

‘Second Opinion’ on Landshypotek Bank’s Green Bond Framework

April 09th 2018

Summary

Overall, Landshypotek Bank's Green Bond Framework, together with the bank's policies, provide a sound base for climate friendly investments. Landshypotek Bank's Green Bond Framework is in line with the recommendations of the Green Bond Principles. The framework lists eligible projects that support the transition to low carbon, climate resilient growth and a sustainable economy. The company has clear guidelines for the management of the green bond proceeds. Landshypotek Bank will report on various impact indicators of projects financed by the green bond proceeds. These reports will be available to both investors and the public.

The framework promotes climate mitigation measures in the form of renewable energy and green building projects. The project category Sustainable Forestry promotes both climate mitigation and adaptation. Forests is an important element in the low-carbon and climate resilient society. Avoiding deforestation and forest degradation combined with afforestation will play an important role in reducing CO₂ emissions and sequestering carbon to counterbalance emissions from other sources. The two most common approaches of utilizing forests in a climate perspective are to protect and sequester carbon or, as in this case, managing forests sustainably, which will provide raw materials and goods, such as biofuels and building materials, for the low-carbon economy.

Landshypotek Bank believes that lending to customers with a focus on sustainability reduces the long-term credit risk. According to the bank, sustainability considerations or analyses are natural and integrated parts of the credit assessment since it can be difficult to separate sustainability considerations from the credit assessment in general. Under its regular lending policy, the bank requires forest management plans for forests above a certain size in order to understand and document the forest owners' intentions and environmental profile. Forestry projects that are to be financed with green bonds issued under this framework need to comply with stricter requirements, a.o. in the form of an independently verified green forest management plan. These plans include minimum levels and targets for nature conservation and deciduous trees, which strengthen a forest's resilience to extreme weather. According to the issuer, the green asset criteria set out in the framework represent stricter environmental standards than what is required by Swedish law as eligible projects are either certified through the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certified (PEFC), or in line with a certification by PEFC.

Investments in forest management may entail the use, contracting or purchase of machinery running on fossil fuels. We encourage the extension of the framework to record these emissions and to promote the use of biofuels in order to align forest management operations with the requirements of the future low carbon society.

Based on the assessment of the project types, policies, goals and reporting standards, Landshypotek Bank's Green Bond Framework receives a Dark Green shading. The framework includes both dark to medium-, medium- and dark green project categories. Given the bank's ownership and longstanding strategy, the dark to medium green forestry projects will receive the major part of the proceeds of the initial green bond issuance under this framework.



°CICERO
Dark 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 Landshypotek Bank Green Bonds Framework and policies for considering the environmental impacts of their projects. The aim is to assess the Landshypotek Bank Green Bonds Framework as to its ability to support Landshypotek Bank'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/ENSO 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. The shading methodology also aims at providing transparency to investors when comparing green bond frameworks exposure to climate risks. A dark green project is less exposed to climate risks than a lighter green investment.

This Second Opinion will allocate a 'shade of green' to the green bond framework of Landshypotek Bank:

- **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 are also important because they 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. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The overall shading reflects an ambition of having the majority of the project types well represented in the future portfolio, unless otherwise expressed by the issuer.

2 Brief Description of Landshypotek Bank's Green Bond Framework and rules and procedures for climate-related activities

Landshypotek Bank is a Swedish bank owned by 40.000 farmers and foresters across Sweden. The bank's primary mandate is to provide financial services to the agricultural and forestry sectors. The vast majority of the loan portfolio is extended to these sectors and since 2017 the bank has also been active in the residential mortgage sector with a focus on the areas outside the major cities in Sweden.

Landshypotek Bank is of the opinion that lending to customers with a focus on sustainability reduces the long-term credit risk. According to the bank, sustainability considerations or analyses are natural and integrated parts of the credit assessment since it can be difficult to separate sustainability considerations from the credit assessment in general. Forestry projects that are to be financed with green bonds issued under this framework are required to provide green forest management plans. These plans include minimum levels and targets for nature conservation and deciduous trees, which strengthen a forest's resilience to extreme weather. According to the issuer, the green asset criteria set out in the framework represent stricter environmental standards than what is required by Swedish law as eligible projects are either certified through the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certified (PEFC) or in line with a certification by PEFC. A green forest management plan has to be produced or verified by a certified 3rd party expert.

