

‘Second Opinion’ on NWB’s Green Bond framework

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Summary

Overall, NWB's green bond framework and the governing laws of the regional Water Boards provide a holistic and sound framework for climate-friendly investments. The Water Boards integrate a range of environmental impacts in their project plans, and perform environmental impact assessments on all large projects. The green bond framework lists eligible projects that are generally supportive of the dual objective of promoting a transition to low-carbon and climate-resilient growth, and improving biodiversity. NWB provides regular and transparent reports to investors and the public.

The regional Water Boards take an integrated approach to climate change and biodiversity projects, and the bond framework does not include any biodiversity projects that would have a negative impact on the climate. The Water Boards are public entities subject to regular and comprehensive reporting at the national and EU level.

NWB reports on environmental impacts and carbon footprint of its activities, including activities financed by the green bond, according to the GRI Global Reporting Framework. We recommend that NWB supplements with additional reporting on methane emissions (from waste water treatment).

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 or overall 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 NWB's Green Bond Framework and policies for considering the environmental impacts of their projects. The aim is to assess NWB's Green Bond Framework as to its ability to support NWB's stated objectives of low-carbon and climate resilient growth and biodiversity preservation.

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 NWB’s Green Bond framework and environmental policies

The Nederlandse Waterschapsbank N.V. (NWB) is a financial institution dedicated to providing finance to the regional Water Boards in the Netherlands. The 26 regional water authorities are responsible for water management at the local level, including water security and flood control. They oversee the operation and maintenance of dikes, locks, pumping stations, flood barriers, canals, and ditches (UVW, 2012).

NWB’s investment framework includes a Green Bond framework, which is supported by the corporate social responsibility reporting, in addition to relevant Dutch law (NWB, 2014). The documents that can impact the environmental soundness of the bank’s investments are described briefly in this section, see Table 1 for an overview of all documents/references on which this second opinion is based.

Table 1: Document/reference overview

Document/ reference no.	Title	Comments
1	NWB Green Bond framework	Brief memo on the Green Bond framework
2	Water and Water Management	Brief outline of the Water Board mandate
3	Water Governance	Description of the Dutch regional water authority model
4	GRI Report 2012	NWB report on social responsibility
5	Water Act of the Netherlands	Description of legal basis for water management in the Netherlands

Climate change is listed as one of three major challenges to flood defences, through rising sea level, storms, and drought (UVW, 2007). The regional water authorities are the first line of defence to climate change in the Netherlands. They are also responsible for applying levies on surface water pollution to households and businesses (UVW, 2012).

The Water Act of the Netherlands stipulates that provincial and municipal spatial planning must indicate consequences for water management (Ministry of Transport, Public Works and Water Management, 2010).

In this way the regional water authorities practice integrated management with urban development planning.

NWB’s Green Bond framework includes a list of eligible mitigation, adaptation, and climate-friendly biodiversity projects that promote the transition to low-carbon and climate resilient growth (see Table 2). Eligible projects for NWB’s green bond are selected by the NWB Treasury from individual Water Boards’ projects.

Table 2: Eligible project categories

Primary objective	Eligible project types
Mitigation	1. Energy recovery from waste water and extraction of phosphor
Adaptation	1. Flood protection 2. Other flood defences 3. Waterway management 4. Pumping stations
Biodiversity	1. Water treatment 2. Sanitation and dredging of waterbeds 3. Transport and cleaning of wastewater 4. Disposal of sewage sludge

To enable investors to follow the development and to provide insight to prioritized areas, NWB’s green bond procedure stipulates that investors will receive an annual letter listing the project groups financed, with a detailed percentage allocation for each project group, a selection of project examples, as well as a summary of green bond developments. These investor letters will be made publically available on NWB’s webpage.

At a corporate level, NWB reports on its sustainability performance, including its carbon footprint, in accordance with the GRI Global Reporting Framework (NWB, 2012). KPMG issued an assurance report for the corporate social responsibility section of NWB’s Annual Report 2012. NWB’s Internal Audit Department monitors reporting quality in the annual corporate social responsibility reports. NWB is also in dialogue with its supply chain to discuss sustainability improvement including carbon reduction.

3. Assessment of NWB’s Green Bond framework and environmental policies

Overall, NWB’s green bond framework is a robust framework for low-carbon, climate-resilient, and climate-friendly biodiversity investments. The framework and procedures for NWB’s environmental investments are assessed according to both the micro or project level impacts and the wider (macro-level) impacts in this section.

Environmental policies that guide the Water Boards

Under EU and national laws, the Water Boards are required to develop a water management plan and report on the progress of implementation (confirmed by personal communication with UVW). Water management reports regarding the water quality and biodiversity impacts of the plans are sent to the

European Commission as a requirement under the European Water Framework Directive. Flood protection schemes are reported on a national level, but also subject to the European Flood Directive. Waste water treatment plans are reported under the European Urban Waste Water Directive. Under Dutch law, the Water Boards are required to acquire an environmental permit for all initiatives, and perform an environmental impact assessment for large projects.

