MOODY'S RATINGS

CREDIT OPINION

12 December 2024

Send Your Feedback

Contacts			
Clifford J Kim VP-Sr Credit Officer clifford.kim@moodys.com	+1.212.553.7880		
A. J. Sabatelle +1.212.553.4136 Associate Managing Director angelo.sabatelle@moodys.com			
CLIENT SERVICES			

1-212-553-1653 Americas Asia Pa Japan

EMEA

asse	852-3551-3077	cific	
	81-3-5408-4100		
Cre	44-20-7772-5454		

Energy NW - Nine Canyon Wind Project

Update to credit factors following upgrade

Summary

Energy NW - Nine Canyon Wind Project's (Nine Canyon: Aa3 stable) credit profile reflects its power purchase contracts (PPAs) with five participants with a weighted average credit quality of Aa3 and PPA terms that incorporate many features of traditional 'take or pay' PPAs. While the operations and maintenance (O&M) cost cap and vague termination language are atypical and represent weakness in the contractual structure of the project, Nine Canyon's strong liquidity and ability to manage its O&M costs sufficiently and the relative importance of the resources from a regional carbon transition perspective mitigates these weaknesses.

At the end of FY2024 (June 30), Nine Canyon had 706 days cash on hand in addition to a 12 month debt service reserve. Additionally, Washington State's stringent decarbonization requirements for electric utilities to decarbonize its power supply by 2045 provide an additional regulatory incentive for the off-takers to secure power from Nine Canyon while the ramp down in debt service by more than 50% that started in FY2024 increases the project's financial flexibility. Also, Nine Canyon's crerdit profile recognizes the older age of the ets with a weighted average age of about 20 years.

Credit strengths

- » Take-or-pay contracts with participants of Aa3 weighted average credit quality
- Historical operating costs well below O&M cap »
- Robust liquidity »
- State mandate for electric utilities to decarbonize its power supply by 2045 »

Credit challenges

- » Atypical contract features for take-or-pay contracts include an O&M cap and vague termination language
- Older assets with a weighted average age of around 20 years

Rating outlook

The stable outlook considers the project's strong participant credit quality, demonstrated ability to keep costs within its O&M cap under its PPA, robust internal liquidity, and stringent decarbonization mandate for Washington state electric utilities.

Factors that could lead to an upgrade

» The project's rating could improve if the weighted average credit quality of the participants improves to Aa2 while the project maintains robust liquidity and manages its costs well below the O&M cost cap.

Factors that could lead to a downgrade

- » The project incurs major and sustained operational problems
- » Internal liquidity declines materially
- » Weighted average participant credit quality drops below Aa3
- » Inability to recover costs under take-or-pay contracts or contracts are challenged

Key indicators

Exhibit 1

2020	2021	2022	2023	2024
244,710	236,320	238,620	199,750	196,320
70,105	61,270	51,975	42,220	31,965
101.3	79.8	89.7	118.1	114.8
110.1	89.4	102.6	128.4	123.1
21.1	24.6	27.6	32.6	44.0
776	821	753	735	706
1.00	1.02	0.94	0.72	0.67
	244,710 70,105 101.3 110.1 21.1 776	244,710 236,320 70,105 61,270 101.3 79.8 110.1 89.4 21.1 24.6 776 821	244,710 236,320 238,620 70,105 61,270 51,975 101.3 79.8 89.7 110.1 89.4 102.6 21.1 24.6 27.6 776 821 753	244,710 236,320 238,620 199,750 70,105 61,270 51,975 42,220 101.3 79.8 89.7 118.1 110.1 89.4 102.6 128.4 21.1 24.6 27.6 32.6 776 821 753 735

Note: The below 1.0x DSCR for FY2022 to FY2024 reflect Nine Canyon usage of excess unrestricted funds in FY2022 and excess debt service reserve funds in FY2023 and FY2024, respectively.

