



Auga Group AB

Green Bond Second Opinion

November 27 2019

Auga Group AB (“Auga”) is a vertically integrated organic food company based in Lithuania. It is one of Europe’s largest organic food producers and went through a conversion from traditional to organic farming during the period 2015-18.

The agriculture sector has important linkages to climate change both in terms of mitigation and adaptation and organic farming has several environmental benefits. These benefits include reduced (no) use of fertilisers and pesticides, which in turn tends to improve soil health (reduced erosion, greater carbon and water retention), and greater biodiversity. Moreover, the relationship between organic farming and GHG emissions on a per hectare basis is clear, even if the implications as a result of increased land-use are still being debated in the scientific community.

The issuer shows an ambition to be a sustainability leader in the field of organic farming. Given the importance of the land use sector for climate change, and the changes in agricultural practices which will be required, we welcome the company’s leadership and enthusiasm. Auga’s ambition of running machinery on self-produced biogas and the commitment to reducing GHG emissions from bovine operations are examples of the company’s innovative green initiatives that this green bond framework will enable the funding of.

Eligible project categories consist of investments in low-impact agricultural practices. They include closed-loop organic farming (where synergies among different parts of agricultural operations are harnessed with an end-goal of a fully functioning circular economy model) and minimum tillage technology (where only the top layer of the soil is tilled, resulting in benefits such as lower levels of soil erosion, increased biodiversity and reduction in fuel consumption (of the tilling machinery).

To improve, the issuer should think more specifically about robust impact measures for the eligible project categories. We encourage the issuer to do so well in advance of its first impact report. We also encourage the company to publish the full methodology of any GHG emission reduction calculation, and to ensure its selection procedures (use of Selection Committee vs Board) are streamlined and robust.

Based on the assessment of project categories and governance policies, and the planned split between (non-screened) refinancing and the financing of new initiatives, Auga receives an overall **Medium Green** shading and a governance score of **Good**.

SHADES OF GREEN

Based on our review, we rate Auga’s green bond framework **CICERO Medium Green**.

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in Auga’s framework to be **Good**



GREEN BOND PRINCIPLES

The green bond framework is in line with the stated definition of green bonds within the Green Bond Principles. Investors should, however, be aware that Auga’s Green Bond Framework is intended for financing new initiatives as well as existing debt. For the existing debt, no screening will be applied. Auga’s green bond framework thus permits proceeds to be used for general corporate purposes. Hence the framework is not fully aligned with all four components of the Green Bond Principles and may include funding of fossil fuel machinery.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of Auga Group AB's (henceforth "Auga") Green Bond Framework dated **October 2019**. This second opinion remains relevant to all green bonds issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the issuer's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence with the issuer. Second opinions are restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO Green is not responsible for an institution's implementation of a framework, nor does it guarantee or certify the climate effects of investments in eligible projects.

Expressing concerns with 'Shades of Green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions of the green funding. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of issuer's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the green funding framework. CICERO Green considers four factors in its review of an issuer's governance processes: 1) the policies and goals of relevance to the green funding framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent.



2 Brief description of Auga's green bond framework and related policies

Auga Group AB ("Auga") is a vertically integrated organic food company based in Lithuania. It is one of Europe's largest organic food producer and manages approximately 38,000 ha of organically certified arable land. The company went through a conversion from traditional to organic farming during the period 2015-18.

Auga Group has four business lines:

- Mushroom growing
- Crop growing
- Dairy and poultry, and;
- End-user products (such as soups and tinned products)

The Auga Group has approximately 1,200 employees and 136 legal entities. It exports to more than 30 markets and consolidated revenues of the Group in 2018 was around EUR 55 million. The company's shares are listed on the Nasdaq Vilnius and Warsaw stock exchanges.

Environmental Strategies and Policies:

Auga has as its long-term objective to have a neutral CO₂ footprint throughout its core business segments. The company monitors and publishes its GHG emissions (indirect (upstream) and direct (on-farm)). In 2018, the total GHG emissions of the group were 63,957 t CO₂ eq. By far the three largest sources of GHG emissions are on-farm fossil fuel use (33 % in 2018), emissions from the soil (32 %) and enteric fermentation (26 %). The group uses guidance from the IPCC, ISO and WBCSD to calculate its GHG emissions.