Eligible projects under the Green Bond framework

The eligible projects listed in the Green Bond framework are generally supportive of NWB’s identified objective of promoting a transition to low-carbon and climate-resilient growth. Only biodiversity projects that do not have a negative impact on the climate are eligible. Table 3 shows the likelihood of meeting the objective for eligible project categories with respect to the long-term environmental objectives.

Eligible project types		Likelihood of meeting objective
Mitigation	1. Energy recovery from waste water and extraction of phosphor	Good. Biogas energy recovery reduces methane emissions from waste water, and could also include heat recovery.
Adaptation	1. Flood protection	Good.
	2. Other flood defences	
	3. Waterway management	
	4. Pumping stations	
Biodiversity	1. Water treatment	Good. Only biodiversity projects that avoid negative climate impacts are eligible.
	2. Sanitation and dredging of waterbeds	
	3. Transport and cleaning of wastewater	
	4. Disposal of sewage sludge	

Strengths

Consideration of dual climate change and biodiversity goals

Eligible projects for the NWB green bond only include biodiversity projects that do not have negative climate impacts. Climate change and biodiversity objectives are not always mutually reinforcing, thus NWB’s framework that views biodiversity projects through a climate lens reinforces the aim of the bond to support low-carbon and climate resilient growth.

In general, adaptation to the impacts of climate change can have both positive and negative consequences for biodiversity and ecosystems. Measures such as increasing the diversity of landscapes, such as manage natural floodplains, forests, and other ecosystems can give positive consequences for both climate resilience and biodiversity. However, hard infrastructure in coastal areas such as sea walls and dykes can often give negative impacts on natural ecosystems such as destroying or altering wetlands, altering tidal currents flow, disrupting, disconnecting and fragmenting marine ecosystems, and disturbing sediment or nutrition flows (CBD, 2009).

However, successful adaption of ecosystems can also contribute to climate change adaption and climate change mitigation, by conserving carbon stocks or reducing emissions caused by destruction of ecosystems. Ecosystems can be used as coastal defense, such as planting marsh vegetation on the intertidal zone and

wetland restoration. Such adaptation measurements can reduce the strength of the wave energy, reduce erosion, and increase the accumulation of sediments as a way to increase the land surface.

Holistic approach

The Dutch regional Water Boards are subject to a variety of EU and national laws governing their environmental footprint and reporting. This comprehensive legal coverage provides a solid foundation for Water Board projects that consider both climate change and biodiversity impacts.

In general, the Water Boards take an integrated approach since they are responsible for flood protection, water management and water quality. Both water retention and ecological potential are considered in combination (personal communication with UVW).

In addition, urban planning and water management interact during the planning phase in the Netherlands. Under the Water Act, municipal and urban planning in the Netherlands must consider the consequences on water management.

Weaknesses

Our main concern of how biodiversity and climate change goals can potentially counteract each other is addressed through the environmental impact assessments of large Water Board projects and the comprehensive reporting at both the national and EU level across a range of environmental issues. Thus we did not find any specific weaknesses in NWB's green bond framework.

Pitfalls

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

The Water Boards take a holistic approach to environmental sustainability in their water management and security mandates, governed both by Dutch and EU environmental law. This integrated approach implies consideration of cross-boundary environmental impacts.

Transparency and reporting

NWB and the governing environmental laws at the EU and state level support comprehensive, regular and transparent updates to investors and the public. Annual reports will be made available to investors including a list of project groups financed, a selection of project examples, and a summary of NWB's Green Bond development. NWB reports on its carbon footprint and other environmental impacts, including impacts from Water Board projects financed by the green bond, according to the GRI Global Reporting

Framework. The Water Boards are public entities, so their financial plans and annual reports are publically available.

The GRI Global Reporting Framework includes a carbon footprint, but does not appear to include reporting on other greenhouse gasses. We would recommend additional reporting on methane emissions (from waste water treatment).

References

- CBD (2009). Connecting Biodiversity and Climate Change Mitigation and Adaptation: Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change. Secretariat of the Convention on Biological Diversity. Montreal, Technical Series No. 41, 126 pages.
- IPCC (2013). Climate Change 2013: The Physical Science Basis, Fifth Assessment Report, Intergovernmental Panel on Climate Change.
- Ministry of Transport, Public Works and Water Management (2010). "The Water Act of the Netherlands", February 2010.
- NWB (2014). "Green Bond Framework", Nederlandse Waterschapsbank N.V.
- NWB (2012). "GRI Report 2012".
- UVW (2012). "Water Governance: The Dutch regional water authority model", Unie van Waterschappen.
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