

‘Second Opinion’ on Nordic Investment Bank’s Environmental Bond framework

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Summary

Overall, Nordic Investment Bank's environmental bond framework and environmental policies provide a clear and robust framework for climate-friendly investments. The environmental bond framework lists eligible projects that are generally supportive of the objective of climate change mitigation and reduced air and water pollution. NIB's Sustainability Policy incorporates a thorough environmental impact vetting process for all projects, and recognizes the importance of life-cycle and trans-boundary impact assessments. NIB is also a signatory to the European Principles for the Environment.

NIB's policies support regular and transparent updates and environmental impacts to investors and the public. NIB also follows the International Financial Institution harmonized accounting and reporting principles for greenhouse gases.

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'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 NIB's Environmental Bond Framework and policies for considering the environmental impacts of their projects. The aim is to assess NIB's Environmental Bond Framework as to its ability to support NIB's stated objective of reduced air emissions and water pollution.

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.

2. Brief description of NIB's Environmental Bond framework and environmental policies

The Nordic Investment Bank (NIB) is the international financial institution of the Nordic and Baltic countries. NIB provides financing to projects that improve the competitiveness and the environment in its member countries (Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden).

NIB's Environmental Bond framework supports the aim of sustainable growth through projects in its member countries or the EU that target:

- Reducing emissions to air by promoting energy efficiency, renewable energy, public transport solutions and recycling; and
- Reducing discharges to water by improving wastewater treatment.

Eligible project types include:

- Energy efficiency
- Renewable energy
- Public transport solutions
- Transmission
- Waste management systems
- Waste water treatment
- Green buildings.

The projects follow the general principle of preventing long-term lock-in of high-carbon infrastructure (urban, transport, and power sector). Project selection for the Environmental Bond is supported by NIB's Sustainability Policy and Guidelines and impact analysis and reporting.

Table 1 Documents received from NIB

Ref. nr.	File name	Content
1.	NIB Environmental Bond Framework Summary	Brief summary of NIB's Environmental Bond framework and definition of eligible projects
2.	NIB Environmental Bond Framework	Description of NIB's Environmental Bond framework including eligible projects and monitoring
3.	NIB Sustainability Policy and Guidelines	Description of NIB's environmental and social compliance requirements
4.	European Principles for the Environment	Declaration of environmental principles in support of EU common approach
5.	Sustainability Management	Brief statement of NIB's sustainable growth vision
6.	NIB Environmental Analysis	Summary of NIB's environmental review process for all loan applications
7.	CO ₂ Impact in NIB Financing	Report of CO ₂ impact of NIB's loans and financing
8.	International Financial Institution Framework for a Harmonised Approach to Greenhouse Gas Accounting	Agree principles for accounting and reporting GHGs

Selection of Eligible projects

Eligible Projects are pre-selected by Sustainability & Mandate Unit, then reviewed and approved by the Credit Committee for inclusion into the Green Fund Pool. Eligible projects must be located in a member or EU country, and must not have any potentially threatening risk elements (including lack of pending environmental permits, environmental reputation risks, or a lack of transparent environmental reporting systems). Environmental Bond financing is channelled through a separate Green Fund Pool managed by the Treasury.

Transparency

NIB provides a continually-updated list of projects financed on their webpage, which includes a qualitative environmental description of the project. In addition, the CO₂ footprint of all NIB's financing activities is published in the Annual Report. NIB also reviews projects for their transparency in environmental information before considering them eligible projects.

3. Assessment of NIB's Environmental Bond framework and environmental policies

Overall, NIB's Environmental Bond framework and environmental policies provide a clear and thorough framework for climate-friendly investments. The framework and procedures for NIB's environmental investments are assessed according to both the micro or project level impacts and the wider (macro-level) impacts in this section.

Institutional environmental policies

In support of NIB's mission to support sustainable growth in its member countries, the Sustainability Policy includes a through system for environmental and social review, compliance, transparency and monitoring. The Sustainability Policy encompasses a global view on the environment, highlighting the importance of life-cycle and trans-boundary assessments. NIB is also a signatory to the European Principles for the Environment (EPE), which highlights sustainable practices and standards based on EU law.

NIB's policy for environmental analysis includes a project categorization to determine the level of environmental analysis necessary prior to investment. Projects with potential for high environmental impact undergo a full Environmental Impact Analysis (EIA), and are monitored by NIB on a case-by-case decision. Projects with potential for a moderate environmental impact are subject to an environmental analysis (more focused than an EIA).

Eligible projects under the Green Bond framework

The eligible projects listed in the Environmental Bond framework support either reduced air emissions or reduced water pollution. NIB's Sustainability Policy and environmental assessments provide a solid foundation for addressing environmental concerns related to large hydro and biofuels, including life-cycle and trans-boundary impact assessment.

