MOODY'S INVESTORS SERVICE

ISSUER IN-DEPTH

26 June 2017

Rate this Research



TABLE OF CONTENTS

Summary Analysis	1
Summary Opinion	1
Transaction Summary	2
Strengths and Weaknesses	2
Organization	2
Use of Proceeds	3
Disclosure on the Use of Proceeds	4
Management of Proceeds	4
Ongoing Reporting and Disclosure	5
About Latvenergo AS	6
Moody's Green Bond Assessment	
(GBA)	6
Moody's Related Research	7

Contacts

Henry Shilling 212-553-1948
SVP-Env Social &
Governance
henry.shilling@moodys.com

Christian Hermann 212-553-2912
Associate Analyst
christian.hermann@moodys.com

Thomas Brigandi 212-553-2985
Associate Analyst
thomas.brigandi@moodys.com

Matthew Kuchtyak 212-553-6930
Associate Analyst
matthew.kuchtyak@moodys.com

Jim Hempstead 212-553-4318 MD-Utilities james.hempstead@moodys.com

Swami 212-553-7950 Venkataraman, CFA Senior Vice President

swami.venkat@moodys.com

Latvenergo AS

Green Bond Assessment

Summary Analysis









Summary Opinion

A GB1 (Excellent) grade is assigned to the green notes issued by <u>Latvenergo AS</u> (Baa2 stable), the largest power supply utility in the Baltics. The grade is supported by a well-defined organization and decision-making process focused on financing qualifying energy efficiency and environmental preservation projects, transparent management of proceeds, and effective reporting and disclosure practices, which reflect commitments to broaden impact disclosures in future reporting. Key considerations in our assessment include:

- » Latvenergo has implemented an internal system for approving eligible projects funded by green bonds, which aims ensure all projects adhere to best practices of corporate governance.
- » Allocations target categories that include renewable energy, energy efficiency and environmental preservation, while proceeds will not go towards nuclear or fossil fuel projects.
- » While individual projects were not cited at the time of the offering, the company published a thorough disclosures on use of proceeds, which detailed what percentage of funds has been allocated to particular projects.
- » An amount equal to net proceeds will be credited to a special account, where the balance will be held on deposit until all funds are disbursed. An internal audit unit at Latvenergo has conducted oversight.
- » Commitment to publish annual green bond reports as long as notes remain outstanding, and ultimately expand disclosures to include expected environmental outcomes and benefits.

THIS REPORT WAS REPUBLISHED ON 2 AUGUST 2017 WITH AN UPDATED EXHIBIT 1

actor	Factor Weights	Score	Weighted Score
Organization	15%	1	0.15
Use of Proceeds	40%	1	0.40
Disclosure on the Use of Proceeds	10%	1	0.10
Management of Proceeds	15%	1	0.15
Ongoing Reporting and Disclosure	20%	1	0.20
Weighted Score			1.00

The transaction's weighted score, using the green bond scorecard, is 1.0. This, in turn, corresponds to a GB1 grade.

Transaction Summary

Latvenergo is the first state-owned company in Eastern Europe to issue green bonds, which now represent about 49% of the company's total bonds outstanding. It has issued two tranches of senior unsecured green bonds in the form of notes pursuant to a second program for the issuance of notes in the combined amount of €100 million. These transactions include:

- » €75 million, 1.9% senior unsecured fixed-rate notes due 2022, which were issued on 10 June 2015
- » €25 million, 1.9% senior unsecured fixed rate notes due 2022, which were issued on 14 April 2016

The proceeds have been intended to finance and refinance, in whole or in part, eligible projects that target (a) mitigation of climate change, including investments in low-carbon and clean technologies, such as renewable energy and energy efficiency projects; (b) environmental preservation, including flood protection projects; and (c) projects related to a sustainable environment, that will account for up to 10% of the issued amount. The Green Bond Assessment was assigned as of 12 October 2016.

