

CREDIT OPINION

27 May 2026

Update



Send Your Feedback

RATINGS

TCTA - Komati Water Scheme Augmentation Proj

Domicile	South Africa
Long Term Rating	Ba3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Arvind Ashok +44.20.7772.1108
Analyst
arvind.ashok@moody's.com

Elisa Wu +44.20.7772.1258
Ratings Associate
elisa.wu@moody's.com

Kevin Maddick +44.20.7772.5218
Associate Managing Director
kevin.maddick@moody's.com

CLIENT SERVICES

Americas 1-212-553-1653

Asia Pacific 852-3551-3077

Japan 81-3-5408-4100

EMEA 44-20-7772-5454

TCTA - Komati Water Scheme Augmentation Proj

Update following outlook change to positive

Summary

The credit profile of [TCTA - Komati Water Scheme Augmentation Project](#) (the Project, or the Issuer) is supported by: (1) the Project's status as a wholly state-owned entity undertaking a water project of national importance on directive from the [Government of South Africa's](#) (Ba2 positive) Minister of Water and Sanitation; (2) the contractual undertaking of the National Department of Water and Sanitation (DWS) to step in and meet the Project's debt obligations; and (3) a tariff framework providing for full cost recovery from end users to ensure Project debt can be repaid.

The credit profile also reflects the following challenges: (1) the lack of an explicit on-demand guarantee from the DWS or National Treasury; (2) broader stress at South African state-owned enterprises, which may cause the government to take a more selective approach to the provision of support; and (3) the Project is exposed to a degree of liquidity risk, albeit manageable in our view.

We view the Issuer as a Government-Related Issuer (GRI) and the ratings reflect a top-down notching from the Government of South Africa's rating based solely on support. In our view, it is not possible to meaningfully assess the Project's credit profile on a standalone basis, given the close operational and financial linkages with the Government of South Africa and TCTA's public policy mandate with limited autonomy.

Credit strengths

- » State owned entity undertaking critical national water infrastructure
- » Operating risk is assumed by the National Department of Water and Sanitation
- » Contractual government undertakings to meet debt obligations
- » Tariff framework providing full cost recovery and payable by DWS irrespective of whether DWS collects payments from the end water users

Credit challenges

- » Lack of an explicit on-demand guarantee from the DWS or National Treasury, reflected in the one notch rating differential between the Issuer and the Government of South Africa
- » Broader stress at South African state-owned enterprises, which may cause the government to take a more selective approach to the provision of support
- » Exposure to a degree of liquidity risk, albeit manageable in our view

Rating outlook

The outlook is positive, reflecting the positive outlook on the Government of South Africa's sovereign bond rating

Factors that could lead to an upgrade

- » An upgrade of the Government of South Africa

Factors that could lead to a downgrade

- » A downgrade of the Government of South Africa
- » In our view, signs of DWS and/or National Treasury being unable or unwilling to provide timely support to the project in periods of financial stress

Profile

TCTA is a 100% state-owned entity mandated with financing and implementing bulk raw water infrastructure projects of national importance. TCTA acts as an Implementing and Funding Agent on behalf of South Africa's National Department of Water and Sanitation (DWS). TCTA's shareholder is represented by the Minister of Water and Sanitation and TCTA is overseen by the Parliamentary Portfolio Committee on Water and Sanitation. The Project is implemented on behalf of DWS and backed by contractual undertakings of DWS to step in and meet the Project's debt obligations. These undertakings bind the National Revenue Fund in accordance with section 70 of the Public Finance Management Act No. 1 of 1999 (PFMA).

The Project forms part of the Vaal River Eastern Subsystem. The project comprises the installation of a system to convey water to Eskom's power stations in Mpumalanga.

TCTA is listed as a "major public entity" under Schedule 2 of South Africa's Public Finance Management Act 1 of 1999. TCTA's mandate is set out in the Notice of Establishment of 1986 (Notice 2631 in Government Gazette No. 10545, dated 12 December 1986) and amended in 2000 (Notice 277 in Government Gazette No. 21017). Directives issued from the Ministry from time to time in terms of Section 103(2) of the National Water Act (Act No. 36 of 1998) give TCTA permission to implement and fund projects on behalf of other water management institutions e.g. the Department of Water and Sanitation.

