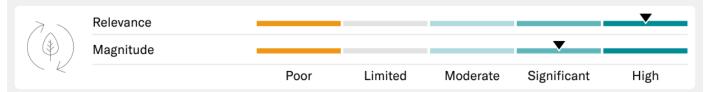
Collection and transport of non-hazardous and hazardous waste



Advancing circular economy is significantly relevant for the issuer, the sector and national context. As a 'pure player' in waste management, Paprec focuses exclusively on activities such as waste collection, sorting, recycling, recovery, and storage. The collection and transport of waste serve as the essential first steps in this process, enabling subsequent sorting and recycling efforts. This is particularly important given the global increase in waste production, projected to rise from 2.01 billion tons in 2016 to 3.4 billion tons by 2050, according to the World Bank.² However, the majority of the projects are implemented in France, which is well-equipped in terms of waste collection infrastructure, with an ample supply of trucks ensuring efficient waste collection, and there is little to no shortage in this aspect.

This category is expected to have moderate contribution on advancing the circular economy. Approximately half of the proceeds in this category are allocated to vehicles, most of which entail to carbon lock-in. These primarily consist of waste collection and transport trucks with combustion engines, adhering to Euro VI standards. Electric vehicles, which constitute a smaller portion of the portfolio, represent the best available technology and have the highest positive impact. The remaining proceeds will be allocated to containers, equipment, and personnel costs. Containers contribute positively as they are essential to a well-functioning waste management system with minimal negative externalities. Equipment includes tools such as forklifts, which may have moderate environmental impacts due to the potential use of combustion engines. Personnel costs are restricted to those directly involved in collection and transport operations, which are crucial for the efficient functioning of the operations.

Sorting and material recovery of non-hazardous waste



Advancing the circular economy is highly relevant for Paprec, the sector, and the national context. As a "pure player" in waste management, Paprec focuses exclusively on activities such as waste collection, sorting, recycling, recovery, and storage. Sorting and recycling are critical steps in the waste management process, transforming collected materials into reusable resources and reducing environmental impact. This is particularly important given the global increase in waste production, which is projected to rise from 2.01 billion tons in 2016 to 3.4 billion tons by 2050, according to the World Bank.³ Regionally, this context enhances its relevance, as France and Spain—where Paprec has significant investments—have recycling rates of around 50%, indicating substantial room for improvement.

This category is expected to have significant positive impact on circular economy by facilitating efficient waste sorting and preparing materials for reuse. Paprec's production of recycled materials relies solely on mechanical recycling, which is the best available technology. The issuer explicitly excludes waste-to-energy and biological treatment plants. Paprec achieves an average recycling rate of 89%, which is well above the EU Taxonomy's minimum threshold of 50%. This performance encompasses various materials, including paper, plastics, and metals. Eligible personnel costs are restricted to those directly involved in sorting and material recovery operations, contributing to the efficient functioning of these operations. Although, France's stringent legislation supports high-quality operational standards and limits potential negative externalities, there are uncertainties related to the management of microplastic residues and water usage limits in recycling facilities.

Additional contribution to sustainability considerations

We have not applied an adjustment for additional considerations to the expected impact score.

Paprec Holding has demonstrated a commitment to identifying and managing environmental and social (E&S) risks through the allocation of appropriate resources and processes at both group and site-specific levels. Over 90% of its facilities hold certifications such as ISO 9001 for quality, ISO 14001 for environmental management, and OHSAS 18001 for security, with 83% of its industrial sites ISO 14001 certified, aiming to reach 100%. These sites implement measures to mitigate environmental risks, including harm to biodiversity and pollution of soil or water. Health and safety policies are in place to safeguard employee well-being, and on governance-related topics, Paprec has established an ethical charter, a whistleblower policy, an anti-corruption code of conduct, and processes to ensure supplier and value chain compliance with these standards.

We note an ongoing controversy related to a fatal workplace accident occurred at Paprec's Valrena facility in July 2023, resulting in the death of a maintenance technician during a cleaning operation. Criminal proceedings have been initiated against Paprec Méditerranée, the site director and the team supervisor in connection with this incident. A hearing before the Criminal Court of Nîmes is scheduled to take place in February 2026. In addition, on February 10, 2025, following confidential negotiations between Paprec Group and the French National Financial Prosecutor's office (Parquet National Financier or "PNF") relating to alleged anti-competitive practices, corruption, favoritism and misuse of corporate assets in France, Paprec Group entered into a public interest judicial agreement (Convention Judiciaire d'Intérêt Public or "CJIP") with the PNF. Under the terms of the judicial agreement, Paprec Group agreed to pay a fine of $\in 12.7$ million as well as a forfeiture of $\in 4.8$ million resulting from a prior judicial seizure. The CJIP conclusively resolves "these historical matters and does not constitute any admission by Paprec Group of liability or guilt, nor does it constitute any determination thereof", and Paprec Group reported that it continues to formally contest the underlying allegations.

Regarding Paprec's overall sustainability strategy, the categories financed under the framework align with the company's commitment to sustainable development. Environmentally, Paprec is dedicated to promoting the circular economy, measuring and reducing its GHG emissions footprint, protecting biodiversity, and controlling environmental and fire risks. Socially, Paprec prioritizes health and safety strategies for its workforce.