The issuer informed us that Landshypotek Bank is part of the Sustainability Group at the Swedish Bankers' Association. In this working group, major Swedish banks discuss the adaptation to current and future climate risk and how climate scenarios could be used in risk analysis and credit assessment. The Sustainability Group has exchanges with a.o. the Swedish Ministry of Finance and the Swedish Financial Supervisory Authority on matters relating to sustainability and the financial market.

Landshypotek Bank has confirmed that the bank has not been involved in any disputes with local communities or NGOs in recent times.

Definition:

Eligible projects fall within the categories sustainable forestry, renewable energy and green buildings. The bank summarizes the categories under "Green Assets". Eligible projects can be financed or refinanced.

Eligibility criteria for each category are derived from the relevant UN Sustainable Development Goals (SDGs). The magnitude of the different SDGs depends on the key characteristics of a given project. The SDGs in question are: SDG 15 Life on Land, SDG 13 Climate Action, SDG 11 Sustainable Cities and Communities, SDG 7 Affordable and Clean Energy.

Green Bond net proceeds will not be allocated or linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defense, potentially environmentally negative resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco. Landshypotek does not provide any loans to either of the above.

The green bonds will, initially, largely refinance existing projects within the categories under “Green Assets”. The bank aims to increase lending to new eligible projects. “New” includes projects that received lending up to 12 months prior to the issuance of a green bond. In this context, the bank forecasts that the allocation of green bond proceeds to such projects is likely to increase.

Selection:

Projects are evaluated and selected in a two-step process. First, Landshypotek Account Managers record data of every single loan. From this, a list of eligible projects in compliance with the Green Asset Criteria is extracted. Second, the Green Bond Committee reviews this list of suggested loans and decides on the allocation of Green Bond proceeds. The Green Bond Committee consists of Chief Executive Officer, Head of Corporate Banking, Chief Financial Officer, Chief Sustainability Officer, and a Forest Expert. The Green Bond Committee holds the right to exclude any green assets already funded if eligibility is lost.

Landshypotek Bank’s independent risk control department will undertake annual reviews of allocation of Green Bond net proceeds to ensure compliance with Landshypotek Bank’s green bond framework. A summary of the findings of the independent and internal risk management department’s annual control and review will be made available for bondholders, presumably through the website.

Management of proceeds:

An amount equal to the net proceeds will be credited to a separate account for Green Assets. Landshypotek Bank will keep this account separate from other accounts to ensure and enable separate monitoring and tracking.

Unused proceeds on the separate account can temporarily be deposited with financial institutions or placed in debt securities issued by the Swedish government or Swedish municipalities, green bonds or covered bonds. The credit risk of such debt securities needs to have a minimum rating of AA- by an established rating agency. The issuer explicitly excludes investments in entities with a business strategy focused on nuclear or carbon dioxide intensive activities, weapons, defense, environmentally challenging extractive industries, gambling and tobacco.

Transparency and Accountability:

Landshypotek Bank will annually provide information to investors on their website. Reporting will include information on the share of refinanced and new projects. The reports will also provide information on Green Bond developments, the outstanding amounts of all types of issued green bonds, the balance of the separate account, the total aggregated proportion of Green Bond proceeds used per category, a summary of the independent and internal risk management review, and green asset reporting for each eligible project category. Reporting will be provided on an aggregated basis and per project category for the entire green project portfolio. Once several bonds have been issued, the bank will strive to provide reporting per project category for each individual bond. Reports will include representative example projects, however, due to data protection considerations and the impractical amount of small projects and related data, the bank will not report on a project-by-project basis.