Strengths and Weaknesses

trengths	Weaknesses
Well-defined organization structure and decision making process for considering, evaluating and	
approving eligible projects.	
100% of the proceeds are allocated to qualifying environmental eligible projects.	
Latvenergo has committed to publishing annual reports and to continue publishing such disclosures as	
long as the notes are outstanding.	
An amount equal to the net proceeds derived from the issuances of the notes had been credited to a	
special account that was used to support the firm's financing of its eligible green projects.	
Latvenergo has disclosed the identity of individual projects funded, including project categories,	
operating segment, project name, status, project completion date as well as the financial allocation in	
EUR terms.	

Organization



Ahead of its green bond launch in June 2015, Latvenergo adopted a Green Bond Framework that sets forth a process for evaluating and selecting environmental projects; defining and enumerating eligible project categories and projects and procedures for earmarking proceeds derived from the bond offerings; and reporting practices. The framework was assessed by an external party, the Center for International Climate and Environmental Research, Oslo (CICERO).

Latvenergo has implemented a well-defined organizational structure and decision-making process for considering, evaluating and approving eligible projects. All expenditures and capital projects that are undertaken pursuant to Latvenergo's Green Bond

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.moodys.com for the most updated credit rating action information and rating history.

Framework are subject to approvals in line with its adoption of broader general best practices of corporate governance. These are intended to ensure accountability and operational efficiency pursuant to which capital investments and expenditures generally are approved according to Latvenergo's internal approval procedures that form part of its integrated management system. The integrated management and project management systems have been designed to comply with International Organization for Standardization (ISO) guidelines and are subject to external audits that are performed by externally certified institutions.

With regard to green bonds, the list of possible eligible projects initially is compiled by Latvenergo's business planning and control department. The projects are then reviewed and approved by the environment and occupational health and safety unit, consisting of environmental specialists and environmental engineers, following which the projects are reviewed by the treasury department. Final reviews are conducted, approved by the CFO. Such decisions are recorded and fully documented.

In terms of project selection, priorities at the macro level are given to projects contributing to Latvenergo's strategic goals as well as the European Union's commitments under the Paris Agreement. This calls for the EU's 28 member states, including <u>Latvia</u> (A3 stable), to achieve a binding target of reducing domestic greenhouse gas emissions by at least 40% by 2030 compared to 1990. Latvia's near-term goal of achieving an 8% reduction by 2020 relative to 1990 levels has already been met.

That said, while eligible projects categories and project types are set out in the Green Bond Framework, the criteria for qualifying such investments is more clearly articulated for internal decision-making rather than external disclosures.

In addition to the internal expertise provided by the professional staff of Latvenergo's environmental management unit, as well as the external capabilities derived from equipment manufacturers and contractors retained to implement eligible projects, Latvenergo teams up with independent organizations or scientists to conduct environmental research and impact studies.

Factor 1: Organization (15%)	Yes	No
Environmental governance and organization structure appear to be effective	•	
Policies and procedures enable rigorous review and decision making process	•	
Qualified and experienced personnel and/or reliance on qualified third parties	•	
Explicit and comprehensive criteria for investment selection, including measurable impact results	•	
External evaluations for decision making in line with project characteristics	•	
Factor Score	1	

Use of Proceeds



Latvenergo continues to gradually reconstruct the hydropower units at its three plants, Plavinas, Riga and Kegums, to replace outdated hydroelectric turbines and increase the installed capacity, efficiency rate and annual electricity output to ensure reliable, efficient, sustainable and competitive operation of the Daugava Hydro-Power Plants (HPPs). That will, in turn, ensure a more efficient use of water, as well as investments in transmission system assets, such as the Kurzeme Ring project.

