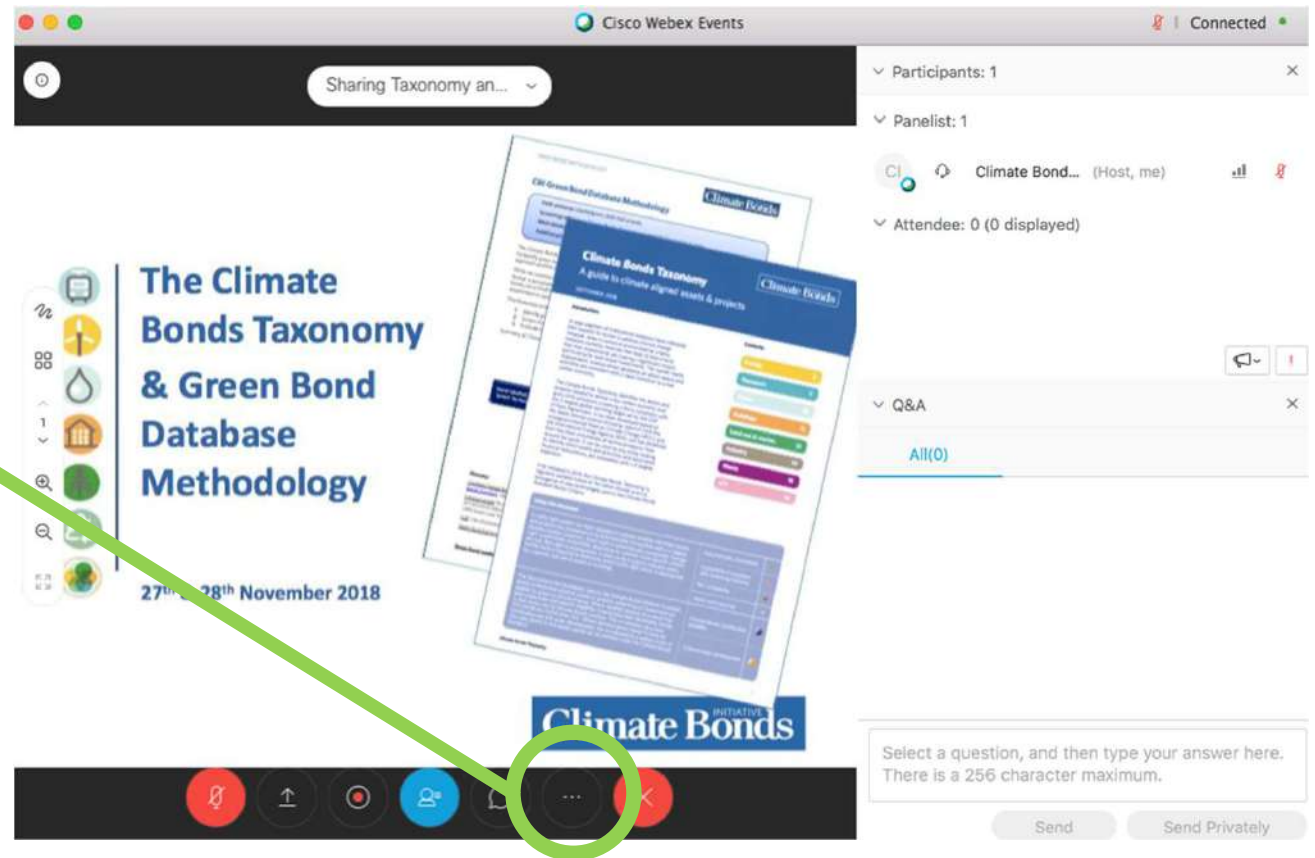


Welcome to this Climate Bonds webinar – *make sure your audio is connected!*

Use this button and select audio connection. You will be given a choice of whether to connect via computer or phone





The Climate Bonds Taxonomy & Green Bond Database Methodology

27th & 28th November 2018



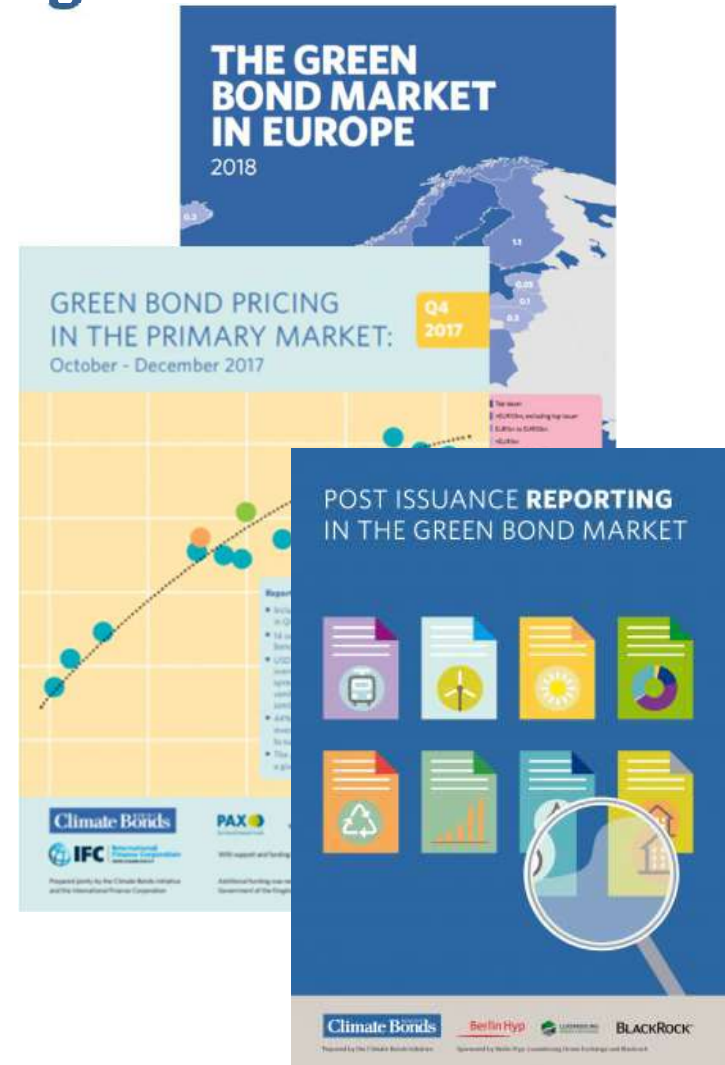
What we'll cover today?