The bank will report on greenhouse gas emissions absorbed by forests or avoided by green buildings and renewable energy installations based on aggregated figures per eligible category.

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

Table 1. Documents reviewed

Document Number	Document Name	Description
1	Landshypotek Bank Green Framework	The framework of the Green Bond. This is the most important document.
2	Green Asset selection process	A short summary of how projects and assets are selected
3	Guideline governance documents	List of documents on corporate governance ethics, sustainability and environment, credit approval process, and social governance
4	Code of Conduct	A general document on how the bank handles conflicts and other ethical issues
5	Compliance Policy	A general document on the internal control and quality checks of the bank
6	Corporate Governance	The structure of the bank
7	Diversity policy Landshypotek Bank Board	A short document on diversity policy in the board, such as balancing gender, age groups, geography, and academic background
8	Annual Report 2017	Annual report 2017 with section on sustainability
9	Sustainability Overview	Short overview on different sustainability issues, not only environmental

10	Appraisal Policy	Documentation on how the assets are price evaluated
11	Instruction for sustainability analysis	Documentation on how sustainability is checked and a list of different sustainability standards
12	Procedure of Green Bond Committee	Documentation on the structure of the committee and how they work
13	Sustainability Policy	Description of how the bank takes economic, social, and environmental responsibility
14	Credit Policy	The principles of how the bank gives credits to customers
15	Guideline for credit granting	More detailed description of credit granting to customers
16	Guideline of customer due diligence	Description of how customers are screened
17	Guideline regarding outsourcing	Documentation on how outsourcing is followed up by the bank
18	HR Policy	An overview of how the bank work on issues related to human resources
19	Policy Anti-Money Laundering and terrorism financing	Documentation on how the bank avoids financing money laundering and terrorism
20	Policy on Declarations of Interests	Description of how conflict of interest in the bank is solved

21	Work Environment Guideline	Description of how the bank works on having a good working environment
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22	Buffer zones for the protection of wetlands	Guidelines for the implementation of the Swedish Forestry Act on the protection of wetlands through buffer zones with vegetation
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23	Forestry Act, paragraph 30	Section on zones for the protection of adjacent natural environments from impacts from forestry operations

3 Assessment of Landshypotek Bank’s Green Bond framework and environmental policies

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

The framework and procedures for Landshypotek Bank’s 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, 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.

Overall shading

Based on the project category shadings detailed below, and consideration of the issuer’s systematic sustainability work and governance structure of Landshypotek Bank in terms of management and use of proceeds, we rate the framework CICERO Dark Green. The framework includes both medium and dark green projects categories. Given the bank’s ownership and longstanding strategy, the dark to medium green forestry projects will receive the major part of the proceeds of the initial green bond issuance under this framework.

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
Sustainable forestry	<ul style="list-style-type: none"> Acquisition of forest land Investments in sustainable forest management (e.g. planning, silviculture, fertilization, harvesting, roads, conservation) 	<p>Dark to Medium Green</p> <ul style="list-style-type: none"> Investments in forest management may entail the use, contracting or purchase of machinery running on fossil fuels. We encourage the extension of the framework to record these emissions and to promote the use of biofuels in order to align forest management

		<p>operations with the requirements of the future low carbon society.</p> <ul style="list-style-type: none"> • Investments in forest management may also enable car traffic through the construction of access roads. • The framework does not set any restrictions on the potential drainage of wetlands or harvesting of carbon rich peat in bogs beyond the Swedish Environmental Act, which requires permits for such activities. • Be aware of potential negative effects on biodiversity.
Renewable energy	<ul style="list-style-type: none"> • Development, construction, acquisition, installation of onshore wind farms in Sweden • Development, construction, acquisition, installation of solar PV power production units in Sweden 	<p>Dark Green</p> <ul style="list-style-type: none"> • Consider life cycle emissions and emissions during construction • Be aware of negative effects on biodiversity
Green buildings	<ul style="list-style-type: none"> • Energy efficient buildings with EPC class A or B, equivalent to 50 or 25% improvement over building regulation • Energy efficient renovation reducing energy consumption by at least 30 % 	<p>Medium Green</p> <ul style="list-style-type: none"> • Building criteria are good, but not the best. In a 2050 perspective, the energy performance of buildings is expected to be improved, with zero emission houses becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments.