Although allocations to individual projects may vary, 100% of the proceeds attributable to the combined transactions are expected to be allocated to project categories and projects that qualify under Latvenergo's Green Bond Framework and, in turn, eligible environmental project categories pursuant to widely accepted broad-based classifications. These include:

- » Renewable energy and energy efficiency (construction and reconstruction of transmission and distribution networks to decrease network losses and provide possibilities to connect renewable energy; smart grid projects)
- » Environment preservation (flood protection, waste and water management)

» Sustainable environment (may include environmental research and development and programs within nature conservation and biodiversity, up to 10% of proceeds)

Furthermore, green bond proceeds will not finance nuclear or fossil fuel projects. Latvenergo's stated intention was to allocate the majority of the green bond proceeds for financing of new projects and refinancing of eligible projects finalized within one year prior to the issue or later.

Factor 2: Use of Proceeds	Yes	No
>95% - 100% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.	•	
Factor Score	1	

Disclosure on the Use of Proceeds



Latvenergo has committed to publishing green bond annual reports.

The identity of individual projects funded was not disclosed at the time of the offerings, however, following both issuances of notes, the company published comprehensive reports detailing the allocation of proceeds covering the entire sum. The comprehensive reports were integrated in the company's Sustainability and Annual Report and are also posted on the company's website.

The report disclosed that about 66% of the proceeds were allocated to generation projects, including electricity generation and thermal energy as well as electricity supply and whole generation operations, 24.9% to transmission oriented projects and around 9% to distribution projects. More specifically, the report notes that the major eligible projects involved the Kurzeme Ring and Daugava HPP hydropower reconstruction project and details project categories, operating segment, project name, status, project completion date as well as the financial allocation in euro terms.

At the same time, the report provides a descriptive justification for each project's eligibility and potential results have been added in the 2016 Annual Report. That said, Latvanergo has committed to expanding its disclosures in the future

Factor 3: Disclosure on the Use of Proceeds	Yes	No
Description of green projects, including portfolio level descriptions, actual or intended	•	
Adequacy of funding and/or strategies to complete projects	•	
Quantitative and/or qualitative descriptions for targeted environmental results	•	
Methods and criteria, both quantitative and qualitative, for calculating performance against targeted environmental results	•	
Issuer relies on external assurances: Second Party reviews, audits and/or third party certfications	•	
Factor Score	1	

Management of Proceeds



As set out in Latvenergo's Green Bond Framework, an amount equal to the net proceeds derived from the issuances of the notes will be credited to a special account that will support the company's financing of its eligible green projects. As long as the notes remain

26 June 2017 Latvenergo AS: Green Bond Assessment

outstanding and the special account has a positive balance, at the end of every fiscal quarter funds will be deducted from the special account and added to Latvenergo's cash pool in an amount equal to all disbursements from that pool made during such quarter in respect to funding and/or refinancing of eligible projects.

Until fully disbursed, the special account balance will be held on deposit with SEB Bank in the form of liquidity reserves.

Furthermore, in January 2017, an independent internal audit unit within Latvenergo issued an opinion on compliance on the management of proceeds from the bond issue and the compliance of the selection of eligible projects within the Green Bond Framework. The audit unit's work complies with the International Standards for the Professional Practice of Internal Auditing, issued by the Institute of Internal Auditors, and whose activities are monitored by the Latvenergo's audit committee.

Factor 4: Management of Proceeds	Yes	No
Bond proceeds are segregated and separately tracked on an accounting basis or via a method by which proceeds are earmarked	•	
Application of proceeds is tracked by environmental category and project type	•	
Robust process for reconciling planned investments against actual allocations	•	
Clear eligibility rules for investment of cash balances	•	
Audit by external organization or independent internal audit unit	•	
Factor Score	1	

Ongoing Reporting and Disclosure



Latvenergo has committed to publishing annual reports and will continue to do so as long as the notes remain outstanding.

In line with its green bond reports already published, Latvenergo will disclose the identity of individual projects funded, including project types, operating segment, project name, status, project completion date and financial allocation in euro terms.