Factor	Sub-factor	Component	Component score	Sub-factor score	Factor score
Use of proceeds	Clarity of the	Nature of expenditure	А		Best practices
		Definition of content, eligibility and exclusion criteria for nearly all categories	А	Best	
	eligible categories	Location	А	practices	
		BP: Definition of content, eligibility and exclusion criteria for all categories	Yes		
	Clarity of the objectives	Relevance of objectives to project categories for nearly all categories	А		
		Coherence of project category objectives with standards for nearly all categories	А	Best practices	
		BP: Objectives are defined, relevant and coherent for all categories	Yes		
		Identification and relevance of expected benefits for nearly all categories	А		
		Measurability of expected benefits for nearly all categories	А		
	Clarity of expected	BP: Relevant benefits are identified for all categories	Yes	Best	
	Clarity of expected benefits	BP: Benefits are measurable for all categories	Yes	practices	
		BP: Disclosure of refinancing prior to issuance and in post-allocation reporting	Yes		
		BP: Commitment to communicate refinancing look-back period prior to issuance	Yes		
	Transparency and	Clarity of the process	А		Best practices
Process for	clarity of the process for defining and monitoring eligible projects	Disclosure of the process	А	Best practices	
project evaluation and selection		Transparency of the environmental and social risk mitigation process	А		
		BP: Monitoring of continued project compliance	Yes		
		Tracking of proceeds	А	Best practices	Best practices
	Allocation and tracking of proceeds	Periodic adjustment of proceeds to match allocations	А		
Management of proceeds		Disclosure of the intended types of temporary placements of unallocated proceeds	А		
		BP: Disclosure of the proceeds management process	Yes		
		BP: Allocation period is 24 months or less	Yes		
	Reporting transparency	Reporting frequency	А	_	Best practices
		Reporting duration	А		
Reporting		Report disclosure	А	Best practices	
		Reporting exhaustivity	А		
		BP: Allocation reporting at least until full allocation of proceeds, and impact reporting until full bond maturity or loan payback	Yes		
		BP: Clarity and relevance of the indicators on the sustainability benefits	Yes		
		BP: Disclosure of reporting methodology and calculation assumptions	Yes		
		BP: Independent external auditor, or other third party, to verify the tracking and allocation of funds	Yes		
		BP: Independent impact assessment on environmental and social benefits	Yes		
		Overall alignment with pri	nciples score:		Best practices

Appendix 1 - Alignment with principles scorecard for Paprec's green bond framework

Appendix 2 - Mapping eligible category to the United Nations' Sustainable Development Goals

The eligible categories included in Paprec's green bond framework is likely to contribute to two of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals		SDG Targets
GOAL 11: Sustainable Cities and Communities	non hazardous and	11.B: Increase number of cities with plans towards inclusion, resource efficiency, and climate change and disaster resiliency
GOAL 12: Responsible Consumption and Production	hazardous waste Sorting and material recovery of non- hazardous waste	12.5: Substantially reduce waste generation through prevention, reduction, recycling and reuse

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the issuer's green bond framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
Collection and transport of non-hazardous and hazardous waste	 Eligible Assets and corresponding expenditures related to the separate collection and transport of non-hazardous and hazardous waste prior to treatment, material recovery or disposal, including the construction, operation and upgrade of facilities involved in the collection and transport of such waste, such as non-hazardous waste transfer stations, as a means for appropriate treatment. Assets, projects, technologies and/or businesses mainly consisting of, but not exclusively: Purchase of waste collection trucks Truck maintenance and repair costs Waste bins, compactors Collection and transport of non-hazardous and hazardous waste (NACE: E38.11, E38.12 and F42.9) Substantial Contribution to Circular Economy 		 Energy consumption reduction Percentage of Euro 5 and Euro 6 trucks (%) Share of orders for industrial vehicles with electric power (%) Number of sites connected for rail, river or sea transport Total volume of waste transported by river and sea
Sorting and material recovery of non-hazardous waste	 Eligible Assets and corresponding expenditures related to construction, upgrade, and operation of facilities for the sorting or recovery of non-hazardous waste streams into high quality secondary raw materials using a mechanical transformation process. This does not include sorting and recovery of combustible fractions from mixed residual waste to produce refuse derived fuel, such as in mechanical and biological treatment plants. Assets, projects, technologies and/or businesses mainly consisting of, but not exclusively: Sorting of waste from selected household collections Production of recycled materials from non-hazardous waste (paper, cardboard, plastics, scraps, metals, wood) 	Circular Economy	 Total tonnage of waste recycled (kT) Recycling and recovery rates overall and per type of waste (%) GHG emissions avoided by the recycling business (ktCO2e) Percentage of sites with an environmental management system (ISO 14001 or equivalent) Percentage of sites certified (ISO 9001 or 14001 or 45001 or 50001)
	EU Taxonomy eligibility criteria: 2.7 Sorting and material recovery of non-hazardous waste (NACE: E38.32 and F42.9) Substantial Contribution to Circular Economy		

Appendix 3 - Summary of eligible category in Paprec's green bond framework

Endnotes

1 The point-in-time assessment is applicable only on the date of assignment or update.

- 2 World Bank. <u>Clobal Waste to Grow by 70 Percent by 2050 Unless Urgent Action is Taken: World Bank Report</u>. September 20, 2018.
- <u>3</u> World Bank. <u>Global Waste to Grow by 70 Percent by 2050 Unless Urgent Action is Taken: World Bank Report</u>. September 20, 2018.

Moody's assigns SPOs in alignment with the main tenets of the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews and the LSTA/ LMA/APLMA Guidance for Green, Social and Sustainability-Linked Loans External Reviews, as applicable; Moody's practices may however diverge in some respects from the practices recommended in those documents. Moody's approach to assigning SPOs is described in its Assessment Framework, and is subject to the ethical and professional principles set forth in the Moody's Investors Service Code of Professional Conduct.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (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 regulators. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

© 2025 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES. CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS, CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK. INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

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 MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE 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 obtained by MOODY'S 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 of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials. To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information chained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful 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, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings nor credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>ir.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V, I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Calificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (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.

REPORT NUMBER 1453492