

Green Bond Impact Report
Nordea Bank AB

July 12, 2018



Content

1. Summary
2. Inaugural Green Bond Impact
3. Asset Portfolio Impact
4. Rationale for Green Bonds
5. Green Bond Asset Portfolio
6. Ensuring asset quality
7. ESG evaluations and SDGs
8. External verification of assets
9. Methodology notes



Summary



Nordea is the largest financial services group in the Nordic region and one of the biggest banks in Europe. We want to make a real difference – by sharing our extensive expertise based on 200 years in the banking business. We have set a number of sustainability commitments across the entire business, which will anchor sustainability more deeply into our operations.

Sustainable finance at Nordea is about integrating sustainability into the bank and all business activities and products within our core areas of investment, financing and customer advice. Sustainable business is a prerequisite to uphold trust and confidence. Nordea is committed to sustainable business and development by combining financial performance with environmental and social responsibility as well as sound governance practices.

The global environment is under great pressure and catastrophes due to climate change and scarcity of natural resources are part of life. The state of the environment affects both individuals and companies, and poses a serious threat to global prosperity. Financial institutions have a considerable role to play in the transformation towards a sustainable society in general and in combating climate change in particular. Nordea is no exception.

“Sustainability is multi-dimensional and is part of everything we do at Nordea. It is about mitigating risks, improving resilience and creating opportunities. It is, quite simply, the right thing to do.”

Casper von Koskull,
Nordea’s President and Group CEO*

During 2017, we saw an increasing interest among our corporate customers for sustainable financing solutions and on the back of increased number of green financing discussions we also issued our inaugural green bond in June to further strengthen our ability to support our customers’ needs and ambitions. As a result, we are also now publishing our first Green Bond Impact Report to provide more insight into the impacts of our Green Bond Asset Portfolio and the inaugural Green Bond.

This Impact Report follows the guidelines for impact reporting, provided by Green Bond Principles (GBP)¹. The report also takes into account the Nordic Public Sector Issuers’ Position Paper on Green Bonds Impact Reporting² as well as the high-level guidance for mapping Sustainable Development Goals to Green Bonds provided by GBP¹.

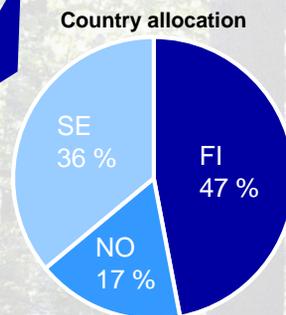
* Nordea Sustainability Report 2017

¹ <https://www.icmagroup.org/green-social-and-sustainability-bonds/>

² https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/NPSI_Position_paper_2017_Final-261017.pdf

Impact overview – Inaugural Green Bond

Impact is reported per issued bond and per invested 1MEUR



Category	Subcategory	Green Bond Assets amount mEUR	Annual Emission Avoided tCO ₂ e	Annual Energy Production GWh	Annual Energy Savings GWh	Annual Water Treatment Million m ³	SDGs
Renewable Energy	Wind power	160	262,300	690	-	-	7, 11, 13
	Hydro power	85	183,300	480	-	-	7, 11, 13
	Subtotal	245	445,600	1,170	-	-	
Green Buildings	Certified green buildings	202	2,500	-	6	-	7, 11, 13
	Subtotal	202	2,500	-	-	-	
Pollution Prevention and Control	Water and waste water management	20	-	-	-	23	3, 6, 12
	Waste-to-energy	33	17,600	150	-	-	11, 12, 13
	Subtotal	53	17,600	150	-	23	
Total		500	465,700	1,322	6	23	

Methodology note:

We are following Nordic Public Sector Issuers' Position Paper on Green Bond Impact Reporting. Calculations are based on Nordea's share of total financing. For more methodological information see the last page of this report.

Impact overview – Green Bond Asset Portfolio

Verified asset portfolio provides an overview for broader impact



It is a cornerstone of Nordea's business to be a responsible member of the society and we use our reach to increase awareness of sustainable investment and financing alternatives to facilitate the transformation towards a low carbon and resilient economy. We are committed to use our leading capital markets platform to arrange financing to our customers for purposes that generate positive environmental benefits.

To that end, our Green Bond Asset Portfolio is a centralised registry of financing with externally verified assets that meet high sustainability standards. We believe that Green Bond financing offers a way to create transparency around funds targeted to climate change mitigation and other environmentally beneficial uses, which in turn create a positive benchmark to all investments.