- Climate Bonds Initiative and green bonds
- The Climate Bonds Taxonomy
- Our green bond database methodology



Climate Bonds Initiative: mobilising debt for climate solutions

- **Mobilise** (act as a market catalyst):
 - ✓ Policy proposals
 - ✓ Engage with market participants
- **Inform**:
 - ✓ Market intelligence
- **Trusted criteria**:
 - ✓ Climate Bonds Taxonomy
 - ✓ Climate Bonds Standard & Certification Scheme



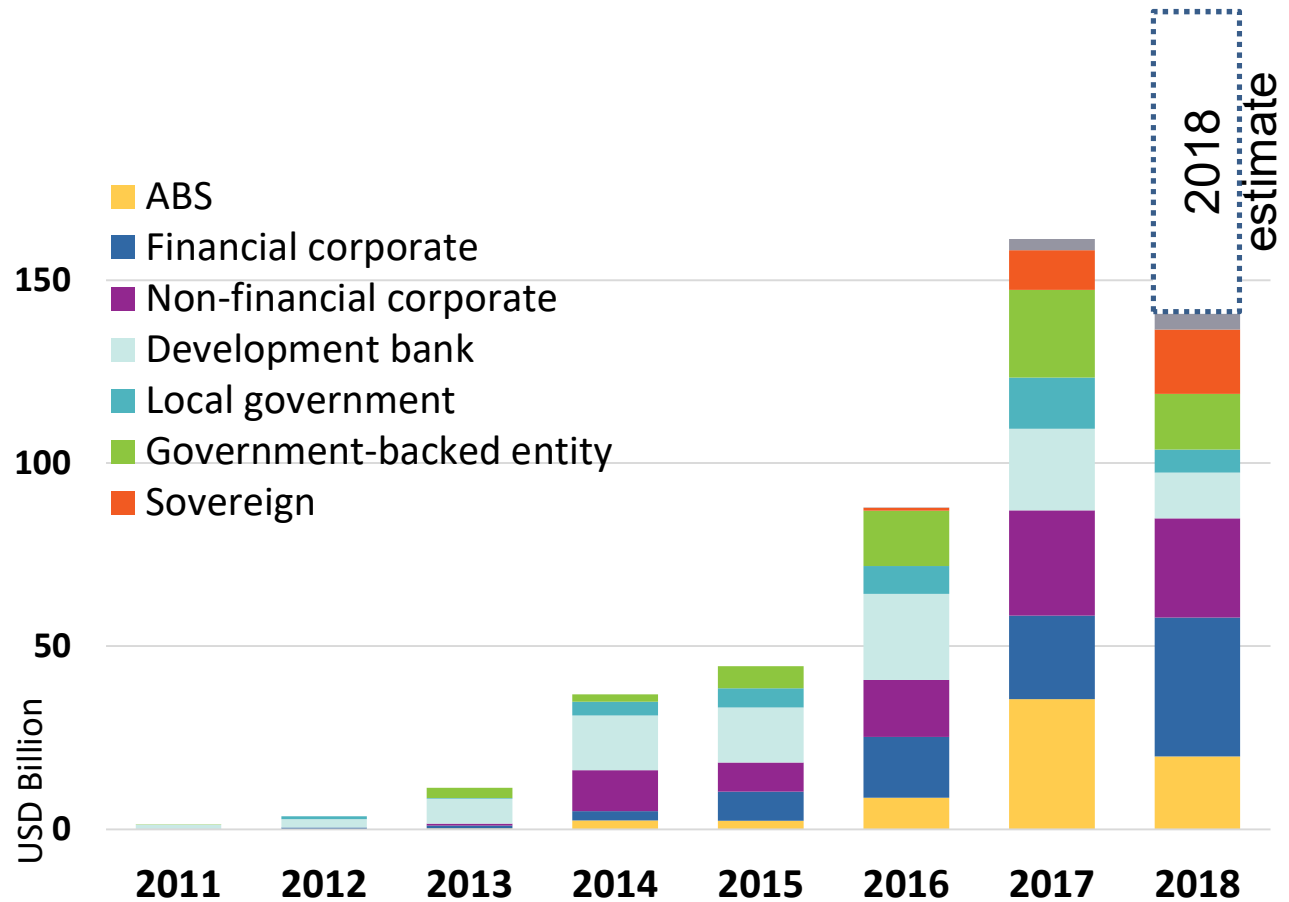
What are Green Bonds?