Source: Moody's Ratings, Issuer

Profile

The Nine Canyon project is a 95.9 MW (63 wind turbines) wind power project located in Washington state and it sells power under take-or-pay contracts to creditworthy public power entities. The project was built in three phases (each a Phase) comprising of the 48.1 MW Phase 1, 15.6 MW Phase 2 and 32.2 MW Phase 3 with commercial operations occurring in 2002, 2003, and 2008, respectively. Phase 1 and 2 use Siemens 1.3 MW wind turbines while Phase 3 uses Siemens 2.3 MW turbines. Debt associated with Phase 1 and 2 have been fully repaid and only debt used to fund Phase 3 construction is remaining with a final maturity on July 1, 2030.

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.

Detailed credit considerations

Revenue Generating Base

Strong participants but PPA contains weak or unclear provisions compared to a typical JAA's take-or-pay arrangement

The project benefits from take-or-pay PPAs with highly rated public power participants. Five of these participants with a weighted average credit quality of Aa3 are responsible for debt service since only the Phase 3 related bonds are outstanding (see Exhibit 2). Since Nine Canyon's Phase 1 and 2 related bonds have been fully repaid, the other five participants who participated only in Phase 1 or Phase 2 are no longer responsible for any debt service costs.

Exhibit 2 NIne Canyon Wind's Bond Participants

urchaser	Rating	Debt Service, %
Grays Harbor County P.U.D. 1, WA	Aa3	37.5
Franklin County Public Uitlity Dist 1, WA	Aa3	25.0
Benton County Public Utility District 1, WA	Aa3	18.6
Lewis County Public Utility District 1, WA	Aa3	15.7
Mason County Public Util Dist 3, WA	Aa3	3.1

Source: Issuer, Moody's Ratings

For O&M expenses across the entire project, all of the project's original ten participants are obligated to pay their share of operating costs and the weighted average credit quality of participants obligated for O&M expenses is also Aa3 (see Exhibit 3). The power output for all of Nine Canyon is attributed to the participants based on their O&M shares.

Exhibit 3

NIne Canyon Wind's participants share of O&M and power output

urchaser	Rating	Annual O&M Budget and Project Output, %
Grays Harbor County P.U.D. 1, WA	Aa3	20.9
Okanogan County Public Utility District 1, WA	A1	16.6
Grant County Public Utility District 2, WA	Aa3	12.5
Franklin County Public Uitlity Dist 1, WA	Aa3	10.5
Douglas County Public Utility District 1, WA	Aa2	10.2
Benton County Public Utility District 1, WA	Aa3	9.4
Chelan County Public Util. Dist 1, WA	Aa2	8.3
Lewis County Public Utility District 1, WA	Aa3	6.3
Mason County Public Util Dist 3, WA	Aa3	3.1
Cowlitz County Public Utility District 1, WA	A1	2.1

Source: Issuer, Moody's Rating

Nine Canyon's PPAs contains many features found in a traditional take-or-pay arrangement whereby the participants have to pay for their respective share of debt service and operating costs, with a 25% step up feature for each phase in case of a participant default and generally does not contain specific project performance requirements.

The PPA also contains terms atypical in a JAA 'take or pay' arrangement, such as an annual payment limit and unclear termination provisions. The payment cap consists of the project's scheduled debt service, annual O&M cap of \$7 million (2006) adjusted by an inflation index, and any credits or debits of any Renewable Energy Production Incentive (REPI) credits. We understand that the annual payment limit caps a participant's payment requirements for any given fiscal year, which could delay the step up requirement under the PPA until the next fiscal year. While the cost cap is a weakness relative to other take or pay projects, Moody's also recognizes that Nine Canyon's historical O&M costs have been below the inflation adjusted cap which has risen over time per the terms of the PPA.

The project's actual O&M expenses totaled \$7.5 million in FY2024 and averaged around \$7.2 million per year over the last three years, which we estimate is well below the inflation adjusted cap.

