





# Green financing

Improved resource efficiency
Competitive low-carbon economy
Protection of the environment
Development of algorithm to characterized

 $\odot$  Development of clean technology

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# Financing the future

The Nordic and Baltic countries have given NIB a mission to finance projects that improve competitiveness and the environment. The bank carefully reviews and selects projects that contribute to this mission. For environmental projects, this expertise has made NIB a leading green financier in the Nordic-Baltic region.

Financing projects that help to reduce the burden on the environment is becoming increasingly important. There is a growing realisation that there are no alternatives to sustainable development.

As agreed at the UN's Climate Change Conference in Paris in 2015, a green transition is required to limit the increase in the average global temperature. To achieve this, private actors and governments need to co-operate to steer finance flows into low-carbon projects. One way of doing this is for governments to involve international financial institutions with clearly defined mandates, such as the Nordic Investment Bank.

#### Lending with a purpose

The Nordic Investment Bank is owned by the governments of the Nordic and Baltic countries. NIB was created in 1975 to overcome investment barriers and attract commercial lending. Since 2005, the Bank's mission has been defined as improving the competitiveness and the environment of the region.

#### Patient money

Located in Helsinki, Finland, NIB has an international staff of 190 experts who work for sustainable growth in the Nordic-Baltic region. The Bank is a reliable source of long-term lending for its customers. NIB acquires the funds for its lending by borrowing on the international capital markets. This way, the Nordic and Baltic member countries can finance the green transition.

NIB is the International **Financial Institution of** the Nordic and Baltic countries.

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#### DRIVERS

Sustainable growth Climate change Marine environment Pollution prevention Productivity improvement



OUR VISION IS A

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# Leading the way in green financing

Companies are increasingly expected to both be profitable and to act responsibly towards societies and the environment. For project owners, it is therefore reassuring that NIB reviews all loan projects from a sustainability perspective.

The Nordic and Baltic owner countries have given NIB an explicit mission to improve the environment.

#### Lona-term lender

NIB's major impact comes from its long-term lending to projects. We analyse all projects from

the perspective of competitiveness and the environment. After projects are completed, our analysts follow up on the benefits achieved. This may help clients capture the wider implications of projects.

The volume of environmental loans has increased in recent years, amounting to about 40% of total lending. Of this, NIB's climate lending has been close

#### **NIB's environmental lending**

In 2016, long-term loans for projects fulfilling our

in ELIR millio



to EUR 1 billion per year. Every year, NIB also lends to projects that benefit the Baltic Sea environment. We have expanded our lending by purchasing green bonds issued by companies and municipalities in the member countries. This financing complements NIB's ordinary lending and supports the green bond market.

#### Leading Nordic green bond issuer





NIB's Head of lending Thomas Wrangdahl hands over a NIB Environmental Bond (NEB) certificate to Fredrik Wirdenius, CEO of Vasakronan, for two projects cofinanced by a ten-year loan of SEK 2,345 million funded with the proceeds of NEB

Since 2011, NIB has raised funds for part of its environmental lending through issuing green bonds. As the leading Nordic green bond issuer, we have a strong interest in participating in setting the standards for environmental financing.



# Selecting environmental projects

NIB targets projects that lead to a competitive low-carbon economy, new clean technology and improved resource efficiency. We also lend to protect the environment and its ecosystem services. The benefits arising from such projects form the base for our environmental lending.

NIB has a Sustainability policy and quidelines to steer its loan review process. The policy covers the environmental, social and ethical aspects of all our lending activities. The policy also defines the types of projects that NIB will not finance. This way, our customers can rest assured that their projects are not detrimental to the interests of current and future generations.

#### **Analysing for impact**

The environmental review assesses the net benefit on a before-and-after comparison basis. The likelihood that the environmental benefits will materialise is also analysed. NIB only defines projects with net benefits for the environment as green financing



To ensure sustainability, NIB's environmental analysts visit most projects considered for financing.

#### Sustainability review

We analyse all loan projects, both for improving competitiveness and the environment, from a sustainability perspective.

Special monitoring is carried out for projects with potential environmental and social risks.

#### **Environmental impact**

We review environmental projects for impact on a before-and-after comparison basis.

Those projects that show a significant net benefit for the environment are considered green financing.

#### **Green bond eligibility**

Only the very best of NIB's environmental projects are funded by proceeds from NIB Environmental Bonds (NEBs).

To be eligible, projects must have significant environmental benefits and a high likelihood of succeeding.

# **Green bonds for** best environmental benefits

NIB is the leading Nordic issuer of green bonds. NIB issues NIB Environmental Bonds (NEBs) to attract investors who particularly want to finance projects that improve the environment.

Only the very best environmental projects receive loans funded by the proceeds of NIB Environmental Bonds. The owners of such projects are entitled to receive a NEB certificate. The NEB Framework is compatible with the Green Bond Principles\*, a voluntary guidance scheme for green bond market participants. The NEB framework has also received a second opinion from the Norwegian research institute CICERO.