- Debt securities issued by financial, non-financial or public entities where the proceeds are used to finance green projects and assets
- Regular vanilla bonds with “green” as a bonus feature
- It’s about the projects and assets, not the issuer.
- The “green” label is an identification tool for investors

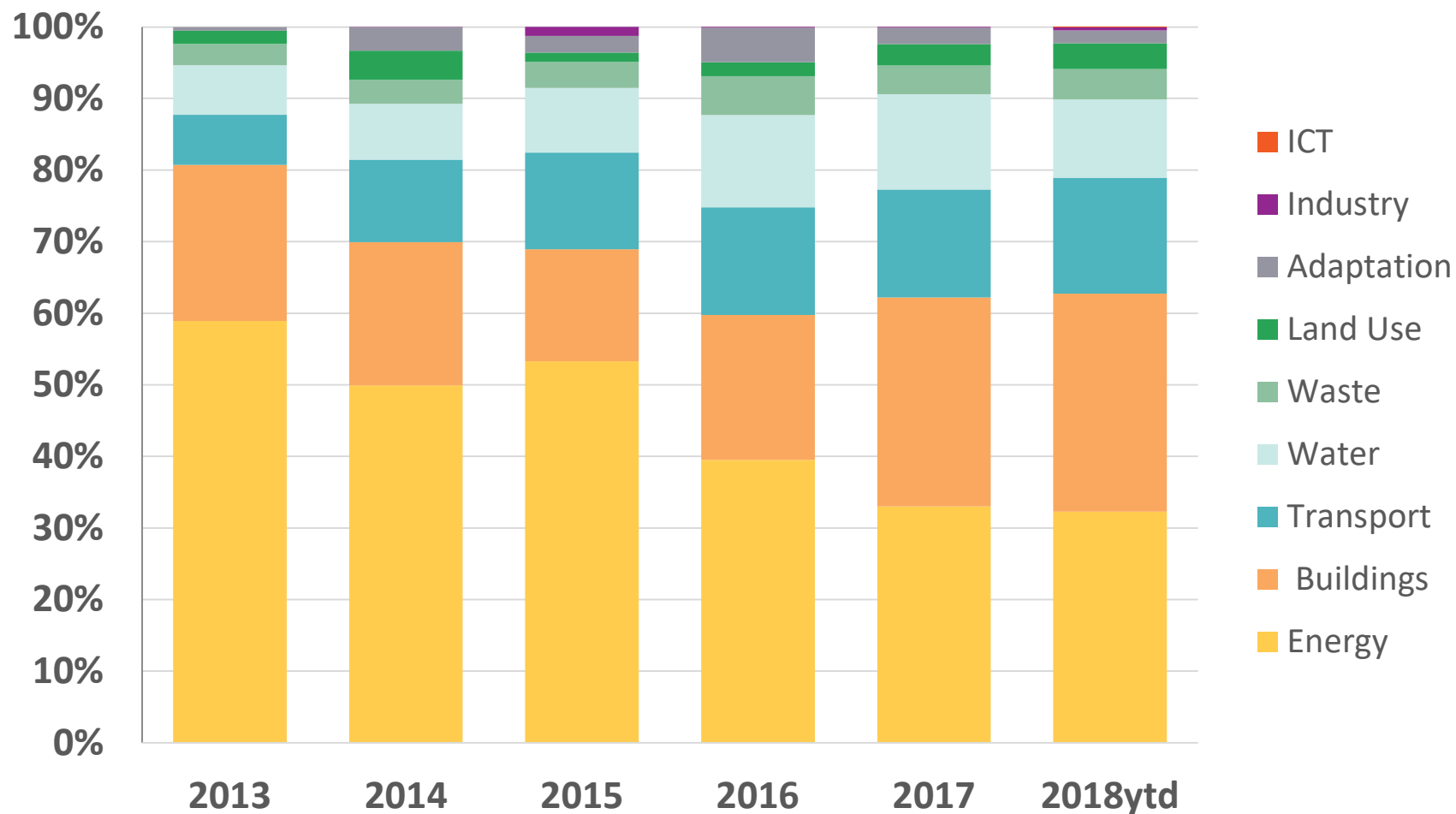
Proceeds to climate projects	<ul style="list-style-type: none">• Vanilla bonds – no complicated structure• Comparable pricing• Refinance as well as project• 90% investment grade
Any entity	<ul style="list-style-type: none">• Governments & DFIs• Corporates• Asset owners: PPPs, banks, utilities, etc• Municipalities
Any structure	<ul style="list-style-type: none">• Senior unsecured• Asset-backed• Covered bonds• Other: loans, Sukuk
Reporting	<ul style="list-style-type: none">• Transparency to climate asset or project• Independent review• Reporting on use of proceeds

