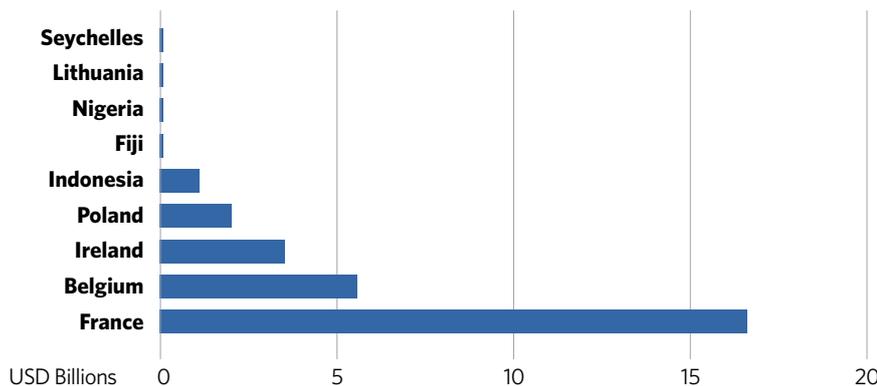


Green Bonds Policy: Highlights from 2018

Public sector green bond action around the world from 2018

1. Sovereign Green Bond Growth

Sovereign issuance



Following a strong start in the first half of 2018, sovereign issuance reached 10.5% of green bond market share by the end of 2018.

- Poland** became the first sovereign repeat issuer with a EUR1bn (USD1.25bn)
- France** tapped their green OAT twice in 2018 for EUR5.1bn in 2018, taking the total issued under the green OAT to EUR14.8bn
- Indonesia** issued the world's first sovereign green sukuk for USD1.25bn
- Belgium** issued EUR4.5bn (USD5.5bn) of its EUR10bn planned green bond issuance in February 2018
- Lithuania** became the first Baltic country to issue a sovereign green bond for energy efficiency in buildings for EUR20m (USD24m)

New issuers in the second half of the year include:

SEYCHELLES



Size: USD15m
Date of Issuance: October 2018
Tenor: N/A
External Review: N/A
Proceeds: Sustainable use of marine resources

The Republic of Seychelles has issued the first world's sovereign blue bond, with the

objective to support sustainable marine and fisheries projects. The issuance represents a milestone in the support of marine conservation, which could serve as a model for other coastal countries and small island states. The blue bond is partially guaranteed by a USD5m guarantee from the World Bank and further supported by a USD5m concessional loan from GEF.

IRELAND



Size: EUR3bn (USD3.5bn)
Date of Issuance: October 2018
Tenor: 12.4
External Review: Sustainalytics
Proceeds: Sustainable water and wastewater management, clean transportation, management of natural resources and land use, renewable energy, energy efficiency, adaptation.

This is the first sovereign green bond issued by the Irish National Treasury Management Agency. The 12-year bond proceeds are earmarked to projects financing sustainable water and wastewater management, clean transportation, management of natural resources and land use, renewable energy, energy efficiency and adaptation. The sale attracted order books of over EUR11bn.

In the pipeline:

- Kenya** is preparing to issue its first sovereign green bond in 2019. A study commissioned by 'Green Bond Programme Kenya' suggests that the manufacturing, transport and agriculture sectors present significant business opportunities as they combine green investments valued USD853m over the next 10 years. The green sovereign issuance is in line with the county's green economy strategy as well as its climate change policies.
- Spain** is planning to issue its first sovereign green bond in the upcoming months in order to finance low-carbon assets, following suit from other European green sovereign issuances.
- The Netherlands** are reportedly committed to issue a sovereign green bond in 2019 for an amount of between EUR3.5bn and EUR5bn.
- Vietnam** aims at issuing USD878bn worth of government bonds, as well as developing green sovereign issuances in 2019.

