Climate Bonds INITIATIVE

Channelling trillions into climate solutions through GSS+ bond

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Our Partners

Ministère de la Transition Écologique et Solidaire
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Westpac
BlackRock
CalSTRS
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apg Asset Management Asia
Union Investment
Allianz Global Investors
novethic
AB
RBC
AIM Affirmative Investment Management
PAX Pax World Mutual Funds
NN investment partners
icmif
IIGCC
Investor Group on Climate Change
Amundi Asset Management
Inquiry: Design of a Sustainable Financial System
TerraWatt Initiative
green building council australia
AXA Investment Managers
FICCI
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PSI Principles for Sustainable Insurance
Ceres
London Stock Exchange
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TP ICAP
MSCI
Thomson Reuters
Investor Network on Climate Risk
Solactive
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EY Building a better working world
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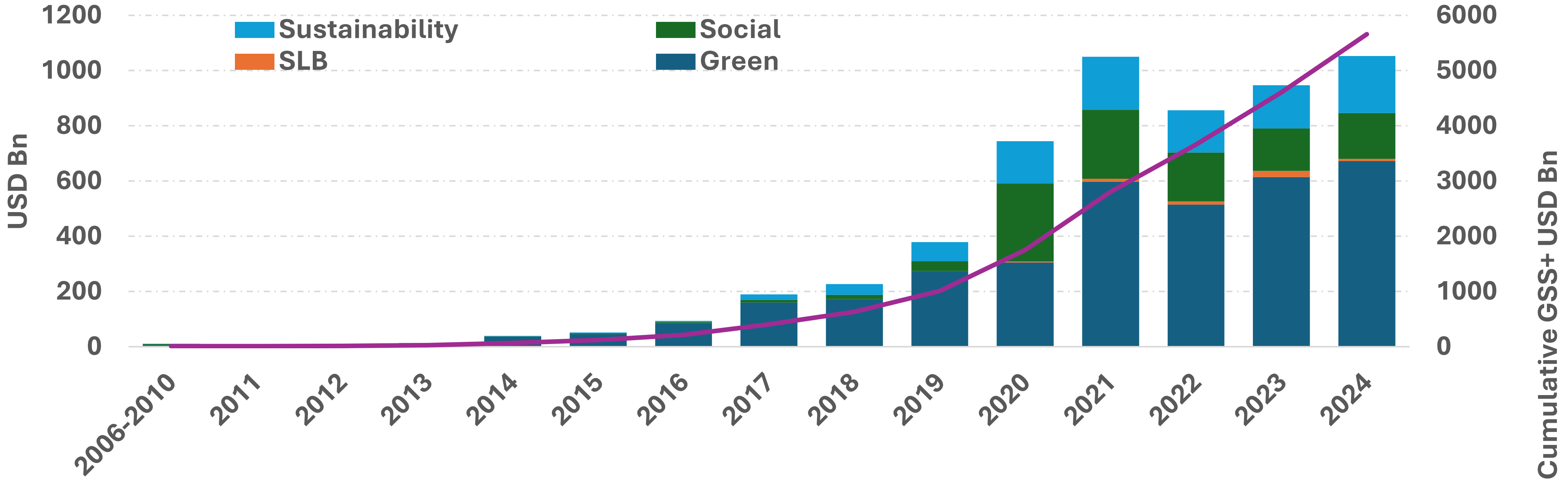
BNP Paribas Asset Management

Creating impact: Climate Bonds has driven a USD5.7tn GSS+ market



2010 Climate Bonds Initiative launched

2012 Climate Bonds Taxonomy released

2014 Climate Bonds advises People's Bank of China on its taxonomy and related regulations. By 2023, China is world's largest green bond market.

2017 Climate Bonds recommendations inform the EU Commission's Sustainable Finance Taxonomy.

