

NORD/LB

Covered Bond Bank Luxembourg



Green Covered Bond Impact Report

Financial Year 2022

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1. Introduction

We are pleased to present our second Green Covered Bond Impact Report (the Report), for the financial year ended 31st December 2022. NORD/LB CBB published its Green Bond Framework in 2019 followed by the issuance of the worldwide first green covered bond based on legislation - Lettre de Gage énergies renouvelables - in January 2020.

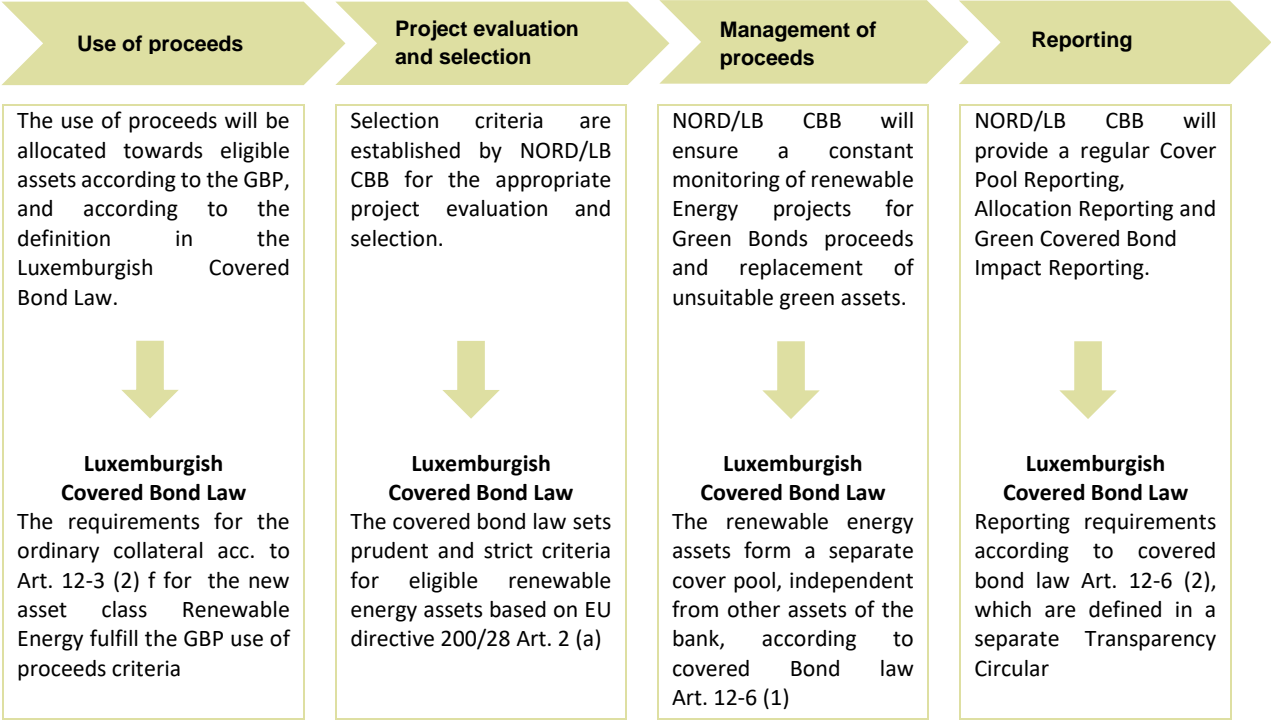
NORD/LB Group – including Norddeutsche Landesbank – Girozentrale – (NORD/LB) and NORD/LB Luxembourg S.A. Covered Bond Bank (NORD/LB CBB) - has been a vocal proponent of the UN Global Compact and its principles for many years and strives to implement these principles within its sphere of influence. Upholding these principles represents a key element for NORD/LB of its responsibility towards customers and employees in the capacity of financial service providers, and towards society as a whole in the capacity of a corporate citizen. For NORD/LB and its subsidiaries, it means that, in line with the ten principles relating to human rights, environmental protection and the fight against corruption, that these issues are firmly entrenched within the guidelines and policies of the Banks and, in doing so, enabled them guide them in their day-to-day activities.