A growing market

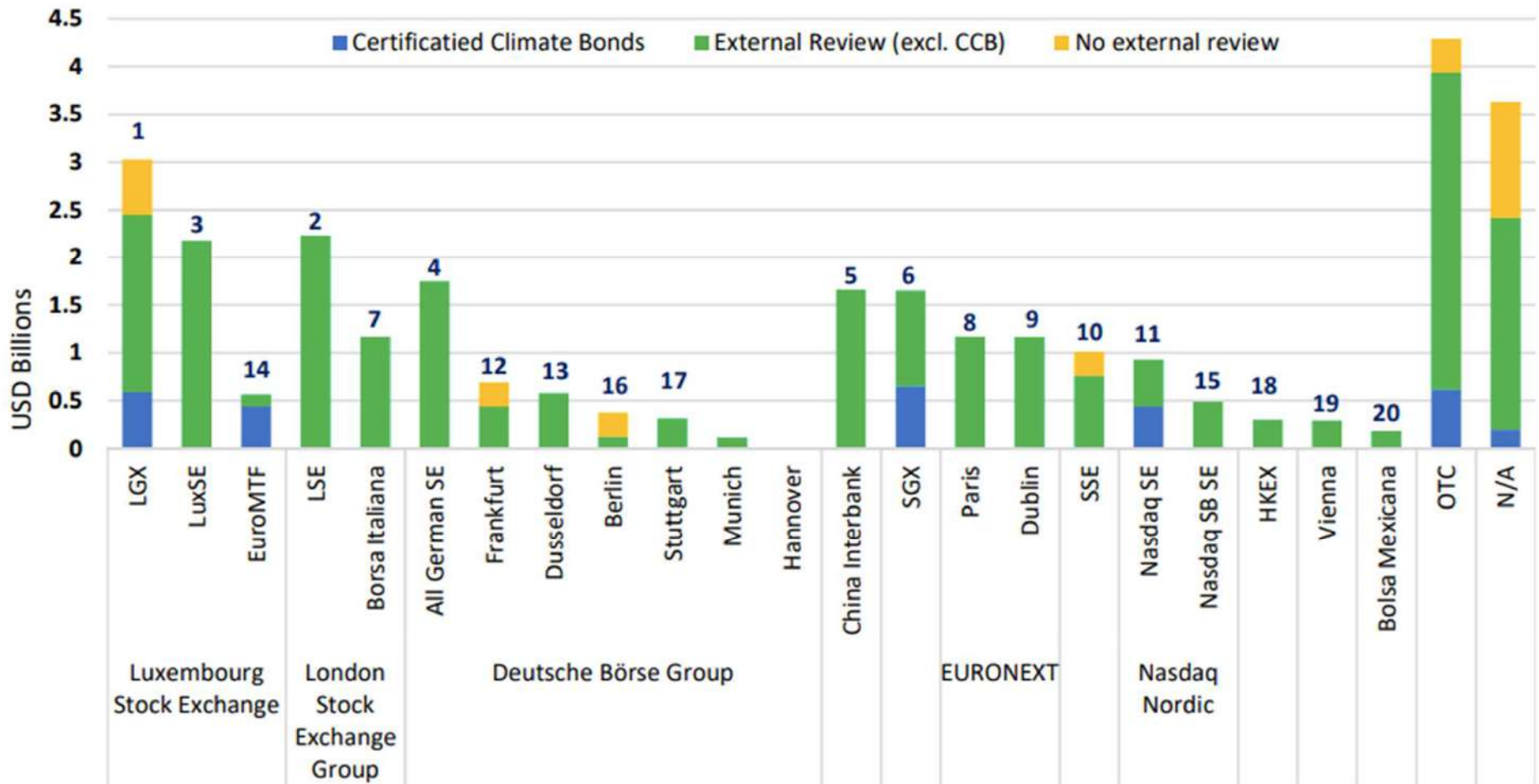
- 2007/8 first bonds from EIB & World Bank
- < 20bn in total issued before 2013
- Bonds weren't previously in ESG portfolios
- First corporates in 2013



Green bonds: Use of proceeds is diversifying



External reviews are expected



What is the Climate Bonds Taxonomy?