Furthermore, Moody's understands that if the project has not been in operations for 12 consecutive months and is not capable of returning to operations without capital improvements that make it uneconomic, the off-takers (with 60% approval) could ultimately seek to terminate the nonperforming phase. In such a scenario, Energy Northwest would have to sell all of the applicable assets and use the proceeds to pay down debt and expenses for that specific phase with any remainder given to the applicable participants. In Moody's view, the off-take contractual terms are ambiguous as to whether the participants would be required to pay for any debt that remains outstanding for the applicable phase assuming the PPA is terminated. We understand that Energy Northwest and their legal counsel believe the participants will continue to be responsible for their respective share of any outstanding debt in the scenario described above. In Moody's view, the Project's strong liquidity, demonstrated operating performance, and stringent mandate by Washington state regarding power supply decarbonization serve as important mitigants that help address this contract uncertainty as well as the O&M cost cap issue.

Since all three phases are in commercial operation, the only other possible termination events are at stated maturity or for a participant default. Under a participant default, the PPA explicitly states that the defaulting participant remains obligated to pay for its share of the debt service even after PPA termination.

Strong state mandate for renewable energy

Nine Canyon benefits from Washington State's clean energy mandate for electric utilities passed in May 2019 that requires all utilities provide its customers with 80% non-greenhouse gas emitting power by January 2030 and 100% by January 2045. This requirement is in addition to the renewable portfolio standard requirement that utilities source 15% of its power from renewable power. Moody's views Washington State's renewable portfolio requirement and non-GHG power supply requirements as important regulatory incentives for the participants to purchase Nine Canyon's power.

Financial Operations and Position

Older assets with long operating history

The project's assets are older with an average life of around 20 years old with the earliest phase reaching commercial operations in 2002 and the last phase having reached commercial operations in 2008. Given the age of the assets, they could experience greater maintenance cost or equipment failures. In the past, Nine Canyon's Phase 1 and 2 experienced numerous gearbox and main bearing failures that Siemens addressed under warranty that expired in August 2012. A separate settlement was reached regarding the main bearings in 2010. For Phase 3, Nine Canyon has an extended warranty that expires in August 2028 and covers major components although it excludes the cost of crane support. While the project's O&M activities have been supportive of high availability averaging around 98% after excluding scheduled outages and downtime, the project's energy production is still subject to the variability of the wind resource. For FY2024, low wind speeds led the project to generate about 196 GWh of power, which was similar to FY2023's 200 GWh but well below the annual average generation of 230 GWh from FY2009 through FY2023.

Ultimately, the project's operating performance remains a key credit consideration particularly with the less clear termination provision and the O&M cost cap issues described above. An inability to maintain a sound operational performance leading to costs that are high relative to the O&M cost cap would be credit negative. As mentioned, for FY2024, the project's O&M expenses totaled \$7.5 million which we estimate is well below the \$7 million (2006) cap when adjusted for inflation.

Low debt service coverage

Nine Canyon's debt service coverage ratios (DSCRs) have averaged around 0.77x over the past three years and they recognize Nine Canyon's use of unrestricted cash flow reserves in FY2022 and its use of excess cash reserves from the debt service reserve accounts for each of FY2023 and FY2024. On the latter, the excess debt service reserves was due the final payoff of Phase 1 and 2 bonds. We expect Nine Canyon to utilize more of its unrestricted cash reserves over time when needed as it nears final bond maturity in 2030. That said, the participants remain fully obligated to pay their pro-rata share of annual debt service.

Liquidity

The project's minimum liquidity consists of a cash funded debt service reserve sized according to the traditional three prong test, a minimum \$750K operating reserve, and a reserve and contingency account. Nine Canyon also has a decommissioning trust that had \$6.6 million at the end of FY2024. Including the operating and contingency reserves, the project's unrestricted liquidity totaled a robust 706 days cash on hand at FY2024. Nine Canyon's overall strong liquidity position materially reduces concerns regarding the PPA's contractual weaknesses including the O&M cost cap.

Debt and Other Liabilities

Legal security

Nine Canyon's bonds are secured by a pledge of the net revenues of the project's three Phases, whose revenue are derived from takeor-pay contracts. Nine Canyon can issue additional debt with 100% participant approval for each project phase and the inclusion of the new debt under the respective PPAs.