The NORD/LB Group has had a sustainability strategy to serve as a strategic foundation since 2013. Therefore NORD/LB Group believes that sustainability is first and foremost a question of attitude: it is a part of the Bank's public mandate to support sustainable development directly and indirectly through its own business activities. The NORD/LB Group is convinced that many aspects of global change result in opportunities and risks for its customers and will therefore also affect its business activities.

NORD/LB CBB intends to make its contribution to achieving the climate targets set by the German Federal Government and contributes to the transition to a more environmentally friendly and sustainable European Economy. NORD/LB CBB is fully committed to supporting the development of the market for sustainable bonds. We believe that issuing green bonds will help provide the necessary resources to fight climate change.

2. Green Covered Bond Approach

NORD/LB CBB’s Green Bond Framework is aligned with the 2018 Green Bond Principles as well as with the provisions related to renewable energies of the Luxembourg Financial Sector Act.



NORD/LB CBB’s Green Bond Framework is confirmed by a Second-Party Opinion from Sustainalytics. Additional information are available on the NORD/LB CBB Green Covered Bond webpage.

In addition, NORD/LB CBB publishes an annual Allocation Report, which is also available on the NORD/LB CBB Green Covered Bond webpage.

3. Impact Green Covered Bond Portfolio Renewable Energy

ICMA Green Bond Eligible category (cover pool date as of 31 st December 2022)	Signed Amount (EURm) loans in cover only	Share of Total Portfolio Financing	Eligibility for Green Financing Instruments	RE Component	Amount allocated	Average Portfolio Lifetime in yrs	Total installed capacity of renewable energy (in MW)	Annual (expected) production of renewable energy (in MWh)	Total capacity of renewable energy facilitated through connection, transmission, transformation and storage (in MW)	Avoided greenhouse gas emissions from the production and facilitation of renewable energy emissions (annual avoided greenhouse gas emissions in tons of CO ₂ equivalents) as per 1 million EUR loan in cover	Contribution to specific UN SDG	Contribution to EU Environmental Objective
a/	b/	c/	d/	e/	f/	g/	g/					
Renewable Energy (loans in cover)	294.9	15%	100%	100%	100%	5.6	807	2,172,038	n/a	325.4	UN SDG 7, 13	Climate Change Mitigation
- Onshore wind power	274.3			93%			757	2,118,157				
- Solar power	20.5			7%			50	53,881				
Total	294.9	15%	100%	100%	100%	5.6	807	2,172,038	n/a	325.4		

a/ Eligible category

b/ Signed amount represents the amount legally committed by the issuer for the portfolio or portfolio components eligible for Green Finance Instruments

c/ This is the share of the total portfolio per Eligible category

d/ This represents the share that financed and/or refinanced projects within the renewable energy sector in accordance with the use of proceeds categories as set out in the Green Bond Framework

e/ This represents the amount of green bond proceeds that has been allocated for disbursements to the portfolio.

f/ WAL based on the legal life of the portfolio

g/ Impact reporting indicators per Eligible category

Renewable Energy

Total installed capacity of renewable energy (in MW)

Annual (expected) production of renewable energy (in MWh)

Total capacity of renewable energy facilitated through connection, transmission, transformation and storage (in MW)

Avoided greenhouse gas emissions from the production and facilitation of renewable energy emissions (annual avoided greenhouse gas emissions in tons of CO₂ equivalents)

The above reported CO₂ avoidance of 325.4 t relates to an annual estimated CO₂ avoidance in t as per 1 million EUR loan in cover