In the green buildings sector, several voluntary environmental certification systems provide some level of measurement of the environmental footprint of a building, including energy efficiency measures. One of the most widely used certification system is Leadership in Energy and Environmental Design (LEED), although many other country-specific systems exist. See LEED (2009a, b, c) for a description. Another similar, widely-used system originating in the United Kingdom is the BREEAM rating system. BREEAM also includes a comprehensive consideration of environmental and energy issues associated with buildings, including a category on land use and site selection (BREEAM, 2014). A rating is issued based on points earned, similar to LEED, with minimum requirements for some environmental issues.

Both LEED and BREEAM certifications include aspects important to long-term sustainable development, e.g. site selection and consideration of brownfields, urban density and planning, and access to public transportation. Still, the certification systems alone do not guarantee a low climate impact. NIB supplements the highest certification levels with a reduction of 25% in energy consumption for each project, according to the EU Green Building Code. NIB also emphasizes site selection considerations on a case-by-case basis.

Table 2 Eligible project types

Eligible Project Type	Description	Likelihood of Meeting Objective
Energy efficiency	Projects that reduce electric energy use by at least 30%; mainly industrial heating/cooling/ventilation improvements	Good. Fossil fuelled power and heat generation are not eligible.
Renewable energy	Wind, photovoltaic, tidal and wave, geothermal, solid biofuels and biogas from organic waste, hydro (small greenfield or existing generation improvements)	Good. Biofuel projects are subject to life-cycle emissions analysis according to Sustainability Policy.
Public transport solutions	Improved transport logistics (mainly based on electricity or biofuels) for freight and passenger rail, waterways transport ensuring a modal shift	Good to medium. Large infrastructure projects financed by NIB are subject to an environmental impact assessment. Fossil-fuel based public transport is subject to aggregate net GHG emissions reporting. Biofuels are subject to lifecycle analysis.
Transmission	Upgrades to allow for increased renewable energy connection, reduced energy losses	Medium. Indirectly supports renewable energy production. Transmission projects are reviewed for their support of renewables.
Waste management systems	With reduced air emissions aim (CO ₂ eq, SO _x , NO _x , dust, heavy metals, dioxins)	Good.
Waste water treatment	With aim to reduce discharges to water (P, N, BOD, COD, heavy metals)	Good. Large wastewater treatment plants financed by NIB are subject to an environmental impact assessment. Methane reduction through biogas is included in the renewable energy project category.
Green buildings	New construction of commercial and multi-family buildings, certified LEED Platinum or BREEAM Excellent, and fulfilling EU Green Building requirements (25% improvement in energy efficiency)	Good. Building certifications are at the highest level, and site-selection will be emphasized. Rebound effects will also be assessed for each project.

Strengths

- The mission and Sustainability Policy of NIB support environmentally sustainable investments.
- NIB screens all eligible projects for environmental risks, including lack of transparency on environmental issues.
- NIB incorporates a thorough environmental analysis and monitoring system for projects with potential for negative environmental impacts.
- The Sustainability Policy recognizes the importance of life-cycle and trans-boundary impact assessments.
- All projects financed by the bond are listed on the website, the CO₂ footprint of all NIB lending activities is published in the Annual Report, and the aggregate net GHG emissions for all investment projects are reported.

Weaknesses

We see no major weaknesses in framework at this time.

Pitfalls

Although fossil-fuel based public transport is included in the framework, most of the intended projects are electricity or biofuel. All projects are subject to aggregate net GHG emissions evaluation against the baseline, and ensure a modal shift to public transportation.

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

Impacts beyond project boundaries

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. NIB's Sustainability Policy incorporates beyond-border impacts and lifecycle assessments.

Rebound effects

Another macro-level concern is the potential for rebound effects. This can occur when GHG 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 GHG 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.

NIB assesses the potential for rebound effects in all green building projects. We cannot see that the risk for substantial rebound effects is high in the case of NIB's Green Bond framework.

Transparency and monitoring, reporting and verification

NIB's policies focus on transparency in eligible projects, and support regular reporting to investors and the public. A list of Environmental Bond-financed projects is available on NIB's website, and the Annual Report includes the CO₂ footprint of NIB's financed-activities. NIB is also a participant in the International Financial Institution Framework for a Harmonised Approach to Greenhouse Gas Accounting, which includes an agreement to report aggregate net GHGs for investment projects.

References

BREEAM (2014). BREEAM International New Construction Technical Manual, SD5075 – 1.0:2013, Issue date: 09/04/2014.

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

LEED (2009a). LEED 2009 for Core and Shell Development, US Green Building Council.

LEED (2009b). LEED 2009 for Existing Buildings Operation and Maintenance, US Green Building Council.

LEED (2009c). LEED 2009 for New Construction and Major Renovations, US Green Building Council.