Category	Subcategory	Green Bond Asset Portfolio amount mEUR	Annual Emission Avoided tCO ₂ e	Annual Energy Production GWh	Annual Energy Savings GWh	Annual Water Treatment Million m ³	SDGs
Renewable Energy	Wind power	251	680,200	1,790	-	-	7, 11, 13
	Hydro power	190	401,500	1,060	-	-	7, 11, 13
	Subtotal	441	1,081,700	2,850	-	-	
Green Buildings	Certified green buildings	1,191	6,200	-	16	-	7, 11, 13
	Subtotal	1,191	6,200	-	16	-	
Pollution Prevention and Control	Water and waste water management	38	-	-	-	40	3, 6, 12
	Waste-to-energy	66	35,300	300	-	-	11, 12, 13
	Subtotal	104	35,300	300	-	40	
Total		1,736	1,123,200	3,150	16	40	

Methodology note:

We are following Nordic Public Sector Issuers' Position Paper on Green Bond Impact Reporting. Calculations are based on Nordea's share of total financing. For more methodological information see the last page of this report.

Moving on from “why” to “how”

We see a clear shift in the reasoning for green issuances

Nordea’s Green Bond issuances are built on long-term focus on sustainability which started more than 10 years ago. The issuance of Green bonds supports one of the most important aspects of sustainability at Nordea namely conducting sustainable business by enabling a connection between sustainable lending to customers and a dedicated investor base as well as building a more sustainable credit portfolio. Issuing Green bonds is also a natural step in the process to reach Nordea’s long-term sustainability targets such as managing Nordea’s indirect impact to fight climate change and to integrate sustainability in all policies, processes and products. Furthermore the issuance of Green Bonds is well aligned with Nordea’s Key Principles to preserve market capacity by seeking diversification of the investor base and product types while maintaining a proactive behaviour.



Ola Bladholm, Chief Treasury Manager
Juho-Pekka Jääskeläinen, Senior Treasury Manager



Mathias Leijon, Head of Corporate and Investment Banking

We have a role in society to help and support these major shifts, such as sustainable finance, and help ensure there is a market and capital allocated to these changes. This is also one of the purposes behind our initiative to launch the biggest sustainability conference in the Nordics last year, and to host the Nordic Sustainable Finance Conference again this autumn.

By including ESG and sustainability into our business, we will take responsibility in assisting our customers in their quest to become even better while also reducing the risk in our own balance sheet over time. The focus of sustainability in financing has shifted from image and perception to more commercial aspects and companies have realized that it is a competitive advantage to engage in ESG. We at Nordea have an obligation to engage, drive and contribute to this change in capital markets.

Nordea’s inaugural Green Bond issue in June last year was the starting point for moving from “why” to “how”. The “why” has been discussed far too long. From a business perspective it is simply great business. The Green Bond proceeds help us to take our customers’ sustainability work one step further by creating a complete value chain from green funding to green loan offering with better commercial terms aimed at sustainable initiatives/investments. This enables us to create a positive impact in society, make a difference for our customers’ employees and their stakeholders which directly strengthens our customer relationships. As, you know, several studies confirms the view that sustainability has gone from “doing good” to “core business”, i.e. sustainability has material impact on economic value. Companies with sustainable business models are the winners of the future and we as a bank want to be part of that future. Simply great business!



Gustaf Sarpakari, Head of Customer Profitability and Analysis
Nordea Business Banking

Green Bond Asset Portfolio

Volume of eligible assets has seen a significant increase

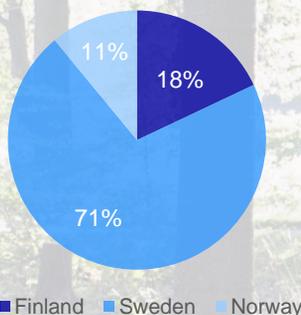
Our Green Bond Asset Portfolio was established in connection to the inaugural green bond issuance in June 2017, and over the past year we have seen significant increase in the verified asset volume from original 807m EUR to over 1.7bn EUR – more than doubling the portfolio volume (115 %). The growth has been driven by increased interest towards sustainable and green financing by our customers as well as increased awareness on ESG within Nordea that has enabled us to identify increasing amount of potentially eligible assets that can be proposed as Green Bond Assets.