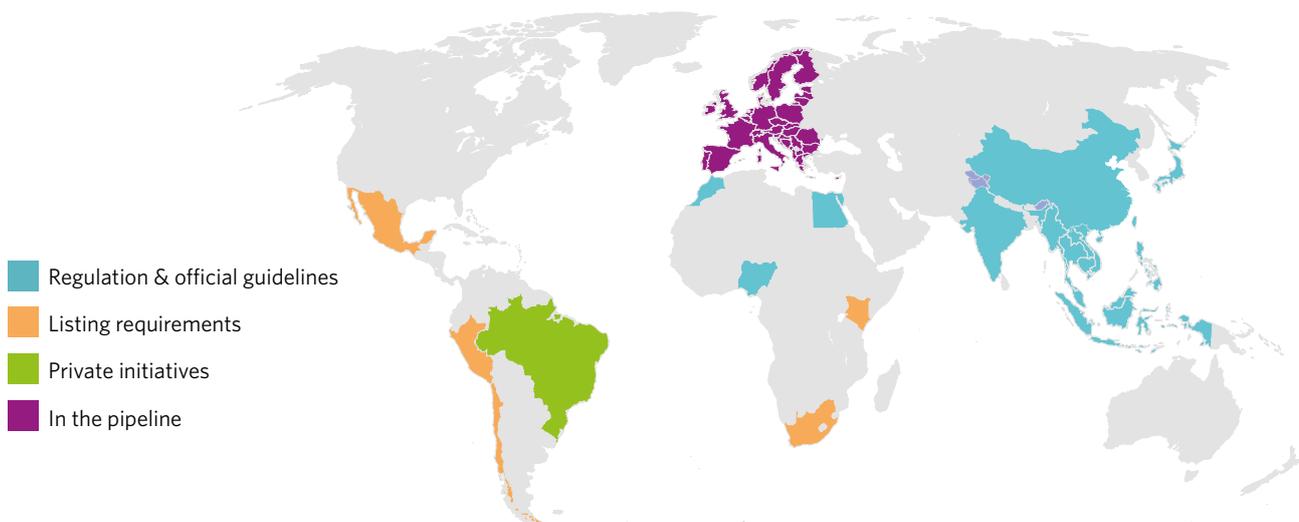
For more on sovereign green bonds, check out the CBI Sovereign Green Bonds Briefing.

SDG/Sustainability/Social/ Green Bonds

For the past few years the labelled green bond market has been expanding beyond green bonds. USD21bn worth of sustainability and SDG bonds have been issued in 2018, according to Climate Bonds data (a 114% growth compared to 2017). We expect the deployment of these frameworks to grow and be adopted by sovereigns and sub-sovereigns as well, allowing them to identify social as well green investments.

2. National guidelines for green bonds

Availability of national and regional green bond guidance



The second half of 2018, saw green bond guidelines published in Egypt and the Philippines, adding to the growing national and regional guidance available for green bond issuers and investors. International guidelines are often taken as a starting point, to be followed by consultations with domestic market players, leading to widespread harmonisation across the globe.

Egypt: Egypt’s Financial Regulatory Authority (FRA) approved a legal framework for issuing green bonds in July 2018, with the aim of providing financial tools to fund eco-friendly projects in the fields of new and renewable energy, construction and transport. The guidelines were developed with the support of IFC, a member of the World Bank Group, and are based on the international guidance provided by the Green Bond Principles.



Philippines: The Securities and Exchange Commission Philippines has approved in August 2018 the *Guidelines on the Issuance of Green Bonds under the ASEAN Green Bonds Standards*, effectively adopting the procedures for issuance set out in the ASEAN Green Bond Guidelines. The Guidelines are based on the international Green Bond Principles with a clear exclusion of fossil fuel power generation projects.



Sustainable Banking Network - Creating Green Bond Markets: Insights, Innovations and Tools from Emerging Markets

In 2018, the Climate Bonds Initiative partnered with the Sustainable Banking Network Green Bond Working Group and IFC to develop a mapping of existing guidelines and green bond frameworks in emerging markets. Following a survey, case study interviews and a review of 13 country and regional green bond frameworks, the first ever Green Bond Market Development Toolkit was developed including:

- A set of Common Objectives (see the 4 boxes)
- A self-assessment and Planning Matrix, which enables policymakers to evaluate their plan of action on 4 pillars of capital market development (market infrastructure, guidance, issuance and capacity building)
- A Roadmap with Common Milestones
- A Capacity Building Needs Assessment with a mapping of existing international resources.