#### Harmonised impact reporting

Transparent reporting is crucial for investors in the green bond market. We therefore publish a list of all NEB-financed loans. In addition, we also report aggregated  $CO_2$ data annually. Data on environmental benefits is reported in harmony with other international financial institutions. This makes NIB a respected contributor to improving the standards of environmental financing.

#### NEB-financed projects belongs to the categories of:

- Energy efficiency
- Waste management
- Renewable energy
- Public transport
- Transmission and distribution systems
- Green buildings
- Wastewater treatment

We calculate the reduction of CO<sub>2</sub> equivalents for all loan projects funded by the proceeds of NIB Environmental Ronds



\* NIB is member of the Green Bond Principles Executive Committee, a group within the International Capital Markets Association.

NIB's Funding team invites investors in NIB Environmental Bonds to visit projects they finance. This image is from a visit to Vantaan Energia's new waste-to-energy plant in 2016. The plant reduces the Helsinki region's dependence on fossil fuels.

#### **Reduction in CO<sub>2</sub> emissions**

Cumulative CO2 reduction

Total CO<sub>2</sub> equivalent impact of financed projects by NIB Environmental Bonds is 940,000 tonnes. The figure is calculated in accordance with the new harmonised methodology implemented by international financial institutions in January 2016. NIB is part of the working group developing the impact reporting.

## Renewable energy in northern Norway

O Energy efficiency O Low-carbon economy O Environmental protection Clean technology

financed with NIB **Environmental Bonds** 

NOK 470M

133<sub>GWh</sub>

annually

Helgeland Kraft AS has signed a 15-year loan agreement of NOK 470 million with NIB to finance six hydropower plants in the Helgeland region of Nordland County, Norway,

The Øvre Forsland hydropower plant generates 33 GWh annually. Combined, the Leirå, Bjørnstokk, Tverråa, Storelva and Tosdalen plants are expected to qenerate 133 GWh per year. All six hydropower plants are designed to have a beautiful appearance adapted to the surrounding nature.

Environmental assessments have been carried out as part of the concession applications for all the six hydropower plants. Some 70%-80% of the water flow is utilised for power generation and 1-2 kilometres of the rivers is bypassed.

Helgeland Kraft AS is owned by 14 municipalities in the region of Helgeland in Nordland, where it distributes electricity to around 80,000 inhabitants through its 7,800 kilometer distribution network.

"Hydropower is one of the most mature technologies among renewable energies and has among the best conversion efficiencies of all known energy sources", says Henrik Normann, President & CEO of NIB.

## **Measuring the** environmental impact

All loan projects are subject to follow-up during their lifetime. Within three years after commissioning a project, our environmental experts will assess how the project actually turned out.

#### **Environmental parameters**

We measure the impact from our lending according to a set of environmental parameters. These include:





Added

Added renewable energy

transports











**Green building** certifications

Increased energy efficiency



infrastructure for electrical land





Greenhouse das emissions



Added wastewater treatment



### **Public transport in Helsinki, Finland**

Helsinki City Transport has signed a 20-year loan of EUR 60 million to purchase forty new trams. The new fleet will be more energy efficient, offer more comfort and better access for wheelchairs and prams, and have a passenger capacity 50% greater than the older trams built in the 1970s.

Helsinki's green trams are an integral part of the urban landscape and the main form of public transport in the inner city. Nearly 57 million passengers per year are using the tram network. The trams are designed to cope with Helsinki's demanding conditions, not least the challenging climate.

#### **⊘** Energy efficiency ⊘ Low-carbon economy ○ Environmental protection O Clean technology



passenger capacity

### **Energy efficiency** in Lithuania



EUR **100** M

### Wastewater treatment in Stockholm, Sweden

The City of Stockholm has signed a 10-year loan of SEK 3,000 million to construct the world's largest underground wastewater treatment facility at Henriksdal. The city estimates annual population growth of around 2.5% until 2040.

The increased transport capacity of the sewer network is expected to reduce the overflow of untreated wastewater into Lake Mälaren. The new membrane bioreactor will result in 40% lower discharges of phosphorus and 33% lower discharges of nitrogen into the Baltic Sea. It will also remove all particles larger than 0.04 micrometres, i.e. all microplastics, from the wastewater. NIB has handed over a NEB certificate to the city that states that 100% of the loan is funded by the proceeds of NIB Environmental Bonds.





#### **⊘** Energy efficiency ⊘ Low-carbon economy ○ Environmental protection ○ Clean technology

The Republic of Lithuania has signed a 20-year loan of EUR 100 million to finance the second phase of a Public Sector Energy Efficiency Project and Housing Renovation programme. The second phase covers renovation of four million square metres of apartments and 49 public buildings, mainly hospitals, health centres and various houses for cultural purposes. Windows will be replaced, roofs and walls insulated, modern ventilation installed and more efficient heating systems. The renovations are expected to reduce the use of heat by 33% on average.



○ Energy efficiency ○ Low-carbon economy ⊘ Environmental protection ✓ Clean technology