We are continuously having a dialogue with various industries and market participants in order to stay updated on latest developments contributing towards our Green Bond Framework and Green Bond Asset Portfolio. As a result of an ongoing dialogue with our customers and other industry representatives, we updated our Green Bond Framework to reflect the increasing usage of the Nordic Swan Ecolabel among Swedish real estate and construction industries.



Juho Maalahti,
Green Portfolio Manager

Green Bond Asset Portfolio allocation



The majority of the Green Bond Asset Portfolio growth has been due to increased volume in Green Buildings, especially in Sweden due to our expanded criteria in our framework, and this development supports our ambition in engaging also households and not just companies into a mutual goal of mitigating climate change. To further strengthen our position, we have also signed up for the Energy efficient Mortgage Action Plan³ piloting phase.

We will continue our focus on implementing sustainability into our core business to further grow our Green Bond Asset Portfolio. While we are able to identify existing green assets and originate new ones, it is worth noticing that the verified Green Bond Asset Portfolio consists of existing lending towards eligible uses of proceeds and in order for external reviewer to verify these assets they must already exist. Hence, to streamline our reporting and avoid confusion, we refer to all assets as refinancing.

Category	Subcategory	Green Bond Assets amount (1 st Green Bond) mEUR	Reserve amount mEUR	Green Bond Asset Portfolio amount mEUR	Number of underlying assets*
Renewable Energy	Wind power	160	91	251	92
	Hydro power	85	105	190	99
	Subtotal	245	196	441	
Green Buildings	Certified green buildings	202	989	1,191	72
	Subtotal	202	989	1,191	
Pollution Prevention and Control	Water and waste water management	20	18	38	2
	Waste-to-energy	33	33	66	1
	Subtotal	53	51	104	
Total		500	1,236	1,736	266

* Number of individual wind parks, hydro power stations, buildings, water utilities and waste to energy plants

³ <http://eemap.energyefficientmortgages.eu/>

Ensuring asset quality

Aligning our existing expertise with market developments

We at Nordea see green financing to be an important activity in supporting one of our most important aspects of sustainability – conducting sustainable business.

We have set up a robust process for eligible asset selection and evaluation in order to ensure good sustainability quality of our Green Bond Asset Portfolio. Recently, we have also introduced green corporate loans in Sweden to further improve the flow of high quality and eligible assets into our Green Bond Asset Portfolio. Our green loans follow the guidance from Nordea Green Bond Framework and this will enable us to focus on right assets to be proposed as eligible Green Bond Assets (Stage 1 in the table below).

Our focus remains at ensuring robust internal evaluation of eligible assets in order to provide clear and transparent information to our external reviewer. Our Green Bond Committee gathers bi-annually to review and approve our Green Bond Asset Portfolio.



Aila Aho, Executive Sustainability Adviser, member of the European Commission's Technical Expert Group on Sustainable Finance

“I think it’s fantastic that the financing community is taking real steps in integrating sustainability into the product offering and strategic thinking. I believe EU level standards would further strengthen and facilitate growth in the green bond market.”

Aila Aho

The European Union has a strong focus on the transition to a sustainable, low-carbon economy and has been at the forefront of efforts to build a financial system that supports sustainable growth. 35 experts representing civil society, academia, the business and finance sector have been selected as members or observers to the group as a way to involve society in shaping the European Commission's proposals.

Nordea and Aila Aho have been selected to receive one of the honourable seats in the European Commission's Technical Expert Group on Sustainable Finance and this will further strengthen our expertise on sustainable finance. The Nordic market has the highest share of green bonds issued relative to the total market and Aila Aho will use her Nordic expertise in the sub-working group developing the EU green bond standards.

Internal evaluation			External evaluation	Committee sign-off
Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<p>Proposed Green Bond Assets</p> <p>Nordea chooses from each financing that is originated by relevant business units according to Nordea's financing criteria and proposed for selection by the business units</p> <p>Relevant business units:</p> <ul style="list-style-type: none"> Commercial and Business Banking Wholesale Banking 	<p>Potential Green Bond Assets</p> <p>Nordea <u>removes</u> financing that does not qualify (or where the client of such financing does not qualify) as Green Bond Assets</p> <p>Nordea further <u>removes</u> financing that is deemed ineligible (or where the client of such financing is deemed ineligible) in reference to Nordea's ESG assessment process</p>	<p>Potential Green Bond Assets</p> <p>The remaining financing is evaluated by sustainability experts within Nordea, after which the qualifying financing is deemed as potential Green Bond Assets</p>	<p>Green Bond Asset Portfolio</p> <p>The external second party opinion provider verifies the potential Green Bond Assets. The qualifying assets constitute the Green Bond Asset Portfolio</p>	<p>Green Bond Assets</p> <p>Role of committee:</p> <ul style="list-style-type: none"> Review the Green Bond Asset Portfolio Confirm the allocation to Green Bond Assets <p>Members:</p> <ul style="list-style-type: none"> Relevant units within the sustainability expert functions, Treasury functions, business areas and risk-and legal functions

