# 'Second Opinion' on Latvenergo's Green Bond framework

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#### **Summary**

Overall, Latvenergo's Green Bond framework and environmental policies provide a progressive, clear and sound framework for climate-friendly investments. The green bond framework lists eligible projects that are supportive of the objective of promoting a transition to low-carbon and climateresilient growth and is supported by a strong governance structure in Latvenergo. The framework explicitly excludes fossil fuel and nuclear investments. Strategies and plans that support an increased use of renewable energy sources and climate resilient growth (e.g. flood protection) in particular, and sustainable development in general, are well developed by Latvenergo both at a general and a more detailed level. Procedures for monitoring and measurement of activities are well documented. Latvenergo's policies support regular and transparent updates, including on examples of project achievements to investors and the public.

Based on an overall assessment of the project types that will be financed by the green bond, and governance and transparency considerations, Latvenergo's Green Bond Framework gets a dark green shading.

#### 1. Introduction and background

As an independent, not-for-profit, research institute, CICERO (Center for International Climate and Environmental Research - Oslo) provides second opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives. The second opinion is based on documentation of rules and frameworks provided by the institutions themselves (the client) and information gathered during meetings, teleconferences and e-mail correspondence with the client.

CICERO has established the global Expert Network on Second Opinions (ENSO), a network of independent non-profit research institutions on climate change and other environmental issues, to broaden the technical expertise and regional experience for second opinions. CICERO works confidentially with other members in the network to enhance the links to climate and environmental science, building upon the CICERO model for second opinions. In addition to CICERO, ENSO members include Basque Center for Climate Change (BC3), International Institute for Sustainable Development (IISD), Stockholm Environment Institute (SEI), and Tsinghua University's Institute of Energy, Environment and Economy. CICERO encourages the client to make this Second Opinion publically available. If any part of the Second Opinion is quoted, the full report must be made available.

CICERO's Second Opinions are normally restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO does not validate or certify the climate effects of single projects, and, thus, has no conflict of interest in regard to single projects. CICERO is neither responsible for how the framework or mechanisms are implemented and followed up by the institutions, nor for the outcome of investments in eligible projects.

This note provides a Second Opinion of Latvenergo's Green Bond Framework and policies for considering the environmental impacts of their projects. The aim is to assess Latvenergo's Green Bond Framework as to its ability to support Latvenergo's stated objective of low-carbon and climate resilient growth.

Climate change will have a significant impact on economic development, both from the perspectives of sustainable future development pathways and from the perspective of adapting to changing circumstances. The recently released Intergovernmental Panel on Climate Change report (IPCC, 2013) on the physical science of climate change highlighted the seriousness of human-induced climate effects. The report can be viewed as an immediate call to action on the challenge of reducing greenhouse gas (GHG) emissions. The 195 countries that have ratified the United Nations Framework Convention on Climate Change (UNFCCC) have agreed to reduce GHG emissions to limit global temperature increase to below 2°C above pre-industrial level. Reaching this target requires shifting development pathways towards low- or zero-emitting economies without delay, and avoiding locking-in high-emitting capital.

CICERO takes a long-term view on activities that support a low-carbon climate resilient society. In some cases, activities or technologies that reduce near-term emissions result in net emissions or prolonged use of high-emitting infrastructure in the long-run. CICERO strives to avoid locking-in of emissions through careful infrastructure investments, and moving towards low- or zero-emitting infrastructure in the long run. Proceeds from green bonds may be used for financing, including refinancing, new or existing green projects as defined under the mechanisms or framework. CICERO assesses in this second opinion the likeliness that the issuer's categories of projects will meet expectations for a low carbon and climate resilient future.

#### Expressing concerns with 'shades of green'

CICERO Second Opinions are graded dark green, medium green or light green, reflecting the climate and environmental ambitions of the bonds. The grading is based on a broad qualitative assessment of each project type, according to what extent it contributes to building a low-carbon and climate resilient society. This second opinion will allocate a 'shade of green' to the green bond framework of Latvenergo:

- Dark green for projects and solutions that are realizations today of the long-term vision of a low carbon and climate resilient future. Typically this will entail zero emission solutions and governance structures that integrate environmental concerns into all activities.
- Medium green for projects and solutions that represent steps towards the long-term vision, but are not quite there yet.
- Light green for projects and solutions that are environmentally friendly but do not by themselves represent or is part of the long-term vision (e.g. energy efficiency in fossil based processes).
- Brown for projects that are irrelevant or in opposition to the long-term vision of a low carbon and climate resilient future.

The project types that will be financed by the green bond primarily define the overall grading. However, governance and transparency considerations also factor in, as they can give an indication whether the institution that issues the green bond will be able to fulfil the climate and environmental ambitions of the investment framework.