Detailed credit considerations

Recent developments

The annual tariff setting process with DWS continues to function as expected for the Project. TCTA determines annually what is required to service the debt over its remaining life, expressed as a tariff (capital unit charge) which is provided to DWS annually to include in the raw water tariffs set for the various projects and systems. Triggers for a tariff adjustment include: variances between budget and actual for previous year; changes in forecast capital cost; changes in forecast water demand (DWS provides water demand forecasts to TCTA); changes in forecast funding cost (i.e. interest rates); changes in regulatory or legislative environment; and changes in any input assumptions that increase/decrease final repayment date.

Eskom's demand on the Project is expected to decrease going forward. Eskom have agreed to leave the tariffs unchanged for the 2026/27 period as a buffer against future changes in demand. Energy supply stabilization and the start of newer power plants have reduced reliance on older power stations. There is no material impact on the overall payments from Eskom to the Project, as the Project's tariff adjustment accounts for changes in volume demand by adjusting the unit tariff accordingly.

The Project's liquidity position, considering cash and undrawn revolving credit, remains adequate. The payment timeliness from DWS to each TCTA project remains good in 2025/2026.

In his 2021 [State of the Nation](#) address, President Cyril Ramaphosa announced plans to accelerate the establishment of National Water Resource Infrastructure Agency (NWRIA) and reiterated the plans in his [2022 State of the Nation](#) address. In September 2022,

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.moody's.com> for the most updated credit rating action information and rating history.

the government published the [Draft South African National Water Resources Infrastructure Agency Bill](#), which seeks to ensure a sustainable, equitable and reliable supply of water.

In August 2023, the [Agency Bill](#) was published by the Minister of Water and Sanitation. It establishes the South African National Water Resources Infrastructure Agency SOC Limited, (referred to as "The Agency" or "SANWRIA") under the full ownership and control of the State in order to acquire, dispose of, fund, provide, maintain, operate, manage and secure fundings of national water resources infrastructure to meet the social and economic developmental needs of current and future water users.

The Bill defines the transfer of national water resources infrastructure to The Agency. All assets, associated liabilities, contractual and non-contractual rights and obligations as well as the whole commercial enterprise will be transferred from TCTA to The Agency. Functions and services of TCTA will be transferred to The Agency prior to its disestablishment. Any guarantee or indemnity expressed or implied by the State in favour of any contractual obligation or associated liability by TCTA remains valid, binding and enforceable. In all contracts to which TCTA is a party, The Agency must substitute TCTA as a contracting party. The implementation of the SANWRIA will be progressive. [The SANWRIA Act](#), following the previously mentioned Agency Bill, was promulgated in September 2024, and its proclamation occurred on 4 February 2025 as contained in the Government Gazette No. 52070 dated 7 February 2025.

The State will own 100% of The Agency and appoint the board directly or through a nomination committee. The Agency must perform the TCTA's Treaty and non-Treaty functions, requirements, financial and other obligations in accordance with the provisions of the Notice of Establishment. Any Borrowing by The Agency is subject to approval by the Minister of Water and Sanitation in concurrence with the Minister of Finance, and must comply with the Public Finance Management Act.

TCTA informed us that The Agency's legal establishment is delayed, with a target timeline of approximately 18 months from March 2026. As of May 2026, the SANWRIA Board has been formally appointed and the SANWRIA Amendment Bill has been signed into law. TCTA informed its lenders of the impending transfer, seeking their consent and waivers for the transition. However, lenders await the findings of external legal and financial advisors before providing the necessary consents. TCTA has requested updates on these appointments and is working on appointing its own legal counsel. Despite initial ambitions for a mid-2026 transfer, TCTA now deems this timeframe unlikely.

We do not consider the institutional changes to impact on the credit position for creditors. The Act states: (1) that in all guarantees issued in respect of TCTA's financial obligations, the new Agency will substitute TCTA as the contracting party as if it had been the entity guaranteed from the beginning, and (2) any guarantee or indemnity expressed or implied by the State in favour of any contractual obligation or associated liability by the TCTA remains valid, binding and enforceable, and (3) continued performance of the Treaty and non-Treaty functions currently being performed by TCTA.