Debt structure

The project's debt consists of traditional fixed rate, amortizing debt with a final maturity of July 1, 2030. Debt totaled around \$32 million at fiscal year end 2024 (June 30th).

Debt-related derivatives

None.

Pensions and OPEB

The project participates in Washington State's statewide, multiple employer Public Employees Retirement System (PERS) pension plan. Moody's calculates the Nine Canyon's adjusted net pension liability (ANPL) for FY2024 relating to its proportionate share of PERS to be around \$2.8 million, compared to the issuer's reported proportionate share of the net pension liability of around \$172K. Moody's adjusts the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. Under governmental pension accounting, liabilities are discounted using an assumed rate of investment return on plan assets. Under our adjustments, we value liabilities using a market based discount rate for high quality taxable bonds, a proxy for the risk of pension benefits. Separately, Nine Canyon has a reported OPEB liability of \$208K.

ESG considerations

Energy NW - Nine Canyon Wind Project's ESG credit impact score is CIS-2

Exhibit 4 ESG credit impact score



ESG considerations do not have a material impact on the current rating.

Source: Moody's Ratings

Energy Northwest-Nine Canyon Wind Project (ENW Nine Canyon) **CIS-2** credit impact score reflects positive carbon transition exposure since the company's generation assets consist solely of carbon emissions free, wind power plants and Washington state has stringent decarbonization mandates for in-state electric utilities but also social and governance risks broadly in line with peers.

Exhibit 5

ESG issuer profile scores



Source: Moody's Ratings

Environmental

ENW Nine Canyon's **E-1** issuer profile score (IPS) largely reflects positive carbon transition exposure since the company's generation assets consist solely of carbon emissions free, wind power plants and Washington state has stringent decarbonization mandates for in state electric utilities.

Social

ENW Nine Canyon's **S-2** issuer profile score (IPS) considers social risks that is broadly in line with peers and does not pose a particular risk.

Governance

ENW-Nine Canyon's (**G-2**) issuer profile score (IPS) considers governance risks that is broadly in line with other JAA projects with take or pay projects and conservative financial policy that has led to robust internal liquidity.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <u>here</u> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Aa3

Rating methodology and scorecard factors

Moody's evaluates Nine Canyon under the US Municipal Joint Action Agencies methodology, and, as depicted below, the scorecard indicated outcome is Aa3, which matches the Aa3 assigned rating.

The negative ½ notch for Contractual Structure and Legal Environment reflects Nine Canyon's continuing exposure to the termination provisions and O&M cap exposure which are present in the transaction, but are mitigated by Nine Canton strong liquidity and cost management profile, along with the importance of the resources from a regional carbon transition perspective.

Exhibit 6 ENW Nine Canyon's Scorecard

Factor	Subfactor/Description	Score	Metric
1. Participant Credit Quality and Cost Recovery Framework	Participant credit quality. Cost recovery structure and governance	Aa3	
2. Asset Quality & Exposure to Environmental Regulation	Asset diversity, complexity, history, and exposure to environmental regulation	Ваа	
3. Liquidity	Adjusted days liquidity on hand (3-year avg) (days)		731
4. Leverage and Coverage	a) Adjusted debt ratio (3-year avg) (%)		118%
	b) Fixed obligation charge coverage ratio (3-year avg) (x)	Baa	1.0
Notching Factors		Notch	
	1. Competitiveness	0	
	2 - Contractual Structure and Legal Environment	-0.5	
	3- Participant Diversity and Concentration	0	
	4 - Construction Risk	0	
	5 - Financing Structure	0	
	6 - Unmitigated Exposure to Wholesale Power Markets	0	

Scorecard Indicated Outcome:

Note: DSCR of 1.0x was assumed given the participant's ultimate obligation to pay debt service. Source: Moody's Ratings © 2024 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-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

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 to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and 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 Investor Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Charter 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 (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 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 1429609

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454