

FINANCING FINAN THE FUTUE **FUTURE** 

# ENTROPORTAL BOND REPORT

# NIB - International financial institution of the Nordic and Baltic countries

NIB finances projects that improve competitiveness and the environment of the Nordic and Baltic countries. The Bank offers long-term loans and guarantees on competitive market terms to its clients in the private and public sectors. NIB is an <u>international financial institution</u> owned by Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden. The Bank has lending operations both in and outside its member countries. NIB acquires the funds for its lending by borrowing on the international capital markets. NIB's bonds enjoy the highest possible credit rating.

The Bank not only finances investments that improve the environment, but also analyses the environmental impact of each project considered for financing. As a result, each loan project under consideration for financing undergoes an individual assessment of its potential environmental impact, including social aspects, as an integral part of <u>NIB's</u> <u>mission</u> of promoting sustainable growth in its <u>member countries</u>.

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# Treasurer's review

NIB continued to be active in the green bond market in 2016, not only by issuing NIB Environmental Bonds, but also by buying Nordic corporate green bonds. During 2016, NIB was elected member of the Green Bond Principles' Executive Committee and invited as observer to the European Commission's High-Level Expert Group on Sustainable Finance.

Fighting climate change is a key issue for many today, including investors and issuers in the fixed income market. The multilateral development banks ("supranationals") have been the frontrunners in this area and have for several years been financing projects that enhance the environment.

Today, green bonds are an important part of NIB's funding program. NIB established its own NIB Environmental Bond (NEB) framework in 2011, and by the end of the year 2016, the Bank had issued the equivalent of some EUR 2.1 billion of NEB transactions. NIB is the leading Nordic issuer of green bonds and is a top ten issuer of green bonds globally within the supranational and agency sector.

In 2016, NIB issued the equivalent of EUR 763 million in environmental bonds.

The objective of the NEB framework is to support long-term climate targets, and NIB is committed to continuing to issue NIB Environmental Bonds. The Bank estimates that we can double the issuance during the coming years. This is backed up by an expected good pipeline of eligible projects.

The Bank believes that transparent reporting is important for developing the green bond market. With scrutinised internal processes in place, NIB feels confident in sharing the process for project evaluation and selection of eligible projects. NIB's Sustainability & Mandate Unit consists today of environmental analysts with a combined more than eighty years' experience in assessing the environmental impact of various projects. A harmonised way of calculating and reporting on the environmental benefit is needed, and the Bank therefore takes an active role in developing the reporting together with the other international financial institutions.

Detailed information on NIB's environmental bonds and descriptions of all the projects financed by NEBs—more than 40 projects so far—can be found on our website. In 2016, NIB arranged site visits for investors to some of the projects financed with NIB Environmental Bonds. These visits were very well received, and NIB also plans to invite investors to get acquainted with some NIB green projects in 2017.

As a long-term lender and issuer of environmental bonds, it is natural for NIB to also buy green bonds. In 2016, NIB decided to allocate EUR 500 million for investments in green bonds issued by companies and municipalities in the Nordic–Baltic region. NIB has decided to cooperate with certain arranging banks. With these arrangers, NIB has discussed their respective green bond underwriting policies, procedures and awareness of NIB's mandate.

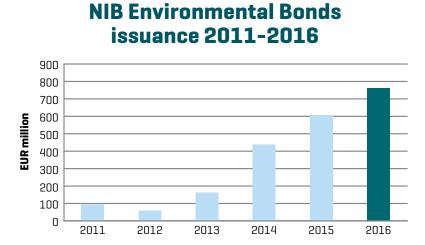
In 2016, NIB purchased the equivalent of EUR 143 million in green bonds.



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# NIB Environmental Bonds and eligible projects 2011–2016

At end of the year 2016, NIB had issued eleven environmental bonds for a total amount equivalent to EUR 2.1 billion. NIB is one of the top ten issuers of green bonds globally within the supranational and agency sector and is the leading Nordic issuer of green bonds.