A guide to climate aligned assets & projects

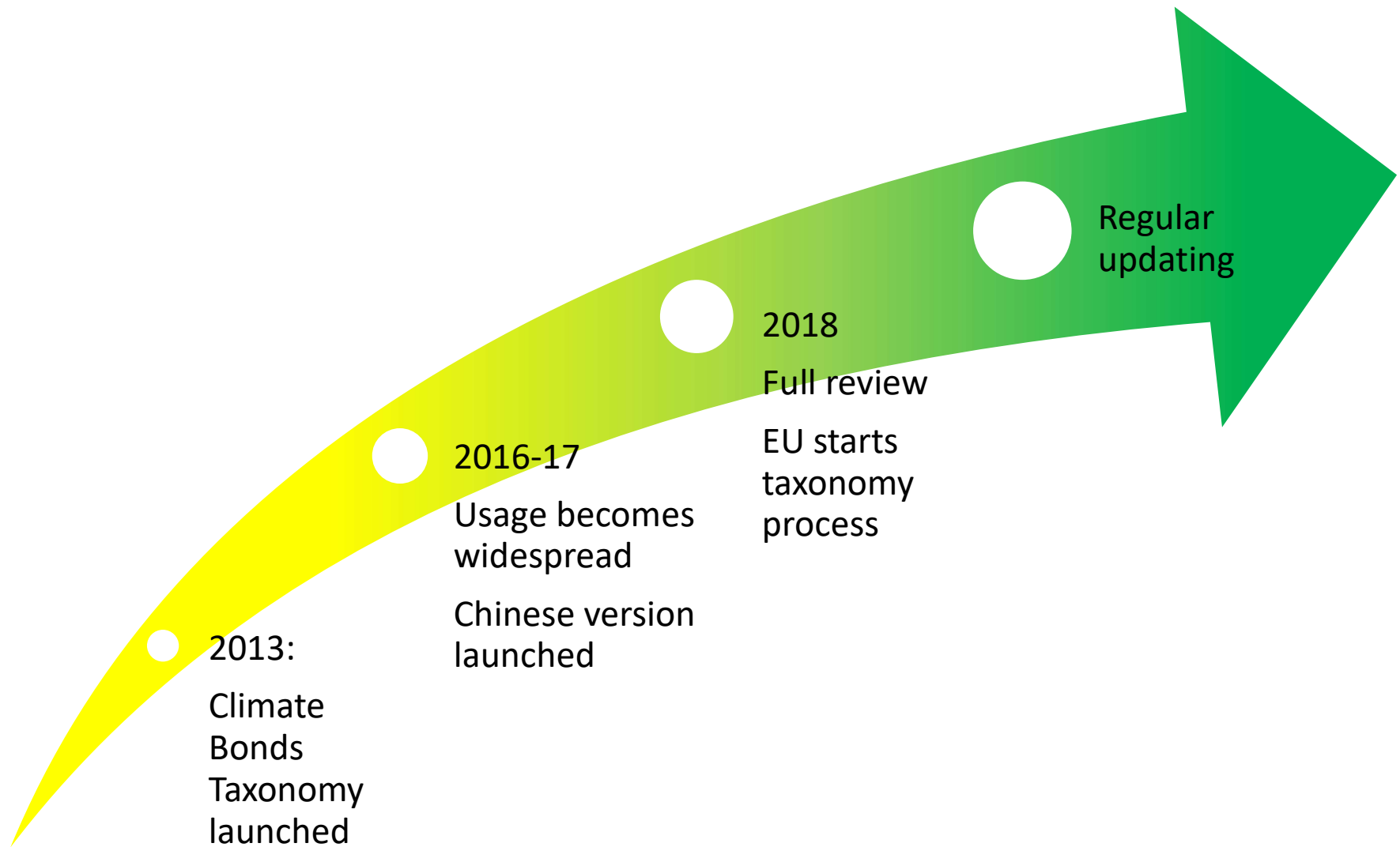
It is available in Chinese & English









































Who uses the Climate Bonds Taxonomy?

- **Issuers:** guide green bond issuance
- **Investors:** guide green investing and their engagement with investors
- **Banks:** green tagging on balance sheets
- **Govs & munis:** green infrastructure pipelines
- **Policy:** inform policy developments

History of the Taxonomy



What does the taxonomy cover?

ENERGY	TRANSPORT	WATER	BUILDINGS	LAND USE & MARINE RESOURCES	INDUSTRY	WASTE	ICT
Solar 	Private transport 	Water monitoring 	Residential 	Agriculture 	Cement production 	Preparation 	Broadband networks
Wind 	Public passenger transport 	Water storage 	Commercial 	Commercial Forestry 	Steel, iron & aluminium production 	Reuse 	Telecommuting software and service
Geothermal 	Freight rail 	Water treatment 	Products & systems for efficiency 	Ecosystem conservation & restoration 	Glass production 	Recycling 	Data hubs
Bioenergy 	Aviation	Water distribution 	Urban development 	Fisheries & aquaculture 	Chemical production 	Biological treatment 	Power management
Hydropower 	Water-borne 	Flood defence 		Supply chain management 	Fuel production 	Waste to energy 	
Marine Renewables 		Nature-based solutions 				Landfill 	
Transmission & distribution 						Radioactive waste management	
Storage 							
Nuclear							



Climate Bond Certified

- Certification Criteria approved 
- Criteria under development 
- Due to commence 



Reading the Taxonomy

The taxonomy uses a traffic light system to identify eligible assets and projects



Indicates asset or project is automatically compatible with a low carbon economy and does not have to comply with any requirements



Indicates asset or project can be compatible with a low carbon economy if it complies with set screening requirements