Auga has several ongoing strategic projects to increase the level of sustainability of its operations. They include:

- Introduction of biogas to the Group's agricultural operations: This initiative includes extraction of waste and byproducts from its own operations (e.g., manure), conversion of the byproducts into biomethane, and running own-designed agricultural machinery on the self-processed (purified) biogas. The organic waste (digestate) left after the biogas production can be used as a fertiliser for the fields increasing soil productivity.
- Establishment of specialised feed technology, with an aim to reduce methane emissions from bovine enteric fermentation (one of the largest sources of GHG emissions from agriculture).
- Improvement of crop rotation in relation to carbon sequestration and nitrogen accumulation capabilities through the use of leguminous perennial grasses (alfalfa, clover, etc.)
- Other farming technologies demonstrating GHG reduction and circular economy potential

The company has received several awards in relation to its sustainability work, including the EBRD "Sustainable Energy Gold Award" 2019 and Stockholm School of Economics (SSE) Riga Environmentally Sustainable Development 2019 award.

Auga runs all its production and administrative facilities on certified green electric power. Apart from some on-farm solar PV, the electricity (99 %) is purchased.



Use of proceeds:

The Company will use the proceeds of the bonds issued under this Green Bond Framework for the following purposes:

1. Working capital and general corporate purposes related with the ongoing sustainability initiatives of the Company (closed-loop organic farming; mill-till (reduced impact tillage) technology and renewable energy); This will in practice include refinancing the costs incurred in the process of converting from traditional to organic agriculture in the period after 2015; and
2. Financing R&D projects related to improving sustainability, including biogas, specialised feed, and crop rotation practices.

Both new investments and refinancing of old investments (partial repayment of existing bank debt, payment of outstanding amounts of agricultural land acquisitions and other working capital purposes) are eligible.

Selection:

For refinancing, there will be no 'selection' as such: partial repayments of existing debt incurred in the process of acquiring land and converting to organic farming will take place without screening.

The remainder of the proceeds left after the partial repayment of existing debt will be transferred to a newly created bank account. The newly created bank account will adhere to the negative screening principle, whereby the funds available will either be used to cover supplier costs (excluding all direct payments for fossil fuels and similar direct expense category) or financing new green projects.

A Selection Committee will be created in the company with the following composition: CEO, CFO, Head of Business Development and Innovation, Head of Legal, Head of Quality and Environmental Specialist. Other responsible persons will be included, if necessary. The Selection Committee will be responsible for both negative screening guidance and selection of the green projects. Should the volume and size of the projects to be considered so merit, selection will be carried out by the Board of Auga.. At the selection and approval stage the expected impact of the innovation projects shall be evaluated, including, but not solely focusing on the GHG emission reduction potential along with additional positive externalities to the animal welfare, business efficiency, consumer health, recyclability and circularity (closed-loop) considerations.

Management of proceeds:

Proceeds to be used for future financing of the green projects shall be placed in one or several separate bank accounts dedicated for the purpose to ensure traceability and transparency. Starting with the first tranche of the Bonds dedicated for future green project financing, the Company will establish internal tracking systems to monitor and account for the allocation of such proceeds. Prior to further issue/-s of tranches, the Company will adopt a liquidity policy (Company's conduct with short term money market instruments).



Reporting:

The Company will publish a Green Bond report on its website at least annually. The first such report will be made available within 14 months of the settlement of the first tranche of the Bonds. Such reports shall, amongst other matters, include (when relevant) a description of eligible projects, their expected impact, total amount of investments and expenditures of eligible projects, as well as the balance of unallocated proceeds.

The issuer will disclose direct and indirect abatement of GHG emissions (in tonnes of CO₂) in relation to respective projects when feasible. The issuer has also suggested that it will report on biodiversity, erosion reduction, improved animal welfare and similar measures when relevant.



3 Assessment of Auga’s green bond framework and policies



The framework and procedures for Auga green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; 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.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Auga’s green bond framework, we rate the framework **CICERO Medium Green**.

Eligible projects under the Auga 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 fundings aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bond Principles (GBP) require that projects should have clear environmental benefits, and that project selection should be well defined.

Category	Eligible project types	Green Shading and some concerns
Sustainable Agriculture  	<ul style="list-style-type: none"> Closed-loop organic farming: Synergies among different parts of agricultural operations are harnessed with an end-goal of a fully functioning circular economy model. Minimum tillage technology. This technology is currently applied to 85%¹ of the company’s total cultivated land. 	Light to Medium Green Auga is an organic farming company subject to standards through the EU Organic Scheme. Organic farming and the eligible project categories of the framework have many positive environmental features, however the variety of different goals of organic farming (health, animal welfare, environment, climate) is too complex to allow an overarching scientific statement on the benefits of organic versus conventional farming.

