

Rating Action: Moody's assigns definitive Aa2 rating to NORD/LB Luxembourg S.A. Covered Bond Bank - Renewable Energy Covered Bonds

28 Jan 2020

Frankfurt am Main, January 28, 2020 -- Moody's Investors Service ("Moody's") has today assigned a definitive Aa2 long-term rating to the Renewable Energy Covered Bonds (Lettre de Gage énergies renouvelables or covered bonds) issued by NORD/LB Luxembourg S.A. Covered Bond Bank (the issuer), (deposits A3, stable; adjusted baseline credit assessment ba1; counterparty risk (CR) assessment A3(cr)), which are governed by the Luxembourg legal framework for covered bonds.

RATINGS RATIONALE

A covered bond benefits from: (1) the issuer's promise to pay interest and principal on the bonds; and (2) following a CB anchor event, the economic benefit of a collateral pool (the cover pool). The rating therefore reflects the following factors:

- (1) The credit strength of NORD/LB Luxembourg S.A. Covered Bond Bank (deposits A3, stable; adjusted baseline credit assessment ba1; counterparty risk (CR) assessment A3(cr)).
- (2) Following a CB anchor event the value of the cover pool. The stressed level of losses on the cover pool assets following a CB anchor event (cover pool losses) for this transaction is 34.1%.

Moody's considered the following factors in its analysis of the cover pool's value:

- a) The credit quality of the assets backing the covered bonds. The renewable energy covered bonds are backed by renewable energy project finance loans. The collateral score for the cover pool is 31.3%.
- b) The legal framework and the structure of the programme. Notable aspects of the legislation for the renewable energy covered bonds compared to the Luxembourg-law based public-sector covered bonds include a 12-month soft bullet maturity feature of the covered bonds.
- c) The exposure to market risk, which is 18.5% for this cover pool.
- d) The over-collateralisation (OC) in the cover pool is 19.4% of which NORD/LB Luxembourg S.A. Covered Bond Bank provides 2.0% on a "committed" basis (see Key Rating Assumptions/Factors, below).

The "timely payment indicator" (TPI) assigned to this transaction is Improbable. Moody's TPI framework does not constrain the rating of the covered bonds at its current level.

As per 31 August 2019, the total value of the assets included in the cover pool was approximately EUR 358.3million, comprising 25 renewable energy project loans. 20 of these projects are wind farms (85.6% of nominal value) and five are solar energy projects (14.4%). 61.3% of the total cover pool amount is backed by projects in Ireland, while the remainder is backed by projects in France, UK, Germany and Sweden.

KEY RATING ASSUMPTIONS/FACTORS

Moody's determines covered bond ratings using a two-step process: an expected loss analysis and a TPI framework analysis.

EXPECTED LOSS: Moody's uses its Covered Bond Model (COBOL) to determine a rating based on the expected loss on the bond. COBOL determines expected loss as: (1) a function of the probability that the issuer will cease making payments under the covered bonds (a CB anchor event); and (2) the stressed losses on the cover pool assets following a CB anchor event.

The CB anchor for this programme is CR assessment plus 1 notch.

The cover pool losses for NORD/LB Luxembourg S.A. Covered Bond Bank's renewable energy covered bonds are 34.1%. This is an estimate of the losses Moody's currently models following a CB anchor event. Moody's

splits cover pool losses between market risk of 18.5% and collateral risk of 15.6%. Market risk measures losses stemming from refinancing risk and risks related to interest-rate and currency mismatches (these losses may also include certain legal risks). Collateral risk measures losses resulting directly from cover pool assets' credit quality. Moody's derives collateral risk from the collateral score, which for this programme is currently 31.3%.

The over-collateralisation in the cover pool is 19.4%, of which NORD/LB Luxembourg S.A. Covered Bond Bank provides 2.0% on a "committed" basis. Under Moody's COBOL model, the minimum OC consistent with the Aa2 rating is 8.5%, of which the issuer provides 2.0% in "committed" form. These numbers show that Moody's is relying on "uncommitted" OC in its expected loss analysis.

For further details on cover pool losses, collateral risk, market risk, collateral score and TPI Leeway across covered bond programmes rated by Moody's please refer to "Covered Bonds Sector Update", published quarterly.

TPI FRAMEWORK: Moody's assigns a "timely payment indicator" (TPI), which measures the likelihood of timely payments to covered bondholders following a CB anchor event. The TPI framework limits the covered bond rating to a certain number of notches above the CB anchor.

RATING METHODOLOGY

The methodologies used in this rating were "Moody's Approach to Rating Covered Bonds" published in February 2019, and "Project Finance and Infrastructure Asset CDOs Methodology" published in December 2019. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

FACTORS THAT WOULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATING:

The CB anchor is the main determinant of a covered bond programme's rating robustness. A change in the level of the CB anchor could lead to an upgrade or downgrade of the covered bonds. The TPI Leeway measures the number of notches by which Moody's might lower the CB anchor before the rating agency downgrades the covered bonds because of TPI framework constraints.

Based on the current TPI of "Improbable", the TPI Leeway for this programme is one notch. This implies that Moody's might downgrade the covered bonds because of a TPI cap if it lowers the CB anchor by two notches all other variables being equal.

A multiple-notch downgrade of the covered bonds might occur in certain circumstances, such as: (1) a country ceiling or sovereign downgrade capping a covered bond rating or negatively affecting the CB Anchor and the TPI; (2) a multiple-notch downgrade of the CB Anchor; or (3) a material reduction of the value of the cover pool.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions of the disclosure form.

Moody's did not use any stress scenario simulations in its analysis.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

For any affected securities or rated entities receiving direct credit support from the primary entity(ies) of this credit rating action, and whose ratings may change as a result of this credit rating action, the associated

regulatory disclosures will be those of the guarantor entity. Exceptions to this approach exist for the following disclosures, if applicable to jurisdiction: Ancillary Services, Disclosure to rated entity, Disclosure from rated entity.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the ratings tab on the issuer/entity page on www.moodys.com for additional regulatory disclosures for each credit rating.

Martin Lenhard VP - Senior Credit Officer Structured Finance Group Moody's Deutschland GmbH An der Welle 5 Frankfurt am Main 60322 Germany JOURNALISTS: 44 20 7772 5456 Client Service: 44 20 7772 5454

Juan Pablo Soriano MD - Structured Finance Structured Finance Group JOURNALISTS: 44 20 7772 5456 Client Service: 44 20 7772 5454

Releasing Office: Moody's Deutschland GmbH An der Welle 5 Frankfurt am Main 60322 Germany JOURNALISTS: 44 20 7772 5456 Client Service: 44 20 7772 5454



© 2020 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/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S 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 BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE 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 INVESTORS SERVICE 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 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. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER

OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS 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 ITS 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its 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, 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 fees ranging from \$1,000 to approximately \$2,700,000. 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 Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.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 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 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 credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit 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.