TCTA's functions are limited, and DWS assumes all operating risk

In the course of fulfilling the responsibilities set out in the Notice of Establishment and the directives that are given to it from time to time by the Minister, TCTA provides the following principal services: (1) structuring and raising project finance; (2) project management and implementation of water infrastructure (including design, construction and environmental compliance); (3) debt management; and (4) tariff setting.

TCTA implements off-budget funding of projects on a standalone basis and puts together the financing case and construction contract package for the DWS. The Project's revenue stream is designed to cover costs (including financing), but no profit is earned. TCTA does not undertake any operation and maintenance activities for the Project – these activities and risks are the responsibility of DWS.

TCTA can only undertake projects on the instruction of the Minister and has a clear public policy mandate. In undertaking its duties, the Notice of Establishment allows TCTA to (inter alia): appoint staff, open its own bank accounts, borrow money (subject to restrictions, and approval by National Treasury if it is binding the National Revenue Fund). The Notice of Establishment stipulates that TCTA may not conclude a borrowing agreement conditional on the issue of a guarantee, indemnity or security which will bind the National Revenue Fund before the requirements of Section 70 of the PFMA have been met. TCTA is required to annually submit to the Minister of Finance a borrowing programme for the year.

DWS undertakes to 'step in' and meet Project debt obligations in event of TCTA failure to perform or early termination of the Project

For each TCTA project there is a separate:

- » borrowing limit authorisation from the Minister of Water and Sanitation in concurrence with the Minister of Finance;
- » Income or Implementation Agreement with DWS undertaking to meet TCTA's debt obligations in relation to the Project; and
- » general ledger and bank account

The Implementation Agreement with DWS sets out, inter alia:

- » the roles of TCTA and DWS in the planning and implementation of the Project;
- » DWS responsibilities for operating and maintaining the Projects;
- » tariff framework elaborating (i) the calculation of the charges the Project is entitled to receive from DWS (irrespective of whether DWS collects payments from the end water users); and (ii) future annual adjustments; and
- » DWS undertakings to assume the Project's debt obligations to lenders, in the event TCTA fails to fulfil any of its obligations under the financing agreements or is disestablished.

In each Implementation Agreement, DWS undertakes to 'step in' and meet project debt obligations in event of TCTA failure to perform or early termination of the Project. TCTA's Notice of Establishment stipulates that TCTA may not conclude a borrowing agreement conditional on the issue of a guarantee, indemnity or security which will bind the National Revenue Fund before the requirements of Section 70 of the PFMA have been met. Accordingly, for each project, the Minister of Finance has formally concurred to the Minister of Water and Sanitation giving (1) undertakings to funders that DWS would step in and takeover TCTA's obligations towards them if TCTA breaches finance agreements, and (2) undertakings to TCTA to make sure that TCTA is always sufficiently funded to enable it to repay its debt. Under the PFMA, TCTA and DWS are required to report annually on the projects to the Minister of Finance.

Tariff setting framework ensures full cost recovery and insulates projects from end user payment risk

The Project's revenue is determined by using a methodology recorded in the Implementation Agreement between TCTA and DWS, and designed to recover TCTA's costs incurred in connection with the Project, over a predetermined period of time or until debt is repaid in full. TCTA is entitled to receive revenue from DWS irrespective of whether DWS has in turn collected its billings from water users. TCTA is therefore not directly exposed to the offtake risk of the water boards/municipalities, as the revenue streams are paid by DWS directly. These entitlements are backed by Government undertakings in favour of the lenders.

National scale rating application

Moody's National Scale Credit Ratings (NSRs) are intended as relative measures of creditworthiness among debt issues and issuers within a country, enabling market participants to better differentiate relative risks. NSRs differ from Moody's global scale credit ratings in that they are not globally comparable with the full universe of Moody's rated entities, but only with NSRs for other rated debt issues and issuers within the same country. NSRs are designated by a ".nn" country modifier signifying the relevant country, as in ".za" for South Africa. For further information on Moody's approach to national scale credit ratings, please refer to Moody's Credit rating Methodology published in August 2022 entitled "Mapping National Scale Ratings from Global Scale Ratings Methodology". While NSRs have no inherent absolute meaning in terms of default risk or expected loss, a historical probability of default consistent with a given NSR can be inferred from the GSR to which it maps back at that particular point in time. For information on the historical default rates associated with different global scale rating categories over different investment horizons, please see https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1280297.