# 2. Brief description of Latvenergo's Green Bond framework and environmental policies

Latvenergo is a state owned Latvian energy company. Latvenergo Group comprises the parent company Latvenergo and seven subsidiaries. All shares of Latvenergo are owned by the Republic of Latvia and held by the Ministry of Economics. The company's power plants provide approximately 70% of all electricity generated in Latvia, equal more than half of the electricity demand in Latvia. Latvenergo uses renewable energy sources such as hydropower, biomass and wind turbines in its energy generation, in addition to gas in its high efficient cogeneration in gas-fired power plants. In 2014, renewables accounted for 30% of the group's total consumption of energy resources, and 54 % of the total electricity output.

Latvenergo's investment framework includes a Green Bond framework lending to eligible projects that target mitigation of climate change, including investments in low-carbon and clean technologies, such as energy efficiency and renewable energy programs. Fossil fuel and nuclear projects are explicitly excluded.

Latvenergo's green bonds can be used to finance new projects and to refinance eligible Projects. The ambition is to use the majority of the green bond proceeds for financing new projects and refinancing of eligible projects finalized within one year prior to the issue or later.

This second opinion is based on documents received from Latvenergo listed in Table 1, and conversations and discussions with representatives from the company, including clarifications.

Table 1 Documents received from Latvenergo.
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Ref. nr.	File name		
1.	Latvenergo Green Bond Framework		
2.	Sustainability and Annual Report 2014		
3.	Corporate Social Responsibility Policy		
4.	Corporate Governance Report		
5.	Code of Ethics		
6.	Environmental Policy		
7.	Environmental Protection Law		
8.	Environmental Impact Assessment Law		
9.	Pollution Law		
10.	Water Management Law		
11.	Law on the Conservation of Species and Biotopes		
12.	Law on Specially Protected Nature Territories		
13.	Sustainable Development Strategy of Latvia until 2030		
14.	National Development Plan of Latvia for 2014-2020		
15.	Long-Term Energy Strategy of Latvia 2030		
16.	Latvenergo ISO 14001 Certificate		
17.	Latvenergo ISO 9001 Certificate		
18.	Latvenergo ISO 10006 Certificate		
19.	Latvenergo OHSAS 18001 Certificate		
20.	Statement and Technical Regulation for HPP dam reconstruction project		
21.	Environmental Impact Study of transmission line project		
22.	Environment Health and Safety Management Plan - HPP modernization project		
23.	Explanation of environmental documents and legislation_28 04 2015		

# **Selection of Eligible projects**

Latvenergo's environment department will together with the Treasury department analyse all current projects of the Latvenergo Group and recommend projects that comply with Eligible Project criteria and thus shall be financed from proceeds of the Green Bond. The quarterly list of the Eligible Projects will be approved by Latvenergo's Chief Financial Officer.

### **Transparency**

To enable investors to follow the development and provide insight to prioritised areas, Latvenergo will provide an annual report that will be published on Latvenergo's web page.

# 3. Assessment of Latvenergo's Green Bond framework and environmental policies

# **Governance capacity and structure**

Latvenergo documents through their environmental policies and strategies, the ISO 14001 certifications and environmental manuals, and its reporting and planning documents, that the company has a solid governance capacity for selecting and carrying out projects under the green bond framework. Implementation of projects is supervised by environmental specialists systematically, including technical documentation and subcontractors' onsite activities.

### **Eligible projects under the Green Bond framework**

The eligible projects listed in the Green Bonds framework are supportive of Latvenergo's identified objective of promoting a transition to low-carbon and climate-resilient growth. Eligible Projects include 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) to a smaller extent (max 10%) projects related to a sustainable environment.

Eligible project types		Likelihood of meeting objective
Renewable energy	Hydro	Dark Green.
	Bio energy (non-food)	Consider life cycle emissions, and avoid negative impacts on biodiversity in new projects.
	Wind	
Energy efficiency	Construction and reconstruction of transmission and distribution networks	Dark Green Consider potential lock-in of obsolete technologies.
	Smart grid projects	Smart grid technologies fit well with a power system where small- scale renewables have a large share. Should lead to less emissions through more efficient power production and consumption.
Environment     preservation	Flood protection	Dark Green
	Waste management	Consider life cycle emissions and avoid negative impacts on biodiversity.
	Water management	Water management is important given future climate change scenarios and expected regional water shortages.
Sustainable		• Dark Green.
<b>environment</b> (max 10% of issued amount)	Environmental research and development within nature conservation and biodiversity programs	More knowledge on problems and solutions addressed would be preferable.