¹ Currently expected to be higher in 2019



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- Research and development related to specialised feed technology, with an aim to reduce methane emissions from bovine enteric fermentation
 - Research and development related to improvement of crop rotation for carbon sequestration and nitrogen accumulation purposes
- ✓ Among the main sources of greenhouse gas emissions in agriculture are land use change (esp. forests, wetlands) for cultivating new areas, emissions from cattle and the use of some types of artificial fertilizer (both from production and use). The use of fossil fuels in machinery is another, albeit smaller source of emissions.
 - ✓ No new fossil fuel equipment, e.g., agricultural machinery, can be purchased under this category.
 - ✓ Closed-loop agricultural operations is forward-looking and in line with resilient and resource-efficient production methods
 - ✓ Minimum tillage technology involves disturbing only the first 5-7 cm of soil and results in a number of sustainability benefits (prevention of soil erosion, increase in biodiversity and reduction in fuel consumption (of the tilling machinery)).
 - ✓ The issuer has clarified that the land acquired for organic farming was previously used for agricultural purposes and not converted from other uses.
 - ✓ The issuer will apply these criteria for all new financing. However, some of the proceeds will go towards re-financing existing debt and the issuer does not have a practical way of separating out the purely 'green' components of the existing debt. Investors should therefore be aware that proceeds may be applied towards non-green past uses, including the cost of buying fossil fuels to be used in operations, and other working capital.
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Green Energy



- Eligible categories consist of expenditures on purchased green electricity from the grid, expenditures related to on-site solar PV, as well as research initiatives related to biogas production

Dark to Medium Green

- ✓ Currently, Auga’s electricity consumption is 99% purchased electricity from the grid. The purchase of certified green energy is positive, but falls short of guaranteeing construction of new capacity of renewable energy
- ✓ It should be noted that only a small portion of green bond proceeds (in the single digits) is likely to be applied towards this category.

Table 1. Eligible project categories

Background

Auga operates in a sector with important linkages to climate change – both in terms of mitigation and adaptation. On the one hand, agriculture has the potential to be both a source and a sink for GHG emissions – depending on production methods and crop types. On the other hand, agriculture is also a sector which is very vulnerable to climate change (such as changes in temperature and seasonal patterns, drought, flooding, and extreme weather events) and can itself be a potential source for adaptation and resilience through its provision of ecosystem services and regulating services (e.g. reducing soil erosion).

Globally, agriculture, forestry and land use account for around 23% of total human activity caused greenhouse gas (GHG) emissions². In the EU (28 states), the agriculture sector accounts for approximately 10% of GHG emissions³. The emissions are attributed to carbon dioxide (CO₂) released during soil cultivation with agricultural machinery, methane (CH₄) associated with livestock enteric fermentation and manure, and nitrous oxide (N₂O) arising from the use of fertilisers and manure. In the EU, the agriculture sector has already started implementing measures to become more efficient and more climate change friendly. As a result of a decline in livestock numbers, more efficient application of fertilisers, and better manure management, the region’s emissions from agriculture decreased by 24% between 1990 and 2012⁴. It should however be noted that although this decrease is to be welcomed, to the extent that livestock production is simply shifted to other regions, global emissions from livestock will not decrease.

Organic farming has many environmental benefits, such as reduced (no) use of fertilisers and pesticides, which in turn tends to improve soil health (reduced erosion, greater carbon and water retention), and greater biodiversity. On a per hectare basis, GHG emissions will be lower than with conventional farming. However, as organic farming tends to be less productive (per hectare) there is an argument that organic farming may lead to greater overall GHG emissions globally as additional grasslands and forests are cleared for agriculture. There is an ongoing debate about this amongst scientists and policy makers, which investors should be aware of.

The eligible project categories of Auga’s Green Bond Framework broadly speaking fall within the category ‘sustainable agriculture’ which both the Green Bond Principles and the EU Taxonomy recognize as having positive implications for the natural environment. We encourage Auga to monitor the development of international guidance from these and other sources.

² https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf

³ https://ec.europa.eu/agriculture/sites/agriculture/files/climate-change/factsheet_en.pdf

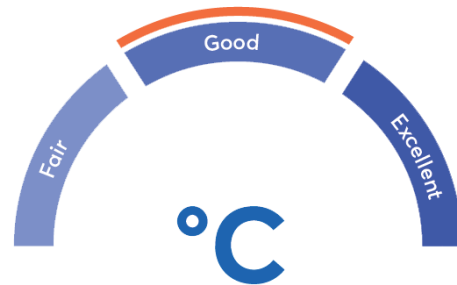
⁴ <https://www.eea.europa.eu/signals/signals-2015/articles/agriculture-and-climate-change>



Governance Assessment

Four aspects are studied when assessing Auga's governance procedures: 1) the policies and goals of relevance to the Green funding Framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

As a company, Auga approaches sustainability in an integral and thorough fashion. As part of its first Sustainability Report in 2017, the company identified the most relevant environmental, social and governance (ESG) risks in the AUGA group's priority areas by using the Nasdaq ESG Reporting Guide for Nordic & Baltic Markets. Moreover, it has undertaken a sustainability criteria materiality consultation with a number of stakeholders in its group. Additionally, it is publishing its GHG emissions at group level and will provide reduction targets starting in 2020.