NSRs are assigned by applying the published correspondence from GSRs. Where a single GSR maps to multiple national scale ratings, Rating Committees assign higher or lower NSRs to individual issuers and debts depending on their relative credit position within the

same GSR category, using the same methodologies as are used to determine the GSRs. The mapping profile for South Africa indicates that a Ba3 GSR maps to an NSR range of Aa3.za to A2.za. We have assigned a Aa3.za NSR to the Project.

Drivers of recovery prospects

In the event of a debt default the Project presents high recovery prospects in our view. This reflects, positively, the essentiality of the Project's critical water infrastructure to South Africa and contractual undertaking of the Government to assume the Project's debt obligations. Recovery could, however, be diminished by the untested process setting out the government's obligations to lenders in the event of an Issuer default, and may be subject to delays given these undertakings do not represent an explicit on-demand guarantee.

Liquidity analysis

Project is exposed to liquidity risk, but this is manageable in our view

The TCTA projects rely on receiving timely payments from DWS and on the demand meeting projections (since the tariffs are set with respect to a forecast user demand profile). If the demand is materially lower, then the tariff framework adjusts the tariff, but with a lag and repaid over the remaining debt repayment period. These events could give rise to a strain on a project's ability to service debt in a timely way, in which case we expect DWS will provide sufficient funding to TCTA to meet its financial obligations to lenders and contractors.

Ultimately, however, we consider the liquidity risk is manageable and we view the credit profile of each project to be underpinned by DWS undertakings in each Implementation Agreement. In the event of liquidity strain at any project, TCTA may request an increase in its borrowing limit, or, DWS may restructure the revenue stream to accommodate liquidity pressure. For example, in 2020 and 2021, the [Vaal River Eastern Sub-System Augmentation Project](#) (Ba3 / Aa3.za positive) could potentially have had a liquidity event, but DWS agreed to restructure the revenue stream to alleviate any potential shortfall in the project's cash position (see [Trans-Caledon Tunnel Authority Projects: Qualified audit reveals governance weakness; liquidity support from Department of Water & Sanitation provides relief](#), published 9 March 2020).

TCTA does manage its liquidity position and can raise short-term funds if required. In practice TCTA has access to committed revolving credit facilities to manage day to day liquidity. The projects do not maintain cash funded reserve accounts.

Rating methodology and scorecard factors

The principal methodology used in these ratings is Government-Related Issuers, published in May 2025. Please see the Rating Methodologies page on www.moody's.com for a copy of this methodology.

We view the Issuer as a government-related issuer (GRI) and the ratings reflect a top-down notching from the Government of South Africa's rating based solely on support. In our view, it is not possible to meaningfully assess the Project's credit profile on a standalone basis, given the close operational and financial linkages with the Government of South Africa and TCTA's public policy mandate with limited autonomy.

Ratings

Exhibit 1

Category	Moody's Rating
TCTA - KOMATI WATER SCHEME AUGMENTATION PROJ	
Outlook	Stable
Issuer Rating -Dom Curr	Ba3
ST Issuer Rating -Dom Curr	NP
NSR LT Issuer Rating	Aa3.za
NSR ST Issuer Rating	P-1.za

Source: Moody's Ratings

© 2026 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 LEGAL, COMPLIANCE, INVESTMENT, FINANCIAL OR OTHER PROFESSIONAL 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 or assessment 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 or assessment 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 contained 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 or assessment 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 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 Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at ir.moody.com 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., Moody's Local PA Clasificadora de Riesgo S.A., Moody's Local CR Clasificadora de Riesgo S.A., Moody's Local ES S.A. de CV Clasificadora de Riesgo, Moody's Local RD Sociedad Clasificadora de Riesgo S.R.L. and Moody's Local GT 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 61 003 399 657 AFSL 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. EU: In the European Union, each of Moody's Deutschland GmbH and Moody's France SAS provide services as an external reviewer in accordance with the applicable requirements of the EU Green Bond Regulation. 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 1486396

CLIENT SERVICES

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