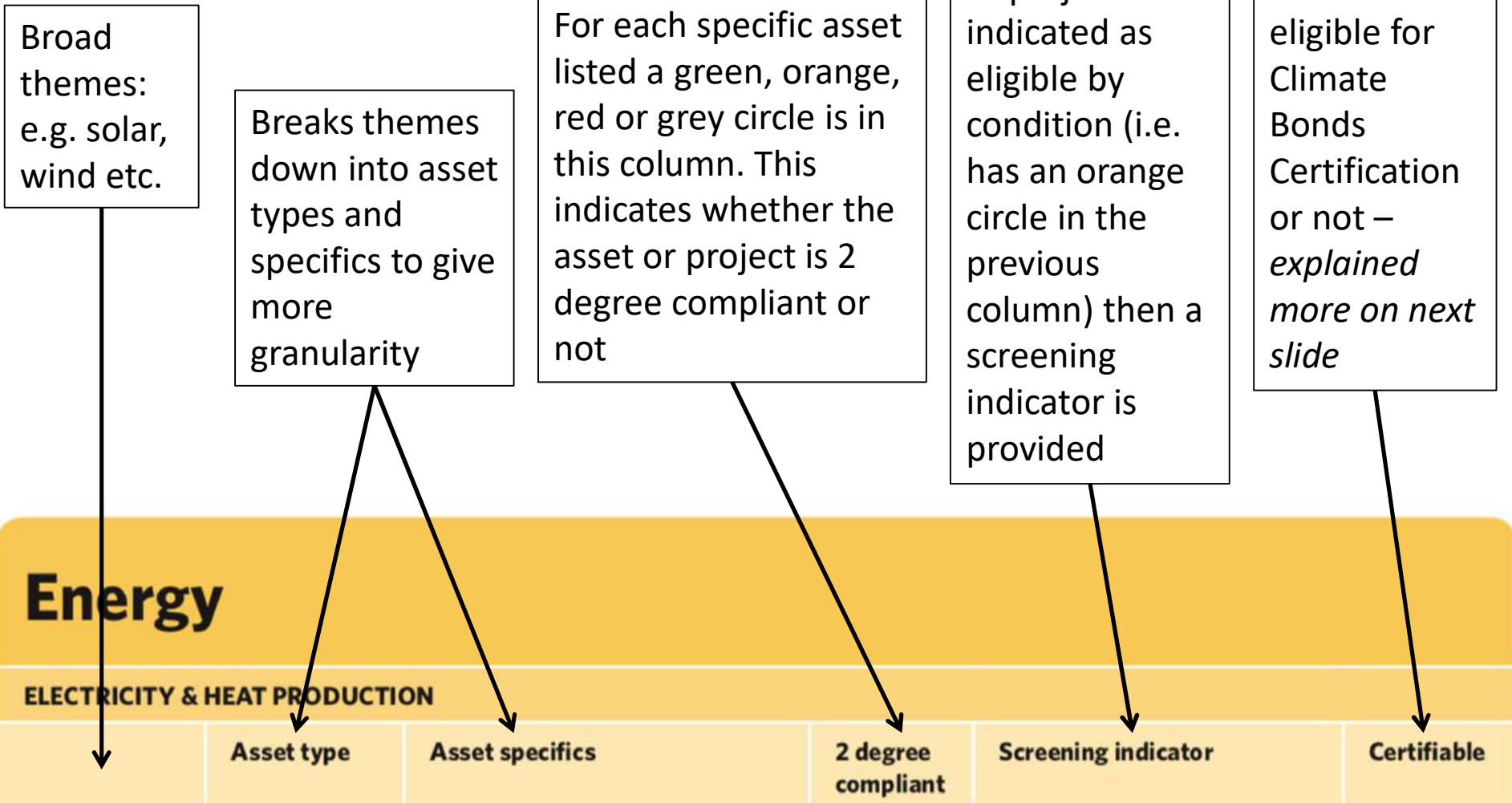


Indicates asset or project is not compatible with a low carbon economy



Indicates that this is an area where more work is required before we can classify these types of projects or assets

Reading the Taxonomy



Reading the Taxonomy

The following symbols are used to indicate when Climate Bonds Certification is available.

If that column is blank it means that we have not started Sector Criteria development

Climate Bonds Certification available	
Criteria under development	

How has it been updated?

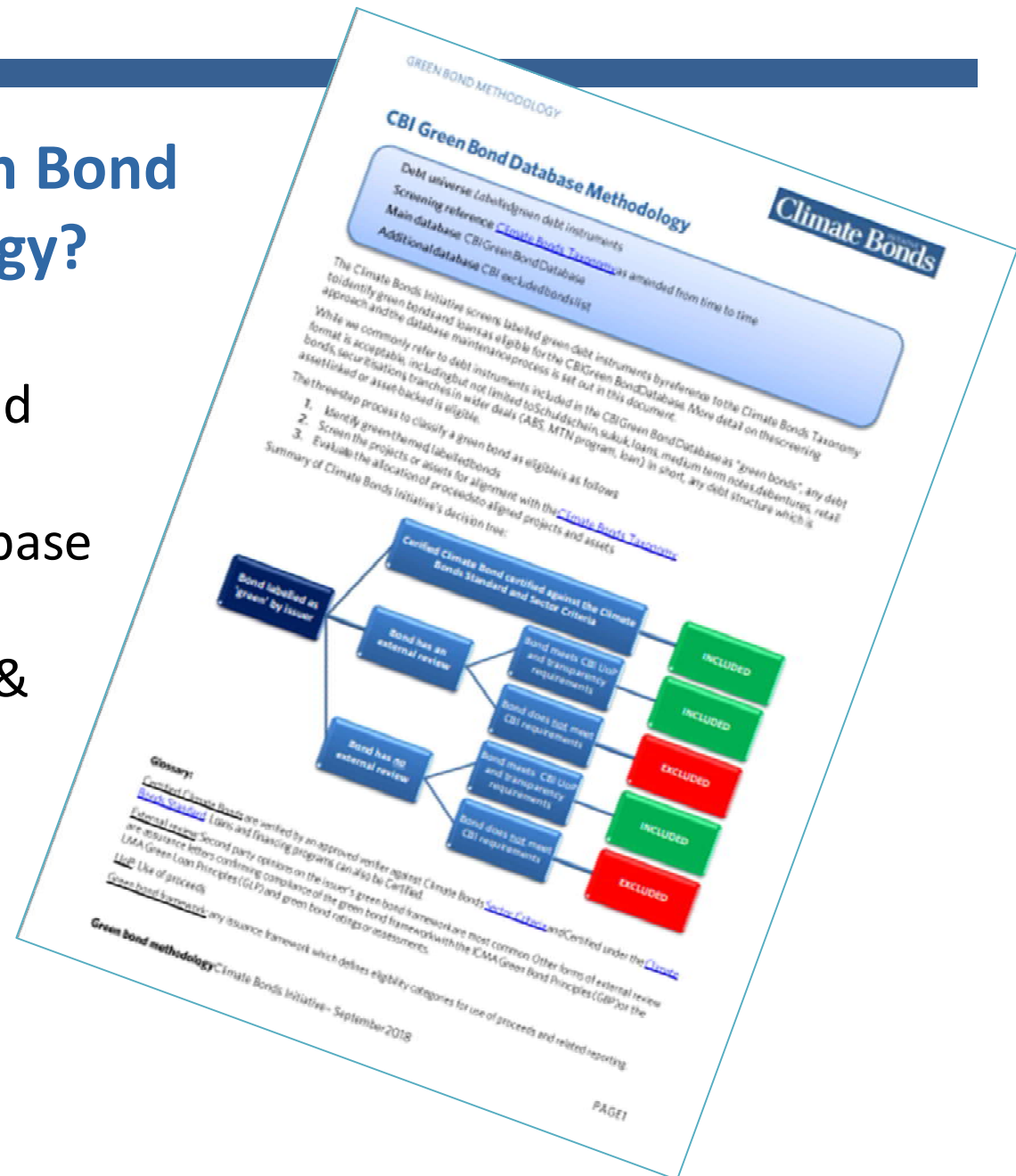
Latest climate science, technology and +200 experts provide input through the Climate Bonds Standard development