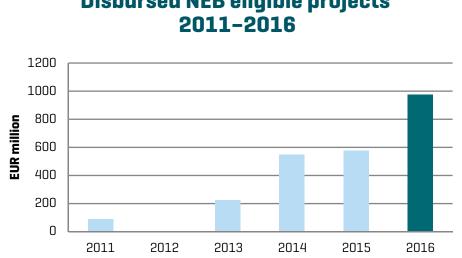


The Bank issued a total equivalent to EUR 763 million of NEBs during 2016, consisting of an eight-year, EUR 500 million environmental bond in June, a five-year, SEK 1 billion bond in January and a seven-year SEK 1.5 billion bond in September.

### **NIB Environmental Bonds**

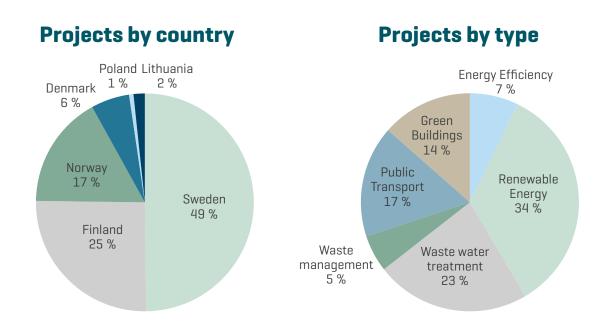
CURRENCY	AMOUNT IN MILLIONS	EUR MILLION EQV. (ACCOUNTING NUMBERS)	VALUE DATE	MATURITY DATE
SEK	1500	156	22.9.2016	22.9.2023
EUR	500	500	10.6.2016	10.6.2024
SEK	1000	107	20.1.2016	20.1.2021
EUR	500	500	17.9.2015	19.9.2022
SEK	1000	107	23.4.2015	23.4.2020
USD	500	397	23.9.2014	30.9.2021
EUR	40	40	11.2.2014	11.2.2019
BRL	343,5	105	6.12.2013	6.2.2018
SEK	500	58	27.9.2013	27.9.2018
SEK	500	59	7.9.2012	7.9.2032
ZAR	1,006.4	92	22.11.2011	19.11.2015

More than 40 projects have been financed with NEB proceeds since the establishment of the framework in 2011. Of these, 18 projects received proceeds from NEBs in 2016 in a total amount equivalent to EUR 980 million.



**Disbursed NEB eligible projects** 

The charts below highlight the distribution statistics for projects by type and country for all projects financed between 2011 and 2016.



# Projects financed by NIB Environmental Bonds

Customer	Country	Time of latest disbursement	Maturity, years	Currency	Total disbursements on a loan, million	NEB- financed EUR million	NEB- financed share of Ioan	Category	NIB's share of added renewable energy, MWh/year
Sydvatten AB	Sweden	Dec 2016	15	SEK	105	11	100 %	Energy efficiency	
AB Transitio	Sweden	Dec 2016	20	SEK	695	71	100 %	Public transport	
Municipality of Kungälv	Sweden	Nov 2016	20	SEK	300	10	34 %	Wastewater treatment	
Helen Oy	Finland	Nov 2016	12	EUR	22	17	77 %	Renewable energy	108,00
Helsinki City Transport HKL	Finland	Nov 2016	20	EUR	60	60	100 %	Public transport	
City of Oslo	Norway	Nov 2016	25	NOK	1,5	165	100 %	Wastewater treatment	
Helgeland Kraft AS	Norway	Oct 2016	15	NOK	470	46	89 %	Renewable energy	58,420
AB Fortum Värme Holding, co-owned with City of Stockholm	Sweden	Sep 2016	10	SEK	600	63	100 %	Renewable energy	166,00
Republic of Lithuania	Lithuania	Aug 2016	20	EUR	40	40	100 %	Energy efficiency	
S-ryhmän logistiikka- keskukset Oy	Finland	Jul 2016	5	EUR	117	117	100 %	Green building	
Ekerövatten AB	Sweden	Jul 2016	2/4/7/10	SEK	100	9	85 %	Wastewater treatment	
City of Bergen	Norway	Jun 2016	20	NOK	1	108	100 %	Wastewater treatment/	11,400
City of Stockholm	Sweden	Jun 2016	10	SEK	2	213	100 %	Wastewater treatment	90,720
Municipality of Ängelholm	Sweden	Jun 2016	5/15	SEK	100	11	100 %	Wastewater treatment	
Vasakronan AB	Sweden	May 2016	10	SEK	445	47	100 %	Green buildings	
Stockholm County Council	Sweden	Feb 2016	10	SEK	1	107	100 %	Public transport	
Käppalaförbundet	Sweden	Feb 2016	25	SEK	151	10	60 %	Wastewater treatment	10,400
City of Mikkeli	Finland	Feb 2016	24	EUR	10	10	100 %	Wastewater treatment	