The company has committed to expand its disclosures in the future to include expected environmental outcomes and benefits, as well as quantified estimated benefits once the reconstruction projects have been completed, and expected environmental outcomes are reported in the 2016 Annual Report. Exhibit 1 shows the operating profile of the company.

Factor 5: Ongoing Reporting and Disclosure	Yes	No
Reporting and disclosure post issuance provides/to be provided detailed and timely status updates on projects	•	
Ongoing annual reporting is expected over the life of the bond	•	
Disclosures provide granular detail on the nature of the investments and their expected environmental impacts	•	
Reporting provides/to be provided a quantitative and/or qualitative assessment of the environmental impacts actually realized to- date	•	
Reporting includes/to include quantitative and/or qualitative explanation of how the realized environmental impacts compare to projections at the time the bonds were sold	•	
Factor Score	1	

26 June 2017

Exhibit 1
Latvenergo's generation, distribution and transmission capacity

Segment	Measure	Units
Generation	Installed Electrical Capacity (MW)	2,569
	Installed Thermal Energy Capacity (MW)	1,842
Distribution	Line Length (km)	93,813
	Transformer Capacity (MVA)	5,892
Transmission Line Length (km) Transformer Capacity (MVA)	5,237	
	Transformer Capacity (MVA)	8,950

Source: Latvenergo Group Sustainability and Annual Report 2016

About Latvenergo AS

Headquartered in Riga, Latvia, Latvenergo Group is the largest power supply utility in the Baltics, operating with three business segments. These include generation and supply, distribution, and lease of transmission system assets. Latvenergo Group is comprised of its parent company, Latvenergo AS, a public limited company incorporated in accordance with the laws of the Republic of Latvia, and seven subsidiaries. All shares in Latvenergo AS are owned by the Republic of Latvia.

Moody's Green Bond Assessment (GBA)

Moody's GBA represents a forward-looking, transaction-oriented opinion on the relative effectiveness of the issuer's approach to manage, administer and allocate assets to, and report on, environmental projects financed by proceeds from green bond offerings. GBAs are expressed using a five-point relative scale, ranging from GB1 (Excellent) to GB5 (Poor). A GBA does not constitute a credit rating.

26 June 2017

Moody's Related Research

Methodology:

» Green Bonds Assessment (GBA), March 30, 2016

Sector In-Depth:

- » Green Bonds Global: France's Sovereign Offering Propels Strong First-Quarter 2017 Issuance, April 20. 2017
- » Environmental Risks: Shift in US Climate Policy Would Not Stall Global Efforts to Reduce Carbon Emissions, February 16, 2017
- » Green Bonds Global: Record Year for Green Bonds Likely to Be Eclipsed Again in 2017, January 18, 2017
- » Environmental Risks Sovereigns: How Moody's Assesses the Physical Effects of Climate Change on Sovereign Issuers, November 7, 2016
- » Regional and Local Governments EMEA: Sub-sovereign green bond issuance has growth potential, September 21, 2016
- » Environmental Risks: Risks and Opportunities: What the Paris Agreement Means for Capital Markets, July 20, 2016
- » Cross Sector Global: Moody's Approach to Assessing the Credit Impacts of Environmental Risks, November 30, 2015
- » Environmental Risks: Heat Map Shows Wide Variations in Credit Impact Across Sectors, November 30, 2015
- » Environmental, Social and Governance (ESG) Risks Global: Moody's Approach to Assessing ESG Risks in Ratings and Research, September 8, 2015

Sector Comment:

- » US Utilities and Public Power: US Executive Order on Clean Power Plan Will Slow, But Not Halt, Transition Away From Coal, March 31, 2017
- » Green Bonds Global: Green Bond Principles (GBP) Are Updated and Expanded, August 31, 2016

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

26 June 2017

© 2017 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-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. 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 ON OT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS NOR 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.

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 SUCH 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 appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. 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.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. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

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 appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

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

REPORT NUMBER 1046429