What is the CBI Green Bond Database Methodology?

A guide to the green bond screening process for inclusion in the CBI database

It is available in Chinese & English



How do we screen bonds?

- **Identify** self-labelled green bonds
 - Variety of labels – we look through to the assets
 - Variety of sources – news, prospectus, SPO, GB rating ...
- **Screen** for alignment with Taxonomy sectors
- **Evaluate** allocation of proceeds
 - **Include** if 95%+ allocated to green assets / projects
 - **Pending** if info is insufficient or deal requires more analysis
 - **Exclude** if not aligned or insufficient information

How the methodology uses the Taxonomy

- The methodology is aligned to
 - GBP / GLP
 - CB Taxonomy
 - *spirit* of the Sector Criteria
- It uses the traffic light system to classify alignment
- Detailed lists of exclusions

SECTOR	TRANSPORT
Private, public and freight land transport	<ul style="list-style-type: none"> • Electric vehicles (EVs), hybrids and hydrogen fuel cell vehicles • Bicycle and public walking infrastructure and services • Passenger trains; urban rail systems such as metros • Freight railways and rolling stock, provided <5% of total emissions • Public transport buses and coaches, bus rapid transit • Manufacturing (supply chain), dedicated infrastructure (e.g. charging/filling stations)
Passenger and cargo water transport	<ul style="list-style-type: none"> • Electric powered or otherwise low-carbon (such as hydrogen, etc) • Supporting infrastructure
Passenger and cargo aircraft and aviation	<ul style="list-style-type: none"> • Electric powered or otherwise low-carbon (such as solar, etc) • Supporting infrastructure
Assets need further review	
Shipping	<ul style="list-style-type: none"> • LNG vessels factoring in design and operational improvements, level of GHG and total emissions
Transport logistics	<ul style="list-style-type: none"> • Sorting centres, intermodal freight facilities, port multi-modal logistics hubs
Ineligible assets	
Personal vehicles (cars)	<ul style="list-style-type: none"> • ICE and CNG passenger vehicles and supply chain
Rail	<ul style="list-style-type: none"> • Rail lines/operators when fossil fuels account for >5% of total emissions
Shipping	<ul style="list-style-type: none"> • Oil tankers and other vessels transporting solely fossil fuels • Heavy fuel vessels
Aviation	<ul style="list-style-type: none"> • Aircraft using fossil fuel