Table 2. Eligible project categories

Strengths

Sustainability integrated in credit assessment.

The core activity of Landshypotek Bank has been and still is to provide financial services to forest owners who intend to operate their forests in a sustainable way. This means that the bank's main exposure is to an asset class with time horizons spanning over multiple decades. It is thus encouraging to see that the bank has integrated sustainability into its credit assessment, since it connects to both, the long-term profitability of the assets and climate risk mitigation and adaptation. Measures to avoid deforestation and forest degradation are in place. The bank has internal systems to check the sustainability of assets. Each account manager, as opposed to a central sustainability function, is required to apply the sustainability criteria. The issuer has a long track-record on financing forestry assets.

Sustainability requirements exceed Swedish law

Forestry projects that are to be financed with green bonds issued under this framework need to provide a green forest management plan. These plans include minimum levels and targets for nature conservation and deciduous trees, which strengthen a forest's resilience to extreme precipitation, droughts, storms and fires, according to the issuer. According to the issuer, the green asset criteria set out in the framework represent stricter environmental standards than what is required by Swedish law as eligible projects are either certified through the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certified (PEFC) or in line with a certification by PEFC. A green forest management plan has to be produced or verified by a certified 3rd party expert.

Sustainable forestry is part of a low carbon future economy

Forests is an important element in the low-carbon and climate resilient society. Avoiding deforestation and forest degradation combined with afforestation will play a role in reducing CO₂ emissions and sequestering carbon to counterbalance emissions from other sources. The two most common approaches of utilizing forests in a climate perspective are to protect them and sequester carbon that way or managing the forests sustainably, which will provide raw materials and goods, such as biofuels and building materials, for the low-carbon economy. Such biofuels and materials can replace fossil based fuels and materials.

Reporting and transparency

The company has clear guidelines for the management of the green bond proceeds. Landshypotek Bank will report on various indicators of projects financed by the green bond proceeds. These reports will be available to both investors and the public. The bank will report on both green indicators e.g. installed capacity of renewable energy and annual energy savings from building projects as well as greenhouse gas emissions absorbed by forests or avoided by green buildings and renewable energy installations based on aggregated figures per eligible category.

Weaknesses

There are no apparent weaknesses in Landshypotek Bank's framework.

Pitfalls

The financed forestry projects may potentially lead to degraded forests and carbon emissions if green asset criteria and standards are not followed.

Sustainable forest management operations, such as thinning, logging, and transport, requires machinery. Investments in forest management may entail the use, contracting or purchase of machinery running on fossil fuels, creating climate gas emissions. The current practice is not in line with the low carbon society. The issuer informed us that data on emissions from such operations are currently not available. We encourage Landshypotek Bank to be aware of this source of climate gas emissions and to extend the framework to record these emissions and to promote the use of biofuels in order to align forest management operations with the requirements of the future low carbon society. We do note that felling is subject to regulations that consider local environmental impacts, such as the required use of bio-oils in hydraulic systems of machinery.

Forest management may require the construction of roads to give access to felling sites and are needed, a.o. for the transportation of logs. The issuer informed us that these roads under Swedish law are open to public use. The issuer also informed us that these are gravel roads and that the primary purpose is not the facilitation of public traffic.

The framework does not explicitly rule out that green bond proceeds may be used to finance the drainage of wetlands and activities connected to carbon-rich peat. The issuer informed us that financing these activities is not the purpose of the framework. The issuer also informed us that such activities are regulated by Swedish environmental law and require obtaining a permit.

When the bank reports on greenhouse gas emissions absorbed by forests we encourage the issuer to also record and report emissions from land use change, e.g. if a wetland is drained to construct an access road, and emissions from the use of machinery.

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. Landshypotek Bank 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 international 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 international 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

