The Climate Resilience Principles

A preliminary framework for assessing climate resilience investments

Building Resilience through Green Bonds

23 April 2019

Climate Bonds Initiative

Climate Bonds Initiative: Mobilizing debt for climate solutions

Mobilise: act as a market catalyst

Inform: provide market intelligence through reports, bond coverage and data services

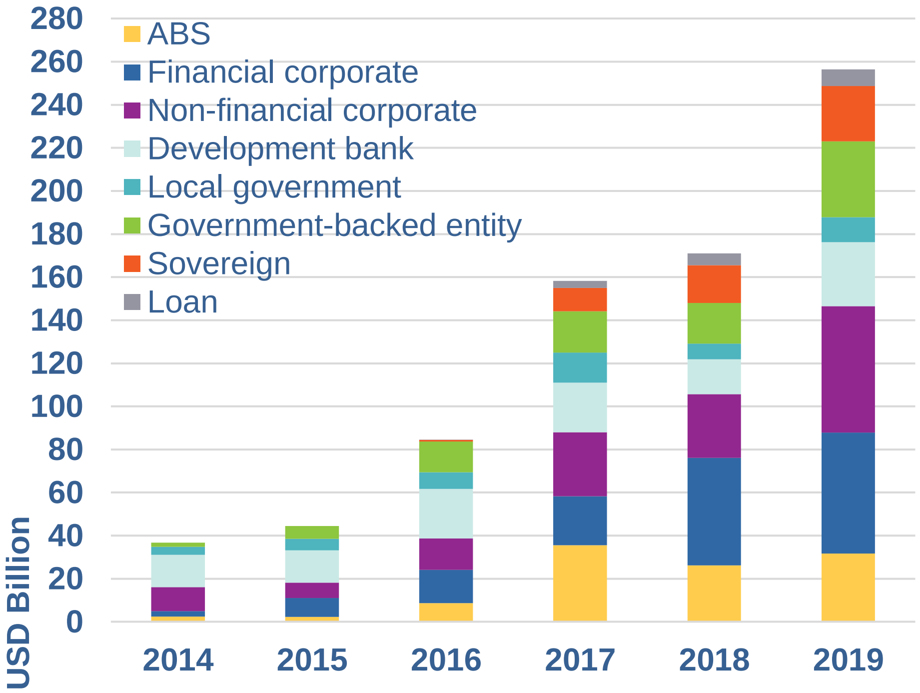
Develop trusted standard and criteria: including the Climate Bonds Standard and Certification Scheme

State of the green bonds market

Green bonds = debt with ‘green’ use-of-proceeds

915 issuers to date across 63 countries

Green bond and green loan issuance volume



Source: Climate Bonds Initiative. Data as of 31st Dec 2019.

