

How to fund the Trans-European Nature Network (TEN-N)

Green Bonds



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Green bonds

A bond is a financial instrument made to provide funds for governments or companies, which is similar to a commercial loan but can be traded on financial markets. The issuer (the government or company) receives a loan and agrees to pay back the face value of the bond on a specific day, plus annual interest payments.

A Green Bond has a similar structure, but the funds raised must be applied to environmental-related projects. Green Bonds have mainly been used to fund renewable energy (e.g. wind and solar) and zero to low-carbon transport (e.g. rail networks or electric vehicles). Other sectors have also been targeted but on a smaller scale, such as forestry.

There has been a high demand from investors for bonds that meet climate, environmental, and social goals. In the next decade, significant funds will be required to finance the transition to an economy which operates within planetary limits. Green Bonds issued by central governments can be a good instrument to finance this transition, scale up nature-based solutions and support nature-positive businesses.

Assessment of subsidies as a funding opportunity for nature restoration

Who is this factsheet for?

- ✓ Public institutions or entities managing protected areas.
- ✓ Local and central governments, and public sector agencies.
- ✓ Pension funds, hedge funds, financial institutions, or asset holders.

Protected areas and ecological corridors can potentially be financed by Green Bonds.

Green Bonds can be relevant for the following actors, amongst others:

- ✓ Public institutions or entities managing protected areas, which can benefit from the extra funds made available by Green Bonds to scale up their work.
- ✓ Governments looking to expand and improve protected area networks and create ecological corridors could issue Green Bonds to invest in nature conservation and restoration.
- ✓ Pension funds, hedge funds, financial institutions or asset holders looking for high-quality investment opportunities that provide solid financial returns and with a strong positive social and environmental impact.

Important considerations for governments and public institutions

Green Bonds need to be large-scale, typically several hundred million euros.

Reporting and auditing is required to prove the authenticity of the Green Bond.

The funds should be used for one-off restoration actions or capacity building, not on current expenses as it is not sustainable in the long run to finance current expenses with debt money.

Green Bonds need to be repaid through taxes or revenues generated directly or indirectly by protected areas or ecological corridors.

Some projects that are termed Green Bonds, can be renamed depending on the use of the funds (e.g. Blue Bonds for marine projects).

Strong points

Large potential to raise funds for nature conservation and restoration by direct allocation to state agencies, or indirectly through dedicated funds managed by civil society organisations like NGOs.

Demand from financial markets: There is growing interest from financial markets for investments that aim to tackle environmental issues.

Lower finance costs: Green bonds have long tenors (10 to 30 years) which give time for the funds to be recouped through taxes or other revenue streams.

Reputational benefits in the perception of governments' and countries' green credentials.

Weak points

Lack of previous examples due to the relatively recent development of Green Bond opportunities.

Need to be repaid mainly through taxes or other revenue streams. According to the EU "1 euro invested in nature generates 8 euros in benefits", yet non-financial benefits are notoriously hard to monetize.



What activities can a Green Bond fund?

Green Bonds can provide finance for:

Network planning costs	Administrative	✓
	Spatial planning	✓
	Biogeographical network planning	✓
	Monitoring and reporting of the protected area network	✓
Protected area establishment costs	Site/corridor designation and management planning	✓
	Administrative	✓
	Remaining knowledge gaps and research needs	✓
	One-off establishment actions	✓
	Compensation	✓
	Land purchase	✓
Management costs	Site (cluster) administration	✗
	Enforcement	✓
	Monitoring and reporting	✓
	Maintenance and restoration measures for species and habitats	✓
	Additional green infrastructure measures (outside protected areas)	✓
	Protected area infrastructure maintenance	✓
Communication and awareness raising costs	Natura 2000-related communication and awareness raising measures, education and visitor access	✓
	Best practice exchange	✓

Examples of financing options for Green Bonds:



Land purchase to expand or create protected areas or to establish ecological corridors.



Minimising barriers to wildlife, installing or building crossings over highways or railways to allow for animals to pass.



Removal of dams and weirs: European rivers are one of the most fragmented on the planet, blocked by large and small barriers. The removal of man-made infrastructures is one of the most cost-efficient strategies for river restoration.



Establishment of marine protected areas: Marine ecosystems are some of the most diverse and productive places in Europe yet are little protected and in need of restoration.

Annex I: How to create a Green Bond? Step-by-step guide

This series of steps guide the development of Green Bonds. The following points are suggested:

Research and planning (what to fund?)

- Clearly define funding needs to create, expand, or improve protected areas and ecological corridors. Ideally at a landscape scale or for the total network, both marine and terrestrial.
- Develop a list of nature-based solutions that could be developed at a landscape scale to improve climate resilience (e.g. restore wetlands to prevent floods and store water during droughts, establish marine protected areas with no fishing areas to restore depleted fish stocks).
- Identify the amount of funds needed to implement the planned actions.