Nordea's process for selecting and evaluating eligible assets

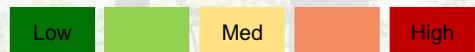
ESG bridging the way to long-term goals

We focus not only on assets but also on companies

We have built up a strong in-house ESG analysis team that supports our credit analysts and client executives to integrate ESG aspects into financing. We are committed to engaging with customers on ESG matters and to understand the challenges and opportunities customers have in their respective businesses and industries.

The ESG analysis conducted in relation to large corporates concludes in an ESG risk rating which is included in credit memorandums. In total, we have five ESG risk categories, ranging from low to high risk. Our process for selecting eligible assets also considers the overall ESG quality of the customer, and companies with ESG risk rating above Medium will not be chosen to be included in our Green Bond Asset Portfolio regardless of the sustainability quality of specific assets.

Companies assigned a high ESG risk are escalated to a group-level credit committee which can, if deemed necessary, consult our Business Ethics and Values Committee (BEVC) – a committee that has overall responsibility for conduct and sustainability in Nordea. For companies rated in the highest risk category, long-term financing is typically offered only on specific terms.



Sustainable Development Goals

We acknowledge that we have an important role in helping the governments in the four Nordic countries in which we operate to achieve the global goals. We have also taken a more holistic approach to the SDGs, realising that they are all relevant to us if we look at our impact – deploying capital into areas where improving standards of living and protecting the environment will drive economic growth.

We have used the high-level guideline for mapping SDGs to Green Bonds provided by International Capital Markets Association (ICMA). SDGs help us assess our impacts on a large scale and provide a good reference point globally.

Below mentioned Sustainable Development Goals are addressed more directly through our Green Bond Asset Portfolio than other SDGs. See our impact overview for mapping of SDGs to asset categories.

SUSTAINABLE DEVELOPMENT GOALS



External review of Green Bond Asset Portfolio

Final verification for the asset quality within our portfolio

In June 2017, we commissioned oekom research AG to assist with confirming the sustainable added value of our Green Bond Asset Portfolio, from which we select individual assets for Green Bond issuances.

To ensure consistency, oekom research AG performs an annual re-assessment of the Green Bond Asset Portfolio in order to provide investors with assurance that the asset selection still complies with the eligibility criteria and that new projects are selected accordingly.

International Capital Markets Association (ICMA) published an additional guidelines for external reviewers⁴ in June 2018, and as the focus on market transparency and integrity increases, we also aim to follow updated guidance on external reviews. The new guidelines introduced four different types of external reviews: Second Party Opinion, Verification, Certification, and Green, Social and Sustainability Bond Scoring/Rating. Nordea's Second Party Opinion provider, oekom, provides us with a Second Party Opinion with a Verification of sustainability quality of included assets against oekom's KPI Framework on all asset categories.

As the market develops, we also evaluate constantly our ambition to acquire certifications and/or green bond –specific rating/scoring.

“In all key issues, Nordea achieved a rating that was above the average for the sector. A very significant outperformance was achieved in ‘Sustainable investment criteria’ and ‘Business ethics’”
oekom research AG