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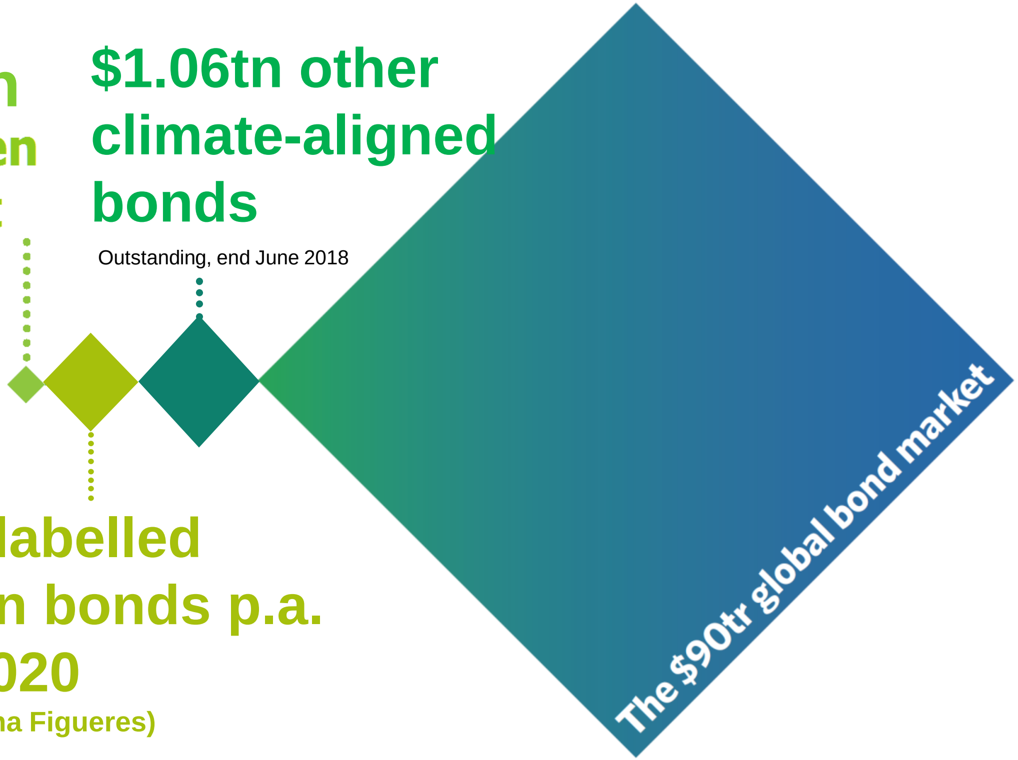
… and there's room for so much more

The $732bn labelled green bond market

Outstanding, end Dec. 2019

$1.06tn other climate-aligned bonds

Outstanding, end June 2018



$1tr labelled green bonds p.a. by 2020

(Christiana Figueres)

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Climate resilience in the green bond market

Financing climate resilience does not make up a large share of the green bond market to date

- Estimated at circa 2-3% of use-of-proceeds by value in Latin America in 2019 (perhaps 4% globally)
- But this is very approximate. Figures is difficult to track precisely as:
  - Not all labelled as resilience
  - Can be part of mixed portfolio with no information on allocation of proceeds within that
  - Difficulty of identifying resilience spend

We'd ask the market for much better reporting on use of proceeds

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Challenge – what is credible/ legitimate in respect of resilience finance

Key questions aimed to answer to assist market and accelerate finance

- What counts as ‘investment in resilience’?
    - Can we have a list of eligible investments in resilience?

- What criteria can be used to screen if any investment is actually having the necessary impact on resilience?
    - How do we assess for credibility?

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Climate Bonds Initiative’s response

- Step 1: Convened the 40+ strong Adaptation and Resilience Expert Group (AREG) and tasked them with developing the Climate Resilience Principles

- Step 2: These Principles provide the framework from which our sector specific TWGs can develop sector-specific climate resilience criteria that can then be used for certification under the Climate Bonds Standard

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Hawaii Green Growth
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Macquarie
Moody’s
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S&P Global
Stockholm Environment Institute
The Nature Conservancy
UNDP
Willis Towers Watson
Winrock International
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XDI

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What we mean by resilience

Given increasing prevalence and severity of climate-related stresses and shocks, adaptation and climate resilience investments are those that:

improve the ability of assets and systems to persist, adapt and/or transform *in a timely, efficient, and fair manner that reduces risk, avoids maladaptation, unlocks development and creates benefits, including public goods*

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Output 1: Identification of two types of climate resilience investment

ASSET FOCUSED intended to maintain or enhance the resilience of an asset or activity to climate change over its operational life

These assets or activities can also contribute climate resilience benefits to the system in which they are a part

i.e. an 'Adapted Activity' in EU Taxonomy language

SYSTEM FOCUSSED intended to deliver climate resilience benefits to the broader system i.e. going beyond ensuring an asset or activity's performance over its operational life