#### Table 2. Likelihood of meeting objectives of a low carbon and climate resilient future.

#### **Strengths**

A strong emphasis on environmental aspects, including climate impacts, of investment decisions is well integrated in the company profile and its activities. The green bond framework and strategy fits well into this picture. It is a strength that several ambitious national energy and environmental plans and strategies guide Latvenergo Group in its operations. The 2030 energy strategy focuses on the use of renewables in transport and in electricity and heat production. Latvia aims at reaching 40% of energy

generated from renewable energy sources by 2020. The aim is to reduce energy import (e.g. fossil fuel, natural gas) and to promote the development of local energy production. By implementing support for renewables based on market principles and appropriate taxation and emissions trading policies, an increased renewable target of 50% could be achieved by 2030.

Latvenergo is an ISO 14001 (environmental management) certified company, and takes part in the Latvian Sustainability Index that is internationally recognized. 2014 was the second year in a row that Latvenergo received the Platinum (highest) category from this Sustainability Index. Latvenergo received 100% evaluation for Environmental Management. Latvenergo Group also received the 2014 Green Frog Award from Deloitte auditing company for a high quality Sustainability Report.

We recommend excluding projects that support prolonged use of fossil fuel-based infrastructure that will contribute to GHGs in the long run. Latvenergo's framework that explicitly says that fossil fuels projects are not eligible for green bond financing is therefore in line with our long-term view on climate change.

The company has informed us that wood based boilers in combined heath and power plants (CHP) are the most likely projects to be eligible under the category "bio-energy (non-food)". It is a particular strength that Latvenergo only uses local wood in its energy production. There will be no need for imports. Local wood is widely used in Latvia (mostly in small and medium combustion plants). The Latvian government aims at further increasing the use of wood in the energy sector.

The company has informed CICERO that, eligible projects under the "Environment Preservation" category mainly relate to flood protection. Possible waste management projects will not be related to fossil fuels and will aim to improve industrial waste management in the company. Waste incineration projects will not fall under this category.

The category "Sustainable environment" includes research and development projects which are used to evaluate and plan further activities to reduce the company's environmental impacts in fields such as biodiversity, energy efficiency, renewables, waste management, water management and waste water treatment. It is a strength that the framework allows for projects that aims at improving impact knowledge of the company's activities.

Latvenergo has good procedures in place for the selection of projects. Latvenergo's environment department will together with the Treasury department analyse all current projects of the Latvenergo Group and recommend projects that comply with Eligible Project criteria and thus shall be financed from proceeds of the Green Bond. The quarterly list of the Eligible Projects will be approved by

Latvenergo's Chief Financial Officer. It's a strength that the environment department is represented in the selection process.

Latvenergo evaluate environmental risks for each project that are considered for financing under the green bond framework. Environmental impact and requirements are evaluated and supervised at all stages of the project development, including supervision of sub contractors.

#### Weaknesses

We find no weaknesses in Latvenergo's Green Bonds Framework.

#### **Pitfalls**

Beyond the consideration of specific project types, it is important to evaluate the potential for macrolevel impacts of climate activities.

Construction and reconstruction of transmission and distribution networks are eligible under the green bond framework. These projects are important in order to build a well functioning energy system. The aim of such investments is to decrease network losses and provide possibilities to connect renewable energy. It is however important to consider potential lock-in of obsolete technologies.

#### Impacts beyond the project boundary

Due to the complexity of how socio-economic activities impact the climate a specific project is likely to have interactions with the broader community beyond the project borders. These interactions may or may not be environmentally friendly, and thus need to be considered with regards to the net environmental impacts of investments. Life-cycle perspectives and supply chain considerations are helpful in that regard.

#### **Rebound effects**

Another macro-level concern is the potential for rebound effects. This can occur when emission reductions result in a net increase in emitting activities. For example, energy efficiency improvements that lower energy costs, inducing more energy use and partially offsetting energy savings. This can have the end result of lower reduction in emissions than anticipated. While these effects can never be entirely avoided, it is recommended to be aware of possible rebound effects and avoid investing in projects where the risk of such effects is particularly high. We cannot see that the risk for substantial rebound effects is high in the case of Latvenergo's Green Bond framework.

# Transparency and monitoring, reporting and verification

The reporting and validation procedures are described well in the Green Bond framework and other documents. Latvenergo's policies support regular and transparent updates to investors and the public. Latvenergo Group will annually issue a Green Bond report including a list of the projects financed from Green Bond proceeds, as well as examples of project achievements in the priority areas set in the Green Bond Framework. This report will be available on the web. Project achievements will be evaluated according to procedures included in Environmental Management and Project Management Systems certified by DNV. Cicero encourages the development of and use of independent verification of Green Bond projects.

# References

IPCC (2013). Climate Change 2013: The Physical Science Basis, Fifth Assessment Report, Intergovernmental Panel on Climate Change.