











Green bonds & forestry



















#### The Climate Bonds Initiative

Mobilising debt capital markets for climate change solutions



Market data & analysis



Standard setting



Policy & market developmen



Climate Bonds Certification





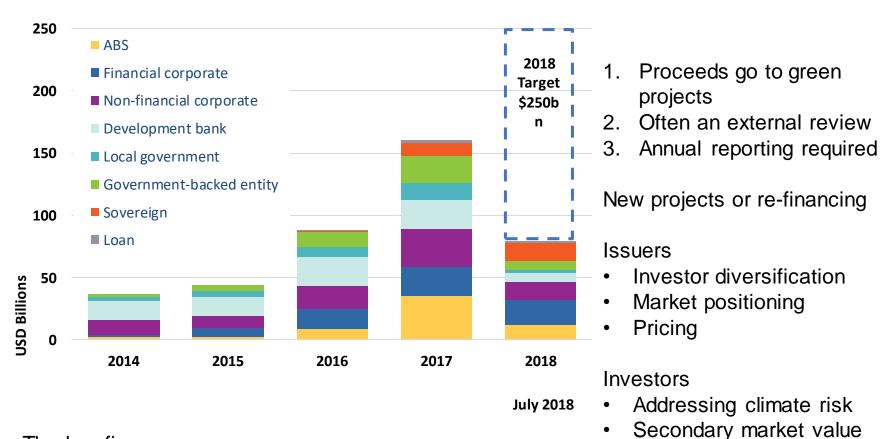








#### Green bonds



The key figures:

USD161bn total green bond issuance in 2017; Over 1500 green bond issues; 85% growth on 2016

38 countries from all continents; 253 different issuers; 160 new issuers

USD10.7bn - largest single green bond









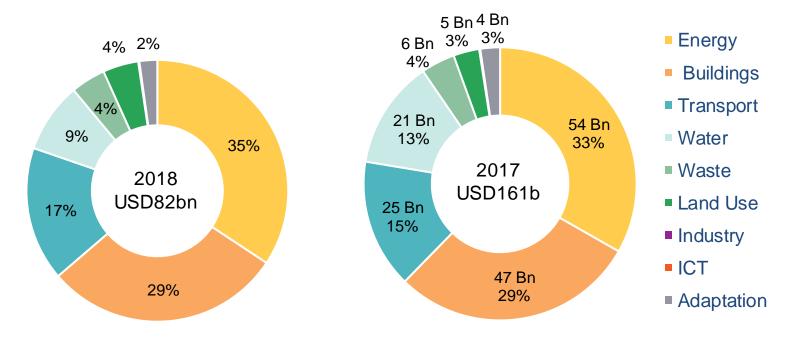




#### Green bonds

Use of green bond proceeds - 2018

#### Use of green bond proceeds - 2017



- Renewable energy has diversified from solar and wind to include power grids, geothermal, offshore wind
- Property related issuance is growing with covered bonds, green MBS and funding deals by European banks
- Transport is on the rise, mainly due to public rail transport investments
- Land use deals now include a forestry covered bond and a sustai Climate Bonds it



# Forestry related green bonds

Issuer Name	Date of Issuance	Country	Value of bond	Use of proceeds
Landshypotek Bank	May 2018	Sweden	SEK5.2bn (USD605m)	Mixed bond for sustainable forestry, renewable energy and green buildings. The inaugural issue is backed by forestry loans on FSC or PEFC certified forestry assets
Sveaskog	Sep 2017	Sweden	SEK1bn (USD126m)	Proceeds will finance FSC certified forests and forestry related investments, projects and assets to promote low carbon and climate resilience growth through sustainable forestry and its related operations
Sveaskog	Mar 2016	Sweden	SEK1bn (USD116m)	General corporate purposes given it is a pure-play forestry company with all assets being FSC certified forests
Suzano Papel e Celulose	Sep 2017	Brazil	USD200m	Proceeds will be invested by Suzano in projects that feature positive environmental attributes and foster sustainable development
Suzano Papel e Celulose	Nov 2016	Brazil	BRL1bn (USD295m)	Proceeds will be invested by Suzano in projects that feature positive environmental attributes and foster sustainable development
Klabin	Oct 2017	Brazil	USD500m	Mixed bond for FSC certified new planting and replanting activities, restoration of native forests, renewable energy, clean transport, energy efficiency, waste management, water management, circular economy products and adaptation
Martha's Vineyard Land Bank	Mar 2017	USA	USD20m	Preservation of woodland for biodiversity
Martha's Vineyard Land Bank	Nov 2014	USA	USD35m	Land acquisitions to protect biodiversity and woodland