Alignment

Aligning with international good practices, learning from peers, and developing common approaches are ways that can be taken by SBN members to accelerate local green bond market development. Alignment with other jurisdictions also enables cross-border issuance and investment.

Quality

Market integrity and credibility are key components of green bond markets. Guidance should therefore include mechanisms for ensuring quality.

Flexibility

Local market conditions must be accounted for and local market players should be involved in the design of an appropriate national guidance. Countries may choose to adopt either a principle based approach or more stringent regulation. A phased approach may be suitable for many.

Harmonization

SBN members have noted the value of harmonising where possible with global definitions of “green”, “social” and “sustainability” bonds and assets. Global definitions and common categories of what qualify as impact projects and sectors will build the credibility of bonds among international investors.

3. EU TEG process

Action 1 clearly states the Commission’s intention to establish an EU classification system for sustainable activities.

To support this action, the Commission presented a legislative proposal aimed at establishing the progressive development of an EU Taxonomy for Sustainable Finance, which is currently being discussed by the European Parliament and Member States. The proposed regulation sets out:

1. six environmental objectives for environmentally sustainable economic activities:

- a. climate change mitigation,
- b. climate change adaptation,
- c. sustainable use and protection of water and marine resources,
- d. transition to a circular economy, waste prevention and recycling,
- e. pollution prevention and control,
- f. protection of healthy ecosystems.

Environmentally sustainable activities are defined as those that have a significant impact towards achieving one of the six objectives, without significantly harming the other five.

2. minimum safeguards compliance, and

3. technical screening criteria, which will be introduced subsequently, as they are developed.

A Technical Expert Group (TEG) on Sustainable Finance, composed of 35 experts from industry and civil society, has been tasked with developing proposals for the EU taxonomy for sustainable economic activities. Sean Kidney, CEO of Climate Bonds is a TEG member.



10-point Action Plan

1. Establish EU Sustainable Taxonomy
2. Create Standards and Labels
3. Foster Investments in Sustainable Projects
4. Incorporate Sustainability in Investment Advice
5. Develop Sustainability Benchmarks
6. Integrate ESG in Ratings and Market Research
7. Clarify institutional investors and asset managers’ duties
8. Incorporate sustainability in prudential requirements
9. Strengthen Sustainability Disclosure & Accounting
10. Foster Sustainable Corporate Governance

1st Round Mitigation

The TEG Taxonomy sub-group identified priority sectors to focus on during their 12-month mandate, based on their emissions impact.

The next step included gathering existing information and definitions to compile a first round of activities, in particular where guidance and criteria was already available and used by markets. These include mitigation activities for:

- **Forestry:** afforestation, reforestation, existing forest management;
- **Buildings:** construction of new buildings, renovation of existing buildings;
- **Manufacturing:** energy and resource efficiency in manufacturing, manufacture of renewable energy equipment, low carbon transport vehicles, energy efficiency equipment and other low carbon technologies

- **Renewable energy production:** solar photovoltaic, wind, concentrated solar power, ocean geothermal and hydropower electricity generation
- **Transportation:** passenger and freight interurban transport, urban passenger land transport, passenger and freight transport by road.

2nd Round Mitigation & Adaptation

In its second phase of work, the TEG has identified additional sectors to work on together with additional external experts. The second phase of mitigation activities will explore:

- **Agricultural activities**
- **Mining and quarrying**
- **Manufacturing of ferrous and non-ferrous metals, cement and chemicals**
- **Transmission and distribution of electricity**

- **Water, sewerage and waste management**
- **Water and air transport**
- **Digital/Information Communication Technologies**
- **Adaptation**

A methodology has also been developed to build the list of adaptation activities. Adaptation activities will need to:

- **Address material physical climate risks**
- **Avoid maladaptation**
- **Have a monitoring system in place aimed at measuring progress towards adaptation results**
- **Be part of a wider strategy**

Workshops and meetings will be held with external experts to define an eligible list of activities for these additional sectors, which is to be delivered in June 2019.

4. Central banks' action



We had already seen Central Banks' action growing early in the year with the first meeting of the Network for Greening the Financial System (NGFS). The Network continued meeting throughout the year, both through global and regional meetings, resulting into the release of its first progress report, summarising initial findings and scope of work for the following year. The Network currently comprises 24 Central Banks and Supervisors and 5 international organisations that have voluntarily agreed to collaborate and contribute to the analysis and management of climate and environment-related risks. Key messages from the first progress report include:

- **New analytical and supervisory approaches are needed** to adequately assess some of these risks, including those based on forward-looking scenario analysis and stress tests.
- **Some members are already taking action;** however more widespread tools and methodologies still need to be developed and quality and availability of data can be an issue
 - Supervisors are starting to actively assess prudential risks and set supervisory expectations to enhance financial risk management of supervised firms
 - Central Banks are also starting to integrate climate-related factors in their investment strategies and introducing incentives for supervised banks to increase green lending and issue green bonds



BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY



FINANCIAL
CONDUCT
AUTHORITY

UK Banking Supervision

The Bank of England's Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) have stepped up their supervision of climate change-related financial risks after a survey revealed only 10% of banks are treating the risks strategically. A Climate Financial Risk Forum will be launched to share best practices and provide leadership on how to assess such risks.

Both the PRA and FCA have launched consultations on how they will be expecting supervised institutions to disclose their risk management practices for climate-related risks. These are largely based on the recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD) promoted by the Financial Stability Board, chaired by the Governor of the BoE, Mark Carney. The proposal is for supervised banks to appoint individuals responsible for the climate-risk agenda at the Board level, develop scenarios to assess exposures, and communicate how risks are being managed. PRA is interested from the perspective of systemic risk, while the FCA consultation focuses on disclosure to help investors and issuers.

Carney has also announced that the impact of climate change will be included in the BoE's bank stress tests.

DeNederlandscheBank

EUROSYSTEEM

De Nederlandsche Bank (DNB)

DNB carried out a stress test to energy transition risks for its financial system. Energy transition risks can materialise in the short-term with governments deciding to implement carbon taxes or restrictions on CO₂ emissions, or in the case of a sudden technological breakthrough. Lastly, energy transition risks may materialise if consumers, firms and financial markets change their expectations regarding the future, even before policy or technological developments occur.

The stress test was conducted analysing four severe but plausible energy transition scenarios, materialising within five years.

The test results show that the losses for financial institutions in the event of a disruptive energy transition could be sizeable: up to 3% of stressed assets for banks, 11% for insurers and 10% for pensions funds. Despite these losses, the impact on supervisory ratios seems manageable, although these vary depending on where the shock is coming from (policy, technology or confidence). The supervisor notes that the disruptive energy scenarios affect not only the carbon-intensive industries but also the economy at large.

Climate Bonds INITIATIVE

© Climate Bonds Initiative. Published on February 2019. Designed by Godfrey Design.

Disclaimer: The information contained in this communication does not constitute investment advice in any form and the Climate Bonds Initiative is not an investment adviser. Any reference to a financial organisation or investment product is for information purposes only. Links to external websites are for information purposes only. The Climate Bonds Initiative accepts no responsibility for content on external websites.

The Climate Bonds Initiative is not endorsing, recommending or advising on the merits or otherwise of any investment or investment product and no information within this communication should be taken as such, nor should any information in this communication be relied upon in making any investment decision.

A decision to invest in anything is solely yours. The Climate Bonds Initiative accepts no liability of any kind, for any investment an individual or organisation makes, nor for any investment made by third parties on behalf of an individual or organisation, based in whole or in part on any information contained within this, or any other Climate Bonds Initiative public communication.

Subscribe - Sign up here to our blog and receive our newsletters to your inbox.

www.climatebonds.net

