

‘Second Opinion’ on Altum’s Green Bond Framework

29 September 2017

Summary

Overall, Altum's Green Bond Framework provides a clear and sound framework for climate-friendly investments. The framework lists eligible categories of assets that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a strong governance structure. As Altum is administering and implementing state aid programs decided by the Latvian cabinet, Altum has no separate strategic plan or targets for promoting a transition to a low carbon society.

Altum's Green Bond Framework lists renewable energy projects and projects related to environmentally friendly (non-fossil based) transport and these projects are clearly aligned with a long-term zero emission future vision. District heating, green buildings and a broad set of energy efficiency or recovery projects are also included among eligible projects, all contribute to a low carbon future although part of these assets may not be applicable to the long term zero emission solution. Proceeds from Altum's green bonds will not be used to finance any fossil fuel or nuclear power projects. Management of proceeds and reporting are of high standards and includes intentions of impact reporting. CICERO is encouraged by this. Overall, Altum's Green Bond Framework is in accordance with the Green Bond Principles.

Based on the overall assessment of the assets and project types that will be financed by the Altum's Green Bond and governance and transparency considerations, Altum's Green Bond Framework gets a Medium Green shading. Investments in district heating, energy recovery and –efficiency projects are good, but not all assets involved may be part of a long-term zero emission future. Efficiency projects should not lead to prolonged life for technologies not compatible with zero carbon emission. Stricter standards for long lasting assets like buildings would have been required for a darker shading. Furthermore, considerations of life cycle concerns and supply chain impacts in addition to more comprehensive impact reporting would enhance the environmental ambitions of the framework.



°CICERO
Medium Green

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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 is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. 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 currently 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. A more detailed description of CICERO can be found at the end of this report. ENSO 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 the outcome of investments in eligible projects.

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

This Second Opinion is based on the green bond framework presented to CICERO by the issuer. Any amendments or updates to the framework require that CICERO undertake a new assessment. 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 and the robustness of the governance structure of the Green Bond

Framework. 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 Altum:

- **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 Altum's Green Bond Framework and rules and procedures for climate-related activities

Altum is a Latvian state-owned development finance institution, which offers state aid for various target groups with the help of financial tools (such as loans, credit guarantees, investing in venture capital funds, etc.). Altum develops and implements state aid programs to compensate for the market's shortcomings that cannot be solved by private financial institutions.

State aid programs administered by Altum, are implemented with public resources – European Union, national and other international institutions and Altum's own financing. Altum's shareholders consist of the Republic of Latvia's Ministry of Finance (40%), the Ministry of Economics (30%) and the Ministry of Agriculture (30%). The leadership of the company is organized according to best practices of corporate governance in accordance with the Development Finance Institution Law, Law on Governance of Capital Shares of a Public Person and Capital Companies, the Commercial Law, the Cabinet Regulations regarding Altum Advisory Council and other binding normative acts. Altum's statutes are approved by the Cabinet of Ministers of the Republic of Latvia.

As Altum is administering and implementing state aid programs decided by the cabinet, Altum has no separate strategic plan or targets for promoting a transition to a low carbon society.

Definition: Eligible Projects are specifically selected loans to Latvian clients funded, in whole or in part, by Altum with the purpose of promoting the transition to low carbon and sustainable development in accordance with the Latvian long term national policies and strategies in the energy sector. Eligible Projects will be financed in accordance with amended Cabinet of Ministers Regulation No.1065, 2009 (see document no. 2 in table 1). The amendment specifies that financing from Altum in the form of loans is available to viable business projects in the field of energy efficiency, renewable energy and carbon reduction measures.

Altum's Green Bonds will not finance nuclear power or fossil-fuel energy related generation projects. Altum's Green Bonds can be used to finance new projects and, occasionally, to refinance Green Projects in accordance with the Green Bonds Framework. The share of proceeds from Altum's Green Bonds that are allocated to new projects and to completed projects respectively at the time of approval will be reported upon in the annual Investor Letter.

Selection: Green Projects will be evaluated according to:

- a) Altum's Creditworthiness appraisal methodology for Business loans,
- b) the Green Bonds Framework and
- c) the related legislation.

Potential Green Projects will be selected and approved in consensus by the Loan and Guarantee Department and the Energy Efficiency Programme Department. Only projects where there is a high likelihood that the net, long-term environmental effects are positive will be approved. Employees in Energy Efficiency Programme department (EEPD) has broad capacity and competence in energy efficiency related areas. When EEPD employees lack adequate competence, Altum will insource that competence, e.g. from The State Environmental Service; Department of Environmental Science (University of Latvia, Faculty of Geography and Earth Sciences).

If, for any reason, a Green Project ceases to meet the environmental criteria on the basis of which it was approved, the Project will be removed from pool of Eligible Projects for financing from Altum's Green Bonds.