Category	Project types
Renewable Energy	<p>“Renewable Energy” means generation and transmission of energy from renewable sources and manufacturing of the related equipment for:</p> <ul style="list-style-type: none"> ▪ wind power ▪ solar power ▪ hydro power <ul style="list-style-type: none"> • small scale plants, run of river plants or refurbishments of existing larger hydro power plants in the Nordic countries without any increase in the size of its impoundment facility ▪ integrating renewable energy sources into the transmission network
Energy Efficiency	<p>“Energy Efficiency” means infrastructure, equipment, technology and processes related to smart grids, energy storage and district heating including:</p> <ul style="list-style-type: none"> ▪ Automation and intelligence in the power transmission network, distribution and related systems
Green Buildings	<p>“Green Buildings” means; Commercial or residential buildings with at least any of the following certifications:</p> <ul style="list-style-type: none"> ▪ the LEED “gold” certification ▪ the BREEAM “very good” certification ▪ the Miljöbyggnad “Silver” certification (Sweden) ▪ Nordic Swan Ecolabel, or ▪ Renovations and refurbishments of commercial or residential buildings leading to reduced annual energy use on a m2 basis that is at least 25% lower than the applicable national regulations in the relevant Nordic country, or that lead to an annual reduction of energy use on a m2 basis of at least 25 %
Pollution Prevention and Control	<p>“Pollution Prevention and Control” means projects or activities and any related infrastructure, equipment, technology and processes towards</p> <ul style="list-style-type: none"> ▪ water and waste water management ▪ waste-to-energy
Clean Transportation	<p>“Clean Transportation” means projects or activities and related equipment, technology and processes towards clean transportation infrastructure, including expansion and improvements of train and metro networks, stations and rolling stock for passenger or freight transportation</p>
Sustainable Management of Living Natural Resources	<p>“Sustainable Management of Living Natural Resources” means Projects or activities and related to sustainable forestry or agriculture in the Nordic countries, including acquisition, maintenance and management of:</p> <ul style="list-style-type: none"> ▪ forests certified by Forest Stewardship Council (“FSC”) or Programme for the Endorsement of Forest Certification (“PEFC”) (Sweden) ▪ sustainable agriculture in the Nordic countries comprised of: <ul style="list-style-type: none"> ▪ organic farming as certified in compliance with the EU and national regulation

Detailed description of Nordea Green Bond Asset Categories

⁴<https://www.icmagroup.org/green-social-and-sustainability-bonds/external-reviews/>

Methodology notes

Nordea reports the estimated impact of the assets financed by the Green Bonds on an aggregate level per category. Calculations have been done for the time period of 26.6.2017 – 30.6.2018. To the extent available, the reporting is based on real data reported by the projects, companies or other organisations. If such information has not been available, Nordea has used estimates for the relevant asset type and location. Estimates are based on the average of similar (size, location) assets within the Green Bond Asset Portfolio. The avoided CO₂ emissions and other impacts are reported in accordance with Nordea's debt financing share.

It is assumed that new energy capacity crowds out fossil fuel based generation. Hence, wind power and hydropower are assumed to crowd out CO₂ emissions in line with the defined emission factor. We have opted to use the emission factor of 380 gCO₂/kWh presented in the Nordic Public Sector Issuer's Position Paper on Green Bonds Impact Reporting⁵. This baseline represents an European mainland mix including Norway. Emission factor is calculated as Combined Margin according to IFI Harmonized Framework methodology, combining a Build Margin and Operating Margin. Same combination of Build Margin (50%) and Operating Margin (50%) is used for all energy projects. We will update this baseline in accordance with updates to the NPSI Position Paper or other relevant guidelines.

For Green Buildings, we are using national building standards as a baseline for measuring impacts. As NPSI Position Paper on Green Bonds Impact Reporting suggests, we disclose the energy savings from green buildings as a net value in relation to national building requirements. We have both commercial and residential buildings in the Green Bond Asset Portfolio, and respective national building requirements are used based on the building year. For buildings where we have not obtained actual energy consumption figures, we have estimated the energy savings based on the building certificate requirements, national building requirements and the building year and floor area.

In general, it is noteworthy that when Nordea has had to estimate the annual energy output instead of using actual generation figures, the results are more inaccurate and give an order of magnitude estimates of electricity produced and, as a consequence, CO₂ emissions avoided. Same uncertainty in reported results applies to other Green Bond Asset Categories as well.

⁵https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/NPSI_Position_paper_2017_Final-261017.pdf

Together with customers and partners
Nordea enables the transition towards a
sustainable future

Contacts

Juho-Pekka Jääskeläinen
Senior Treasury Manager
Long Term Funding
+46 8 407 9027
juho-pekka.jaaskelainen@nordea.com

Ola Bladholm
Chief Treasury Manager
Long Term Funding
+46 70 269 65 32
ola.bladholm@nordea.com

Juho Maalahti
Green Portfolio Manager
Group Sustainable Finance
+358 400 453 120
juho.maalahti@nordea.com

Andreas Larsson
Head of Debt IR
+46 709 70 75 55
andreas.larsson@nordea.com