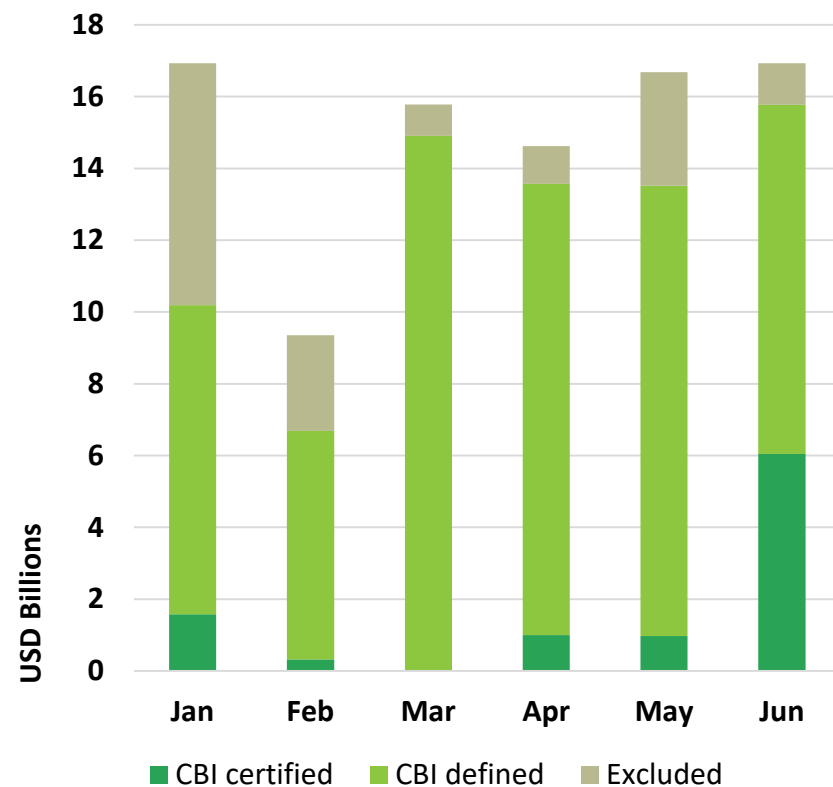
Why we exclude bonds

- Assets not aligned to CB Taxonomy e.g. “clean” coal
- >5% of proceeds allocated to social projects

Bond type	H1 2018	H1 2017
Social	\$4.6bn	\$5.9bn
Sustainability	\$6.0bn	\$3.5bn

- >5% allocation to cash items, e.g. expenses, working capital, R&D
- Insufficient disclosure to determine

H1 2018 monthly issuance volume



Available online:

Climate Bonds Taxonomy
A guide to climate aligned assets & projects
SEPTEMBER 2018

Contents

- Energy 8
- Transport 7
- Water 10
- Buildings 11
- Land use & marine 13
- Industry 14
- Waste 15
- ICT 16

Using this document

A useful light system has been adopted to indicate whether identified assets and projects are considered to be automatically compatible with a 2-degree decarbonisation trajectory (green light) or automatically incompatible. Orange light is potentially compatible, depending on whether more specific criteria are met. Red light is incompatible. A grey circle is used to indicate where further work is required to determine whether light colour is appropriate for a specific subset of assets or activities.	<ul style="list-style-type: none"> Automatically compatible Compatible if consistent with screening indicator Not compatible More work required
The Taxonomy is the foundation used by the Climate Bonds Initiative to assess assets to determine whether assets or projects underlying an investment are eligible for green or social financing. Where possible, a number of external review bodies undertake and certify eligibility. Climate Bonds' external review bodies are listed under the Climate Bonds Certified. This is indicated via a blue 'Climate Bonds Certified' logo. Where detailed sector based criteria for Certification are still under development, this is indicated by a yellow circle. In this case, assets in this sector cannot yet be certified under the Climate Bonds Standard.	<ul style="list-style-type: none"> Climate Bonds Certification available Criteria under development

Climate Bonds Taxonomy 5

<https://www.climatebonds.net/standard/taxonomy>

GREEN BOND METHODOLOGY

CBI Green Bond Database Methodology

Debt reverse labels/kybernet debt instruments
Screening reference: [Climate Bonds Taxonomy](#) as amended from time to time
Main database: CBI Green Bond Database
Additional database: CBI excludeds/whitelist

The Climate Bonds Initiative screens eligible green debt instruments by reference to the Climate Bonds Taxonomy to identify green bond eligible assets eligible for the CBI Green Bond Database. More detail on this screening approach and the database maintenance process is set out in this document.

While we commonly refer to debt instruments included in the CBI Green Bond Database as "green bonds", any debt formal is acceptable, including not limited to subordinated sukuk, loans, medium term notes, debentures, retail bonds, securitisation certificates in wider debt (ABS, MBS program, bond) in short, any debt structure which is associated to asset backed portfolio.

The three-step process to classify a green bond is eligible as follows:

1. Identify green themes/activities
2. Screen the projects or assets for alignment with the [Climate Bonds Taxonomy](#)
3. Evaluate the allocation of proceeds aligned projects and assets

Summary of Climate Bonds Initiative's decision tree:

```

    graph TD
      A[Bond labelled as green by issuer] --> B[Bond has an external review]
      A --> C[Bond has no external review]
      B --> D[Bond meets CB GPF and transparency requirements]
      B --> E[Bond does not meet CB requirements]
      C --> F[Bond meets CB GPF and transparency requirements]
      C --> G[Bond does not meet CB requirements]
      D --> H[INCLUDED]
      E --> I[EXCLUDED]
      F --> J[INCLUDED]
      G --> K[EXCLUDED]
  
```

Glossary

Climate Bonds Standard: Instruments and financing projects can also be "Climate Bonds Standard". Instruments and financing projects can also be "Climate Bonds Standard". Instruments and financing projects can also be "Climate Bonds Standard".

External review: Second party opinions on the issuer's green bond framework are most common. Other forms of external review are supportive of the issuer's green bond framework with the CMAA Green Bond Process (GBP) or the LMA Green Loan Process (GLP) and green bond ratings assessments.

USE: Use of proceeds

Green bond methodology: any resource framework which defines eligibility criteria for use of proceeds and related reporting.

Green bond methodology | Climate Bonds Initiative | September 2018 | PAGE 1

<https://www.climatebonds.net/market>