Management of proceeds: The net proceeds from the issue of Green Bonds shall be credited to a separate account with the purpose to finance Eligible Projects as defined above. As long as Green Bonds are outstanding and proceeds from issues are available on a separate account, Altum shall, at the end of every fiscal quarter, deduct funds from the separate account in an amount equal to disbursements to Eligible Projects made during such quarter. Until disbursement to Eligible Projects, the separate account balance will be placed as part of the liquidity reserve.

Transparency and Accountability: To enable investors to follow the development of Altum's Green Bonds and to get insight into prioritized areas, Altum will provide an annual Investor Letter including:

1. a list of financed Eligible Projects including a brief description and expected impact,
2. a selection of project examples with impact reporting,
3. the share allocated to new projects and to completed projects respectively, and
4. a summary of Altum's Green Bond development.

Altum encourages and promotes the use of impact reporting. Renewable energy projects will report on added renewable energy capacity. Energy efficiency projects will provide data on the percentage improvement in energy efficiency or how much energy that will be saved by the project. When it comes to buildings, Altum will always state that a particular building has energy consumption lower (kwh) than national regulation requirements. Some projects can be of a nature where it can be difficult to add quantitative or qualitative reporting.

The internal tracking method and the allocation of funds from the Green Bond proceeds will be verified by Altum's Internal Audit Department or an external third party appointed by Altum with the relevant expertise and experience. The Investor Letter and the opinion of the Internal Audit Department or external third party will be made publically available on Altum's web page. Green Bonds Framework and Second Opinion from CICERO – Center for International Climate Research (this document) will be made available on Altum's web page.

The table below lists the documents that formed the basis for this Second Opinion:

Document Number	Document Name	Description
1	Altum Green Bond Framework	The Green Bond Framework dated September 27, 2017
2	National Regulations Regarding Loans for Promoting the Development of Micro, Small and Medium Sized Merchants and Agricultural Service Co-operative Societies" (Cabinet Regulation No.1065,15.09.2009, with amendments 26.09.2017)	The regulation No.1065 prescribes the conditions for granting aid in the form of a loan by Altum, in order to promote the development of SMEs.

3	Development Finance Institution Law.	The law specifies the organizational structure, administration, financial management of Altum, its procedure for the development, approval, implementation and monitoring of programs. Among other things, the Law regulates that Altum shall implement programs that are approved by Cabinet of Ministers in the following fields and for the following purposes: <ul style="list-style-type: none"> a) development of the State and municipal infrastructure; b) environmental protection; c) development of a business infrastructure; d) innovation and the development of technologies; e) development of agriculture, processing of agricultural products, rural areas, fisheries and forestry;
4	Latvian energy long term strategy 2030 - Competitive energy for society.	Includes quantitative targets for Latvia in the fields of energy and climate change.
5	Guidelines for Energy Sector Development 2016-2020 (Cabinet Order No129, 09.02.2016)	Describing the main tasks and main actions to achieve the energy sector targets. For some examples, see documents 6-8.
6	Electro mobility Development Plan 2014-2016 (Cabinet Order No129, 26.03.2014)	
7	Riga City Sustainable Energy Action Plan for smart city 2014-2020.	
8	National regulation for energy efficiency in new buildings (Cabinet Regulation No383, annex 5, 09.07.2013).	

Table 1. Documents reviewed.

3 Assessment of Altum’s Green Bond framework and environmental policies

Overall, the Altum green bond framework provides a detailed and sound framework for climate-friendly investments.

In this section, the framework and procedures for Altum’s green bond investments are assessed and their strengths and weaknesses are discussed. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects, whereas the weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

Eligible projects under the Green Bond Framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide certainty to investors that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Renewable energy	<ul style="list-style-type: none"> Wind, solar and bio-energy (only a minor part) as well as related infrastructure. Sources for bio-energy will be short rotation forestry, energy crops, wood wastes, agricultural residues, sewage sludge, industrial residues and municipal bio-degradable waste that are sourced near region (up to 300 km). Allocations from the Green Bond proceeds to bioenergy are restricted to a maximum of 20 per cent of the total allocation to renewable energy projects. 	<p>Dark Green. Consider negative impacts on wildlife and biodiversity. Beware of problems with local air pollution from bio-energy combustion.</p>
Energy efficiency	<ul style="list-style-type: none"> District heating technologies based on renewable energy and related infrastructure; Energy recovery projects; Investments in non-fossil technologies and processes, together with the manufacturing of products, in each case leading to energy efficiency gains of at least 25 per cent; 	<p>Medium-Dark Green. Investments in district heating, energy recovery and –efficiency projects are good, but not all assets involved may be part of a long-term zero emission future.</p>