And these assets or activities must themselves be resilient over their lifespan

i.e. an 'Enabling Activity' in EU Taxonomy language

Output 2: Examples of climate resilience investments

Asset focused investments	System focused investments
All sectors: • Adding resilient features in new infrastructure • Upgrading & modifying existing infrastructure to be climate resilient • Adding redundant & pre-positioning resilient infrastructure • Relocating at-risk infrastructure • Multi asset, multi-action adaptation projects, including timed or triggered upgrades **Agriculture sector examples**: • Climate resilient crops/fodder • Drip irrigation/stormwater management and use • Storage/cooling sheds • Soil rehabilitation	**Water**: Flood defence, wetland protection, stormwater management, rainwater harvesting, desalinization **Buildings**: Green roofs, water retention, porous pavements **Forestry**: Wild brush clearing, species diversification, afforestation and reforestation, mangrove conservation **Energy**: Grid resilience, back-up generation and storage **Health**: Vector-borne & respiratory disease treatment & monitoring **ICT**: Climate monitoring and data collection

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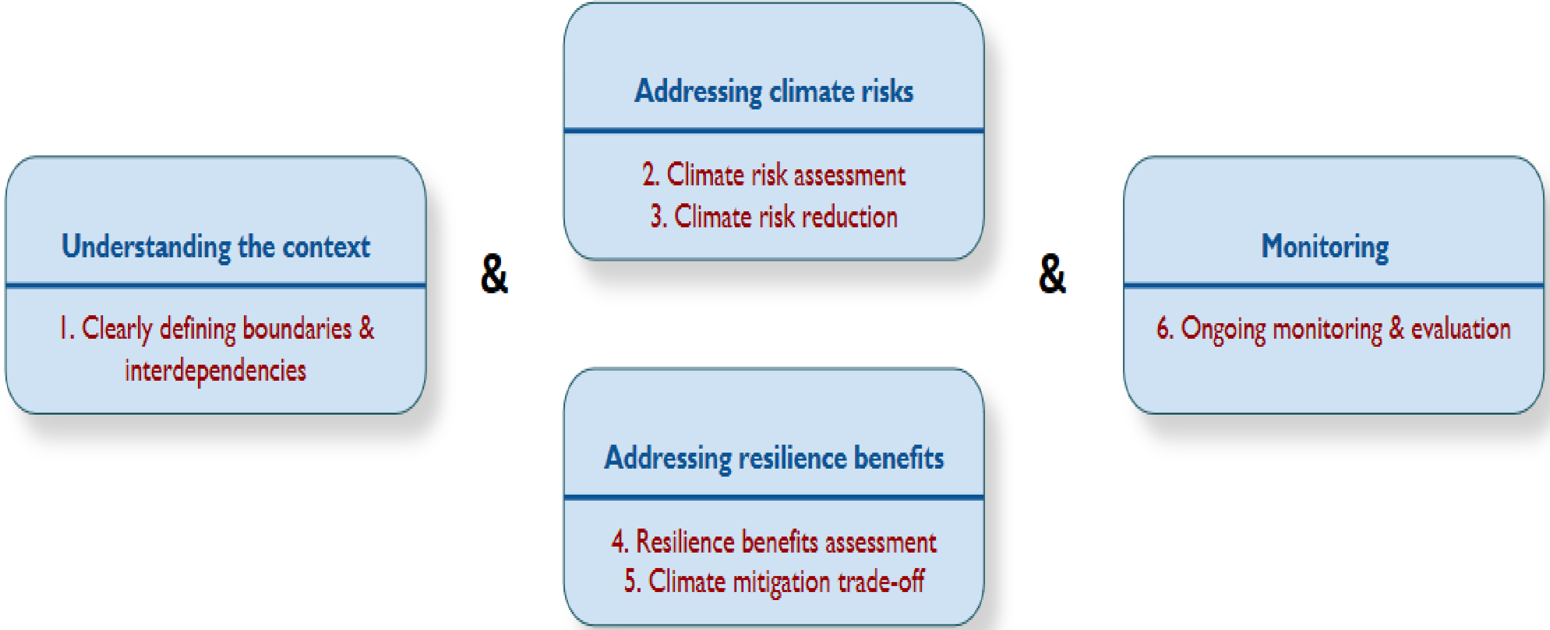
Output 3: The Principles define what is needed from bond issuers