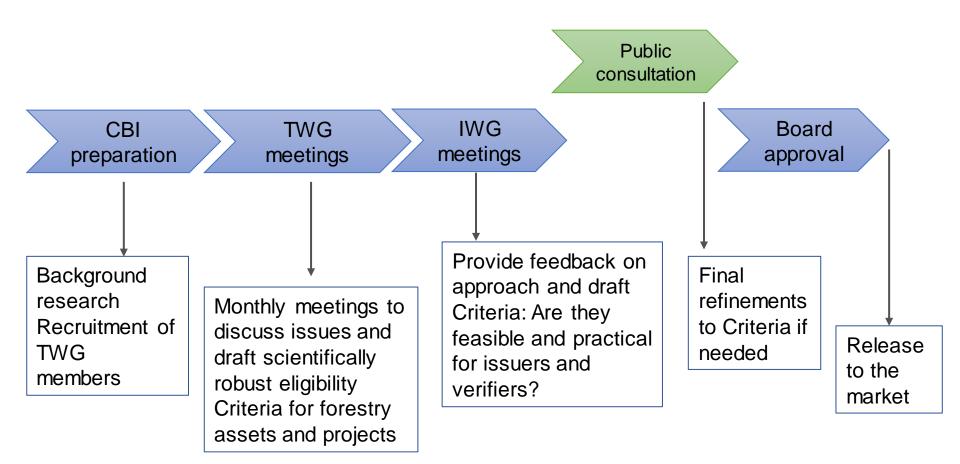


# Why are Forestry Criteria needed?

- Forestry projects can be net emitters or net sinks of GHG emissions
- Forestry projects may not be resilient to predicted climate change
- Criteria are needed to ensure green finance is only going to projects that are sequestering carbon and climate change resilient
- Issuers and investors need guidance



## Forestry Criteria: development process



There is a full list of all Forestry and Land Use TWG and IWG members on the CBI website.

Climate Bonds









## Scope of the Forestry Criteria

- Plantation forestry
- Sustainable forest management
- Harvest of Non-Timber Forest Products
- Forest conservation & restoration
- Other land conservation & restoration
- Supporting infrastructure & supply chain



# Forestry Criteria's overarching principles

	Requirement applies Requirement does not apply Requirement applies in some scenarios		Discontinu	Contribute Const	Non- timber	Forest conservation & restoration	Conservation & restoration of other non-forested	Supply chain activities
\			Plantation forestry	Sustainable forest management	forest products (NTFP)			
		No natural landscape conversion	<b>✓</b>	~	<b>PS</b> 13	N/A	N/A	N/A
	Mitigation component	Carbon stocks of forests or other habitats are maintained through good management practices	<b>✓</b>	✓	~	~	<b>√</b>	<b>~</b>
	Resilience component	Impacts that climate change may cause to the resilience of the forest, land or surrounding ecosystem are understood and mitigated	<b>√</b>	✓	~	~	~	~
		General health of forests or other habitats is maintained through good management practices	~	~	~	~	<b>~</b>	<b>✓</b>
	FPIC component	Free, Prior and Informed Consent is practiced and implemented in the project or activity	<b>√</b>	~	~	<b>✓</b>	<b>✓</b>	<b>✓</b>











## Forestry Criteria: management plan

#### Requirements of the management plan

- 1. Soil health: a soil management plan is developed and implemented with a focus on soil carbon, productivity, retention of soil, retention of soil biomass and soil structure
- 2. Water management: there has been an assessment done of the water requirements of the forests, impacts on and water needs of downstream users (both human and natural) and discharges into watercourses. A water management plan is in place that addresses relevant risks and includes measures to protect ground water and local water bodies
- Fire management: measures have been developed and are implemented for the management of forest fires
- Riparian areas protection: provision has been made to protect riparian areas
- Biodiversity management: the management plan includes provisions for managing and maintaining biodiversity
- Species selection: selection of species that are suitable for the project type (e.g. conservation, restoration or sustainable forest management), will not disrupt genetic diversity or that are suitable for current or projected future ecological conditions
- Chemical use: no use of treatments that are on the WHO list of Critically Important Antimicrobials for Human Medicine, that are listed in the Stockholm Convention, the Rotterdam Convention or that are listed as classification I in the WHO recommended Classification of Pesticides by Hazard. Chemical use is minimised and they are applied in a targeted way
- Forest protection: protection and monitoring measures are in place to prevent and monitor for illegal logging and illegal land conversion











## Forestry Criteria: resilience checklist

#### Requirements of the resilience checklist

- 1. Future climate change related risks and vulnerabilities have been evaluated
- 2. A plan has been designed and implemented to mitigate and adapt to the climate risks and vulnerabilities identified and to improve the resilience of the assets
- There is a plan to annually re-evaluate the risks climate change poses













### Forestry Criteria: Free, Prior & Informed Consent

#### Free, Prior & Informed Consent (FPIC)

- FPIC from indigenous peoples or local communities must be sought out when:
  - Property rights are potentially affected, FPIC must be obtained from property rights holders; or
  - Project activities may lead to the removal or relocation of habitation or activities important to their culture and livelihood.
- FPIC must be carried out in accordance with one of the following:
  - ILO 169
  - FSC
  - Climate, community and biodiversity standard
  - PEFC
  - UN Declaration of the Rights of Indigenous Peoples
  - FAO's FPIC Manual for Practitioners
  - High Carbon Stock Approach / HCV-HCSA
- It is the issuers responsibility to provide information about which FPIC guidance has been followed and evidence that the guidelines have been adhered to.