Decide the timespan of the Bond (for how long?)

- Forecast how long the benefits from the investment will take to be seen on tax gains.
- Analyse other revenue streams that can be used to finance the repayment of the Green Bond.



Issue Green Bond

- A Green Bond is issued by the central government or a public sector agency with the aim to fund a network of protected areas.



After issuing the Green Bond

- The funds are used to implement the proposed plans.
- Ensure reporting and auditing to guarantee that the funds are invested where initially planned (to ensure Green Bond credentials), ideally by an independent third party (e.g. university or consultancy company).
- Communicate the project with local communities and more broadly through local and national level media.



Repayment

- The funds for repayment are generated by an increase in tax revenue and other indirect sources of income.

Annex II: Examples of Green Bonds

Netherlands Sovereign Green Bond

Aim: To promote low-carbon development and improve water management.

Details: The State of the Netherlands in 2019 issued a Green Bond valued at 6.8 billion euros for a timeline of 20 years in an open market auction. The Bond was structured by the Dutch State Treasury Agency, and the funds were raised from multiple investor sources (pension funds, banks and insurance companies) to provide a constant rate of return throughout the years, and were trading at around 4% at the time of the auction.

The target areas for the Bond funds were low-carbon development linked to new renewable energy projects, improvements in energy efficiency, and natural infrastructure solutions for water management to tackle sea level rise, floods, and droughts.

It was listed as a triple-A rating Bond and was certified by the Climate Bonds Initiative.

Funds made available: 6.8 billion euros



Seychelles Blue Bond

Aim: To finance sustainable fisheries and manage marine protected areas.

Details: The Republic of Seychelles issued a micro-scale Blue Bond in 2015, worth 15 million US dollars for a period of 40 years through private placement, pre-selected investors, based in the United States (Calvert Impact Capital, Nuveen & Prudential).

The structure of the Bond involved three parties, the Republic of Seychelles as the Bond issuer, the Global Environmental Facility (GEF) which provided support in the repayment of interest rates (worth 5 million US dollars), and that decreased interest rates for the loan from 6.5% to 2.8%, and the Rockefeller Foundation Group that covered the transaction costs of the Bond (e.g. legal costs).

The funds raised were used for several actions, such as the expansion of marine protected areas (to reach 30% by 2020), improvements in the management of fish stocks, education for local communities and fishing industry, implementation of sustainable fishing practices, and management costs of the Bond.

The World Bank has been involved in the development, promotion and selling of the Blue Bond.

Funds made available: 15 million US dollars.



Nordic-Baltic Blue Bond

Aim: To develop common water resource management and protection.

Details: The Baltic States of Denmark, Norway, Sweden, and Finland together issued a Blue Bond in 2020 for a value of 1.5 billion Swedish kronas (around 1.2 billion euros) for a period of 5 years.

The funds raised from the Blue Bond aim to decrease pollution by nitrogen and phosphorus from agricultural activities, improve the treatment of urban sewage, and better protect and restore water ecosystems, with the end goal of better protecting and managing the Baltic Sea and adapting the region to extreme weather events.

Swedish investors represent 95% of the holders of the Bond, Finnish investors 4%, and the remainder is made up of other European investors. Issued by the Nordic Investment Bank it was marked as a triple-A by the Moody's Rating agency.

Funds made available: 1.5 billion Swedish kronas, (close to 1.2 billion euros)



Annex III: References and recommended reading

Green Bonds and Greenwashing

<https://www.bloomberg.com/news/articles/2023-02-07/green-bonds-are-making-fewer-and-fewer-promises-to-investors#xj4y7vzkg?leadSource=uverify%20wall>

Netherlands green bond

<https://english.dsta.nl/subjects/green-bonds>

<https://english.dsta.nl/news/news/2019/04/08/issuance-20-year-sovereign-green-bond-on-21-may-2019>

<https://www.wri.org/insights/conservation-finance-takes-netherlands-issues-one-largest-green-bonds-ever>

https://www.climatebonds.net/files/files/Dutch_sovereign_Green%2Bbond%2Breport.pdf

Seychelles Blue Bond

<https://www.worldbank.org/en/news/press-release/2018/10/29/seychelles-launches-worlds-first-sovereign-blue-bond>

Nordic-Baltic Blue bond

<https://www.nib.int/files/03c2a48e4c0d142117199687ccf1fee4cca6d8f5/10464-2020-joint-press-release-nib-nordic-baltic-blue-bond-6-october-2020.pdf>

<https://www.nib.int/releases/nib-launches-five-year-sek-1-5-billion-nordic-baltic-blue-bond>

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