	<ul style="list-style-type: none"> Investments in non-fossil energy consumption reduction projects, in each case leading to energy efficiency gains of at least 25 per cent; Minor renovations of commercial or residential buildings leading to reduced energy use per year on a m² basis of at least 25 per cent. 	Efficiency projects should not lead to prolonged life for technologies not compatible with zero carbon emission (lock-in). Also, be aware of possible rebound effects.
Green buildings	<ul style="list-style-type: none"> Commercial or residential buildings with an energy use per year on a m² basis of nearly zero (nearly zero energy building) or at least 25 per cent lower than that required by applicable national regulations at the time of approval by the Altum (according to Cabinet of Ministers Regulation No.383, 2013); Major renovations of commercial or residential buildings leading to reduced energy use per year on a m² basis of at least 35 per cent. 	Medium Green. The reduction targets are good, but not the very best. Avoid prolonging life times for long-lived installations not compatible with zero carbon emission.
Sustainable transportation	Transportation solutions/systems based on non-fossil fuel and supporting infrastructure.	Dark Green.

Table 2. Eligible project categories

Altum's Green Bonds can be used to finance new projects and to refinance Green Projects in accordance with the Green Bonds Framework. The share of proceeds from Altum's Green Bonds that are allocation to new projects and to refinancing respectively will be reported upon in the annual Investor Letter.

Strengths

Use of proceeds

The Green Bond framework includes a comprehensive list of project and asset categories that are important for low-carbon and climate change resilient growth. CICERO takes a long-term view on climate change, and thus recommends excluding projects that support prolonged use of fossil fuel-based infrastructure that will contribute to greenhouse gas emissions in the long run. Altum's exclusion of fossil fuel projects is a clear strength in this perspective. CICERO also welcome the quantitative targets set in the Framework as well as the underlying policy documents.

The inclusion of renewable energy projects is a strong point, but care must be taken with the wide range of bio-fuels considered. Although restricted to be no more than 20 per cent of total allocations to renewable projects, negative impact on biodiversity and other environmental aspects should be carefully considered and avoided.

Energy efficiency projects are good, but in particular energy recovery projects may lead to lock-in of fossil fuel based equipment.

Also, in a low carbon 2050 perspective the energy performance of buildings is of particular importance. Passive or plus house technologies should become mainstream and the energy performance of existing buildings should be greatly improved through refurbishments. Altum is not quite there yet, but is through its focus on energy efficiency and green buildings taking important steps towards this long-term vision.

Process for Project evaluation and Selection

As mentioned, potential Green Projects will be selected and approved in consensus by the Loan and Guarantee Department and the Energy Efficiency Programme Department. It is important that that these bodies combined have the required environmental competence or seek expert advice in order to make judgement on complex issues like bioenergy. Altum commits to insource required competence, e.g. from The State Environmental Service; Department of Environmental Science (University of Latvia, Faculty of Geography and Earth Sciences) when the Energy Efficiency Programme department (EPPD) lack adequate competence. Given this, CICERO finds that Altum has a good structure for approval of projects and assets in place. However, a dark green shading would require systematic considerations of life cycle concerns and supply chain impacts.

Management of Proceeds

CICERO finds the management of proceeds to be good and in accordance with the Green Bond Principles.

Reporting

Altum encourages and promotes the use of impact reporting and will provide that when feasible. The internal tracking method and the allocation of funds from the Green Bond proceeds will be verified by Altum's Internal Audit Department or an external third party appointed by Altum with the relevant expertise and experience. The Investor Letter and the opinion of the Internal Audit Department or external third party will be made publically available on Altum's web page.

CICERO welcome the transparency and comprehensiveness of the reporting and especially welcome the intention of providing impact reporting of the green investments.

Weaknesses

CICERO find no obvious weaknesses in Altum's Green Bond framework.

Pitfalls

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 climate-friendly, and thus need to be considered with regards to the net impact of climate-related investments.

Rebound effects

Efficiency improvements may lead to rebound effects. When the cost of an activity is reduced there will be incentives to do more of the same activity. From the project categories in Table 2, an example is energy recovery and energy efficiency projects. Altum should be aware of such effects and possibly avoid Green Bond funding of projects where the risk of rebound effects is particularly high.

Appendix: About CICERO

CICERO Center for International Climate Research is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen inter-national climate cooperation. We collaborate with top researchers from around the world and publish in recognized international journals, reports, books and periodicals. CICERO has garnered particular attention for its work on the effects of manmade emissions on the climate and the formulation of inter-national agreements and has played an active role in the UN's IPCC since 1995.

CICERO is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO received a Green Bond Award from Climate Bonds Initiative for being the biggest second opinion provider in 2016 and from Environmental Finance for being the best external review provider (2017).

CICERO Second Opinions are graded dark green, medium green and light green to offer investors better insight in the environmental quality of green bonds. The shading, introduced in spring 2015, reflects the climate and environmental ambitions of the bonds in the light of the transition to a low-carbon society.

CICERO works with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions. Led by CICERO, ENSO is comprised of trusted research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD). ENSO operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

cicero.oslo.no/greenbonds