However, the company's green bond framework is currently vague on certain aspects related to governance: for example, a liquidity policy has not yet been adopted, and it is suggested that the Board - rather than the Selection Committee- will undertake selection in some cases without it being immediately clear why this is warranted. The green bond reporting metrics are also not very detailed. We encourage the issuer to clarify and strengthen these aspects in future reporting to green bond investors. We also encourage the issuer to publish the full methodology for calculating GHG emission reductions, alongside the results.

Some of the green bond proceeds from his framework (approximately one-third according to the issuer) will go towards refinancing general corporate debt. However, it is our view that Auga operates with a holistic and all-encompassing focus on sustainable agriculture. This is further strengthened by the fact that the debt was incurred in order to convert Auga's operations from traditional to organic farming, and that the company has environmental impact estimates for this process: According to the issuer, the conversion process included the expansion of perennial grasses and legumes with Nitrogen accumulating properties from 26% to 40% of total arable land, and moving from regular to min-till tillage on almost all arable land – techniques which both contribute to more carbon being sequestered in the soil and lower GHG emissions. The overall assessment of the governance structure of Auga gives it a rating of **Good**.

Strengths

Auga's green bond framework shows an ambition to be a sustainability leader in the field of organic farming. Given the importance of the land use sector for climate change, and the changes in agricultural practices which will be required, we welcome the company's leadership and enthusiasm.

Auga is an organic farming company subject to standards through the EU Organic Scheme. The organic logo can only be used on products that have been certified as organic by an authorised control agency or body. This means that they have fulfilled strict conditions on how they must be produced, processed, transported and stored. The logo can only be used on products when they contain at least 95% of organic ingredients and additionally respect further strict conditions for the remaining 5%. Whilst organic farming does not itself guarantee performance in terms of GHG emissions, many of its practices (e.g. fertiliser and pesticide use) are compatible with those of climate friendly agriculture.



Auga is at the forefront of developing sustainable practices in line with circular economy thinking. Its ambition of running its machinery on self-produced biogas is a key example of this philosophy. We are also impressed by the company's commitment to reducing GHG emissions from its bovine operations: enteric fermentation is a key global challenge in agriculture and the company's willingness to trial new approaches suggests a genuine concern with being 'best in class'. Moreover, the company is 'cluster lead' in a research project related to biogas purification and methane enrichment with zero methane emission to the atmosphere. As a first step, Auga has started the development of a tractor powered by biogas (prototype).

Weaknesses

Auga's green bond framework permits future as well as past investments and the company does not have the ability to separate non-green from green debt refinancing. It is understandable that the company wishes to allow for refinancing and although in broad terms the expenditures incurred were for converting from traditional to organic farming practices – with several environmental benefits - investors should be aware that general corporate expenditures (including for fossil fuel purchases) will be in the mix.

Pitfalls

Auga produces for the local and European markets but it also exports to the Middle East (the UAE is its largest export market for end-user products). Transport of Auga's products takes place primarily by road (approximately 80%), but also by sea (approximately 20%). GHG emissions from transport to consumer markets are not included in Auga's emissions calculations. The company stresses that it expects more and more of its products to be sold to local markets, as the trend for locally sourced food continues. This is positive, however, to ensure value chain emissions are kept at a minimum, we encourage the company to continue monitoring transport options with an eye to choosing the lowest possible emission options.

Research findings on the environmental impact of organic and sustainable agriculture are constantly evolving. The relationship between farming practices and GHG emissions are of particular interest to green bond investors and the climate change community at large. Auga should be mindful of staying abreast of new developments in the agro-scientific community, of deploying the best available technologies and practices, and of communicating changes and results transparently and honestly to its investors.



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Auga Green Bond Framework October 2019	Green Bond Framework
2	Auga Annual Report 2018	Annual Report
3	Business Plan 20180430	Auga's business development plans regarding biomethane production
4	Cluster Activity Plan 20170523	Document showing Auga's activities related to biogas power developments through an R&D cluster
5	Biomethane agreement_20191030_150109	Agreement between Auga and Ministry of Economy about biomethane research facility with co-finance from EU Structural Funds
6	AUGA sustainability 2018	Auga's Sustainability Report, 2018
7	AUGA-Environmental-policy	Auga's Environmental Policy
8	PRINCIPLES-OF-BUSINESS-ETHICS-2	Auga's governance/ethics policy
9	Statement on Min till	Company statement about the increase in acreage subject to min till technology



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Statement on crop rotation

Company statement about the share of land with nitrogen accumulating and carbon sequestering crops



Appendix 2: About CICERO Shades of Green

CICERO Shades of Green (CICERO Green) is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green funding investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green 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 Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent 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).