See Appendix for further elaboration and https://www.climatebonds.net/climate-resilience-principles for the full report

Key points to highlight about the Principles

- Focus on 'first-order' physical climate risks
- Applicable to all assets/ projects/ activities
- Very forward looking: to be applied over the operational life of the asset, not simply the life of the financial instrument, which means understanding and addressing the climactic conditions of tomorrow in a way that is flexible and deals with uncertainty
- Are qualitative/ process based: climatic conditions and shocks are context specific, so responses to them need to be context specific
- The constant is that they require
  - That measures are taken (in asset or project design, construction or adaptation) that ensure the asset or project is 'fit for purpose' to deliver its services over its operating life and that it will do no significant harm to climate resilience itself - this is a move beyond simply requiring an evaluation of climate risks
  - Regular monitoring and reappraisal

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Main challenges

- Assessing resilience benefits particularly for system-focused investments
- Determining the outcomes aiming for
- Whether there are any circumstances under which resilience could or should be prioritized over mitigation

First applications of the Climate Resilience Principles

- On 20 Sept 2019, EBRD issued a USD 700m Climate Resilience Bond. Projects earmarked for use of proceeds were selected and are managed in alignment with the Climate Resilience Principles
- CBI are currently developing climate resilience **criteria** in line with these Principles for Agriculture and Shipping.
- We'll continue to roll out the Principles into specific climate resilience criteria by sector as we develop new sector criteria / revise existing criteria

Thank you

Appendix: Further detail on the Principles

Principle	Brief Description
1. Boundaries and interdependencies for assessing climate risks and resilience impacts are clearly defined	Issuers must define the boundaries of the climate resilient investment and associated assets and activities, as well as the internal and external interdependencies between the broader system affected by those assets and activities. These boundaries and interdependencies are important for scoping risk and benefits assessments, and ensuring the asset or activity being invested in is fit-for-purpose and does no harm to the system of which it is part, per the further principles defined below.
2. Physical climate risk assessment undertaken	Issuers must perform an assessment of the physical climate hazards to which the subject asset or activity will be exposed and vulnerable over its operating life. Issuers should use both top down risk assessment methods using a broad range of climate models and observed data. RCP 4.5 and 8.5 emissions scenarios should guide these top down assessments. Bottom up risk assessment methods that look at inherent system vulnerabilities in local context should also be used.
3. Risk reduction measures undertaken	Issuers must demonstrate that the risks identified have been mitigated to a level such that the subject asset or activity is 'fit for purpose' in the face of coming climate change over its operational life, and does no significant harm to the resilience of the system of which it is a part. It is recognised that that there will be uncertainty about future climate change impacts, which influences on what it means to be 'fit for purpose'. Therefore, flexible solutions that are robust in a variety of scenarios are encouraged.

Appendix: Further detail on the Principles

Principle	Brief Description
4. Climate resilience benefit assessment undertaken	Issuers are to assess the climate resilience benefits of system-focussed assets and activities and demonstrate that they are 'fit for purpose' in the sense that they significantly contribute to enhancing climate resilience at a systemic level, again with flexibility to take into account the inherent uncertainty around future climate change impacts.
5. Mitigation trade-offs	Climate mitigation requirements may be lowered for climate resilience focused assets or activities whose resilience benefits considerably outweigh associated emissions or serve to avoid GHG emissions in the event of a disaster. In these instances, a trade-off analysis is required. Discussion is ongoing as to a rule set to determine under what circumstances such a trade-off might be permitted and the nature of the trade-off analysis in the circumstance. In every case, the asset or activity must not lock in fossil fuels or undermine any international or national commitments.
6. Ongoing monitoring and evaluation	Issuers are required to undertake ongoing monitoring of climate risks and benefits to determine whether the subject assets and activities continue to be fit for purpose and maintain any climate resilience benefits as climate risks evolve. In its reporting to the Climate Bonds Initiative, the issuer must annually verify this ongoing monitoring and evaluation of the climate resilience performance.