Estimated impact assessment based on: production data for projects in operation for the full year 2022 and expected production for projects still under construction

in 2022 according to net P50 (P50 = assumption that the predicted wind yield will not fall below predicted wind production based on a 50% probability),

calculation of CO₂ avoidance based on baseline CO₂ equivalent emission per kWh in the country where project is located

Further information about the portfolio is also available on the NORD/LB CBB Green Covered Bond webpage: https://www.nordlbcbb.lu/online/www/menu_top/greenbond/5327/ENG/index.html

4. Methodology / Definitions

Methodology for calculating the CO₂ avoidance

- Determination of performance data per project:
 - Nominal capacity equals the total installed capacity of renewable energy
 - Energy yield (p.a.) equals annual (expected) production of renewable energy
- Conversion of the performance data to the share of the project financed by the loan, i.e. determination of the performance data per individual loan
- Extrapolation of performance data to the volume of the Green Covered Bond Pool (LdG RE) (separately for wind financing and solar financing)
- Conversion of performance data (projected or actual) into avoided CO₂ emissions p.a. using the CO₂ factor:
 - For the total volume of the total LdG RE cover pool
 - For the issue proceeds of the LdG RE
 - As per EUR 1mln

Determination of energy yield

- For each project financing, at least one independent yield report is prepared in order to verify the potential yield of the plants
- The expected value (P50) from the yield report serves as a basis
- Individual deductions are made for each park
- In the case of PV, degradation is also taken into account

Definition of the CO₂ emission factor (baseline emission factor)

- Calculation of CO₂ avoidance based on CO₂ emission factor per kWh in the country where the project is located (conversion factors are based on reference year 2021)
- A CO₂ emission factor per country is used to calculate the CO₂ emissions saved
 - The value indicates the amount of carbon dioxide produced, e.g. in Germany (or in the respective country of the project), in generation of one kilowatt hour of electricity for the end consumer as a direct emission from the combustion of fossil fuels
 - The CO₂ factor used is based on the approach developed by the International Financial Institutions Technical Working Group on Greenhouse Gas Accounting which is available at:
 - <https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting/ifi-twg-list-of-methodologies>
 - https://unfccc.int/sites/default/files/resource/Renewable%20Energy_GHG%20accounting%20approach.pdf
 - https://unfccc.int/sites/default/files/resource/Harmonized_IFI_Default_Grid_Factors_2021_v3.2_0.xlsx
- Calculation of avoided CO₂ emissions (in tons p.a.) by multiplying the emission factor by the determined energy yield per loan and for the entire portfolio

5. Appendix

The Luxembourg Financial Sector Act¹ is the basis for the business model of NORD/LB CBB. Since 22 June 2018, the asset class renewable energies (Art. 12-3 (2) f) has been part of the defined cover pool for the "Lettres de Gage" debt instruments issued by a Covered Bond bank.

The definition of the asset class renewable energies in Luxembourg law is based on EU Directive 2009/28 Art. 2 (a) and includes

- **Energy produced from non-fossil, renewable energy sources**, i.e. wind, solar, aerothermal, geothermal and hydrothermal energy, ocean energy, hydropower, biomass, landfill gas, sewage gas and biogas, and energy from similar energy sources
- **Generation,**
- **Storage and**
- **Transmission** (including electricity storage facilities, transformers and electrical wiring) (whether under construction or completed) of energy from renewable sources, provided that
 - such equipment is used exclusively in connection with renewable energies, and
 - the storage and transmission equipment is used for storage and transmission related to renewable energy for more than 50 per cent of its actual use.

Art.	article
acc.	according
CO ₂	carbon dioxide
CSSF	Commission de Surveillance du Secteur Financier
EEA	European Economic Area
EU	European Union
ESG	Environmental, Social and Governance
LTV	loan-to-value
max.	maximum
MW, MWh	megawatt, megawatt hour
NGO	non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal

¹ Source: http://www.cssf.lu/fileadmin/files/Lois_reglements/Legislation/Lois/L_050493_lsf_upd160719.pdf

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