For more information about the project, please visit our website.

NIB publishes the total CO2 equivalent impact of all projects financed by NIB Environmental Bonds. At year-end 2016, the impact was 740,000 tonnes.\*

\* P.a. reduction calculated on the basis of the participation of NIB in per cent in a project. The number is calculated in accordance with the new harmonised methodology implemented by <u>International Financial Institutions</u> in January 2016.

# **Case Studies**

### **Helgeland Kraft AS**

The world's most striking hydropower station

Date:	October 2016
Disbursed amount:	NOK 470 million
Maturity:	15 years
Category:	Renewable energy
NIB Environmental	
Bond eligibility:	89% of disbursed amount

The loan has been provided for financing six hydropower plants with an estimated total annual generation capacity of 166 GWh in the Helgeland region of Nordland County in Norway. This amounts to about 16% of Helgeland Kraft's total production. The project will increase the security of supply to the Nasdaq [Nordpool] electricity pool. NIB's share of added renewable energy is 58,420 MWh/year.

The sixth hydropower plant is Øvre Forsland, which is the last of four hydropower plants that has been built at the river Forslandselva in Leirfjord municipality in Nordland County. The plant was commissioned in March 2015, and officially opened by the Minister of Petroleum and Energy Tord Lien in August 2015. For more information about the projects, please visit our website.

Øvre Forsland hydropower plant. Photo: Helgeland Kraft



### City of Stockholm—Henriksdal water treatment plan

The world's largest underground wastewater treatment facility

Date:	June 2016
Disbursed amount:	SEK 2,000 million
Maturity:	10 years
Category:	Wastewater treatment
NIB Environmental	
Bond eligibility:	100% of disbursed amount

The loan has been provided for an expansion of the Henriksdal underground wastewater treatment plant and to construct a 15-kilometre sewer tunnel under the southern-central part of Stockholm, Sweden.

The increased transport capacity of the sewer network is expected to reduce the overflow of untreated wastewater into Lake Mälaren from an estimated 185,000 cubic metres annually to less than 10,000.

The new MBR technology will result in 40% lower discharges of phosphorus and 33% lower discharges of nitrogen into the Baltic Sea from the plant. It will also remove all particles larger than 0.04 micrometres, i.e. all microplastics, from the wastewater. NIB's share of added renewable energy is 90,720 MWh/year. For more information about the project, please visit our website.

Henriksdal water treatment plant. Photo: Kari Kohvakka



# NIB invites green bond investors to visit the projects

The Funding team from NIB invited green bond investors to visit projects they helped finance in Finland. The first stop on the tour was Vantaan Energia's new waste-to-energy plant, which reduces the Helsinki region's dependence on imported fossil fuels. The second visit was to S Group's energy-efficient grocery distribution centre in Sipoo, which utilises geothermal and condensing heat.

"We think it is important to show our investors the actual outcome of their investment decisions, hence we decided to arrange a visit to some of the projects financed with NIB Environmental Bonds", says Lars Eibeholm, Head of Treasury at NIB.

"These projects clearly illustrate the power and the responsibility that big investors have in making investment decisions that help us do both well, financially and good for society. We are all exposed to issues such as climate change and social challenges. Following the money for seemingly small actions may be difficult, but it's worth it: these sites were proof points that we can all make a real difference", says Sari Lintumaa, CEO of Zurich Global Corporate Finland.

For more information about the event and projects visited, <u>please visit our website</u>.

From the left: Head of Fixed Income Peter Castrén at Local Tapiola Asset Management, Senior Funding manager Alexander Ruf at NIB, Project Manager Kalle Patomeri at Vantaa Energia, Head of Treasury Lars Eibeholm at NIB, Head of Business Development & Control Harro Pitkänen, Head of Funding and Investor Relations Jens Hellerup at NIB, Senior Funding Manager Angela Brusas at NIB, SRI Analyst Samantha Stephens with Mirova, CEO Sari Lintumaa of Zurich Global Corporate Finland, Portfolio Manager Pontus Soramäki with Ålandsbanken Abp and Portfolio Manager Philip Dencker Svendsen at PKA.



# NIB buys green bonds in cooperation with arranging banks

As a long-term lender and issuer of environmental bonds, NIB wants to support the green bond market, which finances projects with positive environmental impact, such as contributing to climate change mitigation.

NIB has extensive experience in evaluating the environmental impact of all projects it lends to, which benefits the assessment of underlying projects financed by NIB-purchased green bonds. In 2016, NIB decided to allocate EUR 500 million for investments in green bonds issued by companies and municipalities in the Nordic-Baltic region.

"Purchasing green bonds fits well with the part of NIB's mandate that focuses on financing projects that improve the environment", says Thomas Wrangdahl, Head of Lending at NIB.

Green bonds are typically issued with the involvement of arranging banks assisting the issuing corporate entity. As a rule, NIB will itself evaluate the environmental impact before investing in a new green bond, but in some cases there are time constraints. Thus, it is important that arranging banks with whom NIB cooperates know what purposes the bond proceeds are being used for and whether the issue would be eligible for NIB to invest in.

NIB has decided to cooperate with certain arranging banks. With these arrangers, NIB has discussed their respective green bond underwriting policies, procedures and awareness of NIB's mandate. NIB discloses its purchases of green bonds; the aggregate amount as of 31 December 2016 was EUR 143 million. Information on purchases made so far is available on <u>the NIB website</u>.

"This cooperation with green bond arrangers allows NIB to follow its strict requirements for investing while being able to react to the rapid decision-making required for investing in green bonds", says Lars Eibeholm, Head of Treasury at NIB. "We look forward to cooperating with other arranging banks, as well", he adds. For more information on the topic, <u>please visit our website</u>.

# NIB member of the Green Bond Principles' Executive Committee and observer to EU High-Level Expert Group on sustainable finance

The Green Bond Principles (GBP) are a set of voluntary process guidelines to promote the integrity and development of the green bond market. The members and observers of the GBP include investors, issuers and dealers. The Executive Committee is the main body within the GBP developing and deciding on the further amendments to the Principles. NIB joined the GBP in 2014 and was voted into the Green Bond Principles Executive Committee on 16 June 2016.

As of January 2017, NIB is participating as observer to the High-Level Expert Group that is assigned to provide recommendations for the European Commission on sustainable finance as a follow-up on the EU's 2030 Agenda for sustainable development.

The expert group has been set up for a year to identify measures to integrate sustainability considerations into the EU rules for the financial sector. The group consists of twenty policy leaders from civil society, the finance sector and academia. By the end of the year, the group will provide a report containing a set of operational recommendations for the European Commission. This marks an important step in the follow-up to the EU's 2030 Agenda for sustainable development as well as the Paris Agreement on climate change.

As international institutions contributing to the development of sustainable finance, NIB, the European Investment Bank, the European Environment Agency, the United Nations Environment Programme and a number of other organisations have been invited as observers to the expert group.

# NIB Environmental Bond framework

Addressing environmental challenges is a concern shared among a growing number of fixed-income investors worldwide. In order to respond to these investors' readiness to support environmentally sustainable projects, NIB in 2011 introduced a <u>framework</u> which allows investors to provide funds for the Bank's environmental lending.

Under this framework, the Bank can issue NIB Environmental Bonds (NEBs), the proceeds of which are used to finance projects which have a positive impact on the environment. The debt obligations carry no project risk and are issued under NIB's standard debt issuance programmes.

NIB has obtained a second opinion on the NIB Environmental Bond framework from CICERO, which can be found on <u>our website</u>.

Only loans to projects located in NIB member countries or the EU may be considered for financing. Projects qualify as eligible if the sustainability review does not identify any potentially threatening risk elements to the projects and the likelihood of achieving the targeted environmental benefits is high.

In line with the Green Bond Principles (GBP), NIB also has four core components in its framework:

Use of proceeds Process for project evaluation and selection Management of proceeds Reporting

#### **Use of proceeds**

The Green Bond Principles encourage the issuer to clearly describe the utilisation of the green bond proceeds for eligible projects. The GBP explicitly recognize several broad categories of eligibility for green projects aiming to address key areas of concern.

NIB has identified the following categories eligible for green projects:

- Energy efficiency leading to a reduction of energy use of a minimum of 30% (fossil fuel energy generation is excluded)
- Renewable energy
- Public transport solutions mainly based on electricity or biofuels
- Electricity transmission and distribution systems to increase the capacity for renewable energy
- Wastewater treatment to reduce discharges into water
- · Green buildings

### **Process for Project Evaluation and Selection**

According to the Green Bond Principles, the issuer should outline the process and criteria for project evaluation and selection, and the environmental sustainability objectives.

Due to NIB's environmental mandate, the Bank assesses and measures the environmental impact of all its lending projects. NIB's internal Sustainability & Mandate unit has a long history of systematically conducted environmental

reviews of projects prior to financing. During the assessment of mandate fulfilment of all projects, the environmental specialists identify and preselect NEB eligible projects. Eventually, the Bank's Credit Committee decides which loans are deemed eligible for financing through NIB Environmental Bonds.

The mandate assessment consists of two main components: an assessment of the project's potential environmental impact, and an assessment of the risk that the project's potential impacts will not materialise. The potential impact is rated on a six-grade scale from "Negative" impact to "Excellent" environmental improvement. Once the potential impact has been determined, the analysts also assess on a four-grade scale the risk that the project's expected impact will not materialise.

Only projects that reach the two highest levels on the potential impact and have low realisation risks are eligible to be allocated to receiving NIB Environmental Bond proceeds.

### **Management of proceeds**

The Green Bond Principles emphasise that the net proceeds of green bonds should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner and attested to by a formal internal process linked to the issuer's lending and investment operations for green projects. The balance of the proceeds should be periodically adjusted to match the allocations.

At NIB, an amount equal to the net proceeds from the sale of the NEB issuance will be held in a separate portfolio until it is disbursed to eligible projects.

### Reporting

According to the Green Bond Principles issuers should make, and keep, readily available up to date information on the use of proceeds, including listing projects to which green bond proceeds have been allocated, as well as briefly describing the projects and amount allocated, and their expected impact. Transparency is important and the GBP recommends the use of qualitative performance indicators and, where feasible, quantitative performance measures and to explain the key methodology and assumptions used in the determination.

NIB publishes detailed descriptions of all issued NEBs and projects financed on <u>its website</u>, along with the total CO2 equivalent impact of all projects financed by NEBs.

International Financial Institutions (IFIs) have developed and signed a harmonised framework for green bond impact reporting. The framework outlines key principles and recommendations on how to conduct impact reporting. NIB is part of the IFI working group developing the framework, and it calculates its impact numbers in accordance with the harmonised methodology implemented by IFIs in January 2016.

### Contact

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www.nib.int/capital\_markets/environmental\_bonds

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