

## CREDIT OPINION

18 January 2019

Update

 Rate this Research

### RATINGS

#### Indian Renewable Energy Develop. Agency Ltd.

Domicile	India
Long Term CRR	Not Assigned
Long Term Issuer Rating	Baa3
Type	LT Issuer Rating - Fgn Curr
Outlook	Negative

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

Alka Anbarasu +65.6398.3712  
VP-Sr Credit Officer  
alka.anbarasu@moodys.com

Srikanth Vadlamani +65.6398.8336  
VP-Sr Credit Officer  
srikanth.vadlamani@moodys.com

Jien Hoong Chew +65.6311.2649  
Associate Analyst  
jienhoong.chew@moodys.com

Graeme Knowd +81.3.5408.4149  
MD-Banking  
graeme.knowd@moodys.com

» Contacts continued on last page

### CLIENT SERVICES

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

# Indian Renewable Energy Develop. Agency Ltd.

Update following rating action

## Summary

On 14 January 2019, we affirmed the Baa3 local- and foreign-currency issuer ratings of [Indian Renewable Energy Develop. Agency Ltd.](#) (IREDA). IREDA's Baseline Credit Assessment (BCA) of ba3 was also affirmed. The rating outlook has been changed to negative from stable. IREDA's issuer rating is three notches above its ba3 BCA and reflects our assessment of a high level of link between IREDA and the [Government of India](#) (Baa2 stable).

The rating actions take into account the deterioration in IREDA's financial performance because of an increase in problem assets, as well as a significant decline in profitability, driven by certain changes in accounting norms. The negative rating outlook reflects our expectation that the company's ba3 BCA could come under pressure if the weak financial performance is sustained over the next 12-18 months.

IREDA's nonperforming loan (NPL) ratio rose to 7.4% as of 30 September 2018, a significant increase from 6.0% as of 31 March 2017 and 3.5% as of 31 March 2013. In addition, the company's profitability, as measured by net income/average managed assets, declined to 0.8% on an annualized basis in the first half of fiscal 2019 (the fiscal year ending 31 March 2019) compared with 2.0% in fiscal 2018 and 2.3% in fiscal 2017. This decline in profitability has been driven by lower core profitability, as well as the one-off impact of higher provisions for funded interest on restructured loans.

The company's capitalization has also declined because of strong credit growth and mark-to-market losses from its unhedged foreign-currency exposure. The company's tangible common equity/total managed assets declined to 10.5% as of 30 September 2018, compared with 12.3% as of 31 March 2018 and an average of 18.1% for fiscal 2014-17.

Nevertheless, these weaknesses are somewhat balanced by IREDA's stable funding and liquidity profile, which is supported by its long-tenure borrowings from multilateral agencies that have been mostly guaranteed by the government.

## Credit strengths

- » Stable liquidity and funding, with long-tenure borrowings from bilateral and multilateral agencies that are mostly supported by guarantees from the Indian government
- » Government ownership, as well as its role as the key agency to implement the government's renewable energy initiatives, which ensure strong direct and indirect funding support from the government

## Credit challenges

- » Declining capital metrics because of lower profitability and the one-off mark-to-market impact of unhedged foreign-currency exposure
- » Weak asset quality from legacy loans to the cogeneration, biomass and hydro sectors, which form most of the company's gross nonperforming assets
- » High concentration risks because of its exposure to the renewable energy sector only
- » Relatively small capital base, which limits IREDA's strategic importance and its role in financing renewable energy

## Outlook

The outlook on IREDA's ratings is negative.

## Factors that could lead to an upgrade

Given the negative rating outlook, we are unlikely to upgrade the company's ratings during the outlook horizon of the next 12-18 months. Nevertheless, the rating outlook could return to stable if (1) the company returns to its historical levels of profitability on a sustained basis, and (2) the company's asset-quality metrics remain stable and are supported by a strengthening in IREDA's loss-absorbing buffers.

## Factors that could lead to a downgrade

Downward pressure on the ratings could materialize through a continued deterioration in the company's asset quality, or a significant weakening in the company's capitalization or profitability, or both. In addition, any changes in the company's policy role could also hurt the ratings.

## Key indicators

Exhibit 1

### Indian Renewable Energy Develop. Agency Ltd. (Unconsolidated Financials) [1]

	3-18 <sup>2</sup>	3-17 <sup>2</sup>	3-16 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total assets (INR Million)	202,773	187,042	131,958	24.0 <sup>4</sup>
Total assets (USD Million)	3,109	2,880	1,984	25.2 <sup>4</sup>
Net Income / Average Managed Assets (%)	2.0%	2.3%	2.5%	2.3 <sup>5</sup>
12 Month Coverage (%)	166.6%	191.9%	207.1%	188.5 <sup>5</sup>
FFO/ Total debt (%)	2.4%	3.4%	3.2%	3.0 <sup>5</sup>
Secured Debt / Gross Tangible Assets (%)	24.8%	27.2%	34.0%	28.7 <sup>5</sup>
Tangible Common Equity (Finance) / Tangible Managed Assets (%)	12.3%	13.2%	17.2%	14.2 <sup>5</sup>
Problem Loans / Gross Loans (%)	6.3%	6.0%	5.7%	6.0 <sup>5</sup>
Net Charge Offs / Average Gross Loans (%)	0.0%	0.0%	0.0%	0.0 <sup>5</sup>

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] LOCAL GAAP. [3] May include rounding differences due to scale of reported amounts. [4] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime. [5] Simple average of periods presented for the latest accounting regime.

Source: Moody's Financial Metrics

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Profile

Indian Renewable Energy Develop. Agency Ltd.'s (IREDA) principal activities involve engaging in promoting, developing and extending financial assistance for setting up projects related to new and renewable sources of energy, energy efficiency or conservation.

IREDA is a public financial institution under section 2(72) of the Companies Act, 2013, and registered as a non-banking financial company with the Reserve Bank of India (RBI). It was established in March 1987 and is wholly owned by the Indian government under the Ministry of New and Renewable Energy (MNRE).

The company is headquartered in New Delhi, with branch offices in Chennai, Hyderabad and Ahmedabad.

## Detailed credit considerations

### A significant decline in profitability

IREDA's return on average managed assets (annualized) declined to 0.8% in H1 of fiscal 2019, which was significantly lower compared with the 2.0% in fiscal 2018 and 2.3% in fiscal 2017.

The deterioration in the financial performance has been driven by an increase in credit costs, a lower interest margin because of higher competition from banks and other non-bank companies, and the mark-to-market impact from unhedged foreign-currency exposure. IREDA's profitability was also affected by a provision amounting to INR491 million made for funded interest on restructured loans. The company has made a 50% provision for the funded interest on restructured loans and will provide the remaining 50% in H2 of the fiscal year.

Therefore, we expect IREDA's profitability metrics to remain under pressure in fiscal 2019. In addition, we estimate some under-provisioning for IREDA's problem accounts, with loan-loss reserves representing 46.5% of the company's problem assets as of 30 September 2018. We expect the loss given default for some of these assets to significantly exceed the company's existing reserves because the projects in most cases are technically not viable.

### Capitalization has declined as a result of strong credit growth and weakened profitability

IREDA's tangible common equity/tangible managed assets declined to 10.5% as of the end of September 2018 compared with an average of 18.4% for fiscal 2014-17, because of robust credit growth and mark-to-market losses from its unhedged foreign-currency exposure. Nevertheless, the company reported a total capital adequacy ratio of 17.4% as of the end of September 2018 that was above the minimum capital ratio of 15% as prescribed under the RBI norms.

About 30% of IREDA's borrowings are unhedged, and the open exposure represents about 90% of the company's capital. In the past two years, the foreign-currency translation impact eroded about 12% of the company's tangible common equity. Nevertheless, given that the Indian rupee has stabilized relative to the other foreign currencies, we do not expect the unhedged exposure to significantly impact the company's capital position in the next few quarters.

In June 2017, the Cabinet Committee on Economic Affairs approved the IPO of IREDA. The company subsequently filed its draft red-herring prospectus with the Securities and Exchange Board of India, which was approved in February 2018. The IPO is part of the Indian government's plan to raise the company's profile in the domestic and international financial markets to enable it to further leverage loan financing for the renewable energy sector. Until the IPO materializes, we can expect the company's credit growth to slow.

IREDA has received regular capital infusions from the Indian government (INR2.45 billion since 2010) through budgetary allocations. However, following the change in its status to a Mini Ratna in 2015, the government ceased its budgetary capital allocations to IREDA. Nevertheless, we expect the government to continue to support the company, given the strategic importance of the renewable energy sector.

### Deterioration in asset quality in the legacy lending book; nevertheless strong loan growth in a relatively untested sector could expose the company to downside risks

IREDA's loan growth moderated to around 14% as of the end of September 2018 from the same period a year earlier, compared with the 17% reported as of year-end fiscal 2018. While this growth is coming from a very small base, a large proportion of the company's loan book is untested with a sizable portion of the company's outstanding loans being originated over the past two fiscal years. With the

exception of the solar and wind segments, most renewable energy loans tend to have long durations of eight to 12 years, with repayment moratoriums of typically one year, many of the companies in the loan book have not yet started repayment.

In addition, IREDA's NPL ratio further increased to 7.4% as of 30 September 2018 because of slippages from its standard restructured loan portfolio, a significant increase from 3.5% as of fiscal 2013. The company currently recognizes NPLs on a 120-day-past-due basis and will transition to NPL recognition on a 90 plus-day-past-due basis from fiscal 2020, in line with the practice followed by the Indian banks, as well as most finance companies. We expect the change in recognition basis to increase the company's reported NPL ratio by another 100-150 basis points.

IREDA's asset quality has been strained by very high NPLs in the small hydro, cogeneration and biomass segments, and we expect the company's asset quality to deteriorate further, particularly in these segments. At the same time, the asset-quality performance in the company's key focus segments of wind and solar remain good. To address the asset-quality issues, the company has tightened its underwriting policy and limited the loan value to 50% of the cost for projects in the small hydro, cogeneration and biomass segments.

IREDA's single-sector concentration and high credit concentration in a few borrowers exposes the company to downside risks because of its small net worth compared with that of large lenders active in power sector financing.

We expect sector concentration to remain high over the next few years, given the small number of companies in the renewable energy sector. Furthermore, we expect wind and solar projects to represent a significant proportion of the company's new disbursements.

In addition, IREDA's loan book is also highly concentrated in certain Indian states. The high concentration risk also renders IREDA vulnerable to any policy changes, particularly around the pricing and purchase of renewable energy from the producers based in that state.

#### **Stable funding and liquidity, with long-tenured borrowings from multilateral agencies guaranteed by the Indian government**

IREDA has a diversified funding profile, with access to borrowings from bilateral and multilateral agencies that are mostly guaranteed by the Indian government. These borrowings accounted for about 53% of the company's total borrowings as of 31 March 2018. Masala bonds, taxable bonds and tax-free bonds in the domestic capital market represented 46% of the company's total borrowings as of 31 March 2018, while the remaining borrowings comprised funding from banks and other financial institutions.

As a result of these government guarantees, IREDA has a superior funding profile consisting of long-tenured borrowings that support its overall funding and liquidity structure. Of the company's total borrowings, 43% will mature in or after 2022.

In addition, IREDA had liquid assets of about 12% of its total assets as of the end of September 2018, which can provide support during unexpected short-term stress. The high amount of liquid assets relative to its peers, combined with a sizable amount of its liabilities maturing between five to seven years, resulted in the company having a strong 12-month coverage ratio of 167% as of 31 March 2018. However we expect a gradual moderation in the company's stock of liquid assets to about 3%-5% of its total assets, in line with the practice followed by other non-bank financial companies in India. IREDA's funds from operations as a percentage of total debt, which serves as an indicator of the company's ability to pay interest and meet debt maturities remains modest at 2.4% as of 31 March 2018.

#### **Government support, given IREDA's status as a key renewable energy agency**

Renewable energy is an important component of India's energy planning process. The MNRE aims to add 175 gigawatts to the country's renewable energy capacity by 2022, with a roadmap supported by policy and regulatory help for the sector. Furthermore, the RBI has included renewable energy financing in the priority-sector lending category.

IREDA is the nodal agency to route the government's various subsidies and grants to the renewable energy sector. The company is also the program administrator for MNRE schemes, such as the generation-based incentive scheme for wind and solar power projects, a rooftop solar power program and a capital subsidy scheme for solar water heating systems.

Because of this role, IREDA will likely continue to benefit from government support. This support was in the form of regular equity infusions until fiscal 2015, as well as guarantees for around 89% of the company's borrowings from multilateral agencies (these borrowings accounted for around 53% of its total borrowings as of 31 March 2018) and access to tax-free bonds (a low-cost funding source).

Furthermore, the government allocated INR3 billion to IREDA from the National Clean Energy Fund for on-lending to banks and financial institutions in the renewable energy sector. IREDA has also been mandated by the government in 2016 to raise INR40 billion in bonds, fully serviced by the Indian government to support various MNRE schemes, of which a total of INR16.4 billion was raised as of 31 March 2018.

### Operating environment

We assign a Ba2 score to IREDA's operating environment, based wholly on the industry risk of Indian power-sector lenders. (India's Macro Profile reflected in the Baa2 macro level does not have any weighing in the scorecard because this score is higher than the Industry Risk score.)

The operating environment score has no impact on IREDA's financial profile and results in a Ba3 adjusted financial profile, in line with the Ba3 score before the consideration of the operating environment.

### Macro-Level Indicator

IREDA's revenue is generated in India. The Baa2 Macro-level Indicator score reflects India's economic strength of High+, institutional strength of Moderate and susceptibility to event risk of Moderate -.

### Industry risk

We assign a Ba Industry Risk score for Indian power-sector lenders. Lending to this sector is largely concentrated with banks and a few non-bank financial institutions. The technical nature of lending, big ticket size and underdeveloped bond market for lending to projects that are in the construction phase have led to the concentration of exposures with a few companies.

Given the significant stress in the Indian power sector, lenders are selective in their lending decisions and command some pricing power because a large number of companies have pulled back from the sector.

The lending to the power sector follows domestic economic cycles. Furthermore, there are significant differences in the quality of the industry participants in terms of project planning and implementation. This combined with limited backup liquidity for many industry companies, tends to extend downturns because confidence sensitive funding can be slow to return to the sector. The weak credit quality of power distribution companies is another key challenge.

In line with the commitments under the Paris agreement, India plans to increase the share of green energy in the total energy mix. Furthermore, technological improvements have made the pricing of renewable energy comparable with conventional energy. In line with these developments, renewable energy accounts for a greater share of new projects under implementation compared with conventional energy sources. Based on the government's stated capacity addition targets by 2022, renewable energy will account for only about 20% of the country's power generation and the remaining will be produced from conventional sources.

Lending to the power sector is fairly niche; however, companies in this segment have a long track record, given they have existed for a long time. Indian power-sector lenders have a stable product offering, given that electrification of the country is a key policy agenda of the Indian government.

### Business profile and financial policy

We make no business profile and financial policy adjustments to IREDA's scorecard.

### Support and structural considerations

IREDA's Baa3 issuer rating is three notches above its BCA of ba3 and reflects our assessment of a high level of links between IREDA and the Indian government. The support assumption is based on our Government-Related Issuers methodology.

### About Moody's scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our Scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology

The methodologies used in this rating were Finance Companies rating methodology, published in December 2018, and Government-Related Issuers rating methodology, published in June 2018. Please see the Rating Methodologies page on [www.moodys.com](http://www.moodys.com) for a copy of these methodologies.

## Ratings

Exhibit 2

Category	Moody's Rating
INDIAN RENEWABLE ENERGY DEVELOP. AGENCY LTD.	
Outlook	Negative
Issuer Rating	Baa3
Senior Unsecured -Dom Curr	Baa3
Other Short Term	(P)P-3

Source: Moody's Investors Service

© 2019 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 INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. 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 MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS 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 AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS 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.

CREDIT RATINGS AND MOODY'S PUBLICATIONS 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 rating process or in preparing the Moody's publications.

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 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 OR 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 rating, agreed to pay to Moody's Investors Service, Inc. for ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody.com](http://www.moody.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

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 Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1150159



## Analyst Contacts

Alka Anbarasu <i>VP-Sr Credit Officer</i> alka.anbarasu@moodys.com	+65.6398.3712	Srikanth Vadlamani <i>VP-Sr Credit Officer</i> srikanth.vadlamani@moodys.com	+65.6398.8336
Jien Hoong Chew <i>Associate Analyst</i> jienhoong.chew@moodys.com	+65.6311.2649	Graeme Knowd <i>MD-Banking</i> graeme.knowd@moodys.com	+81.3.5408.4149

## CLIENT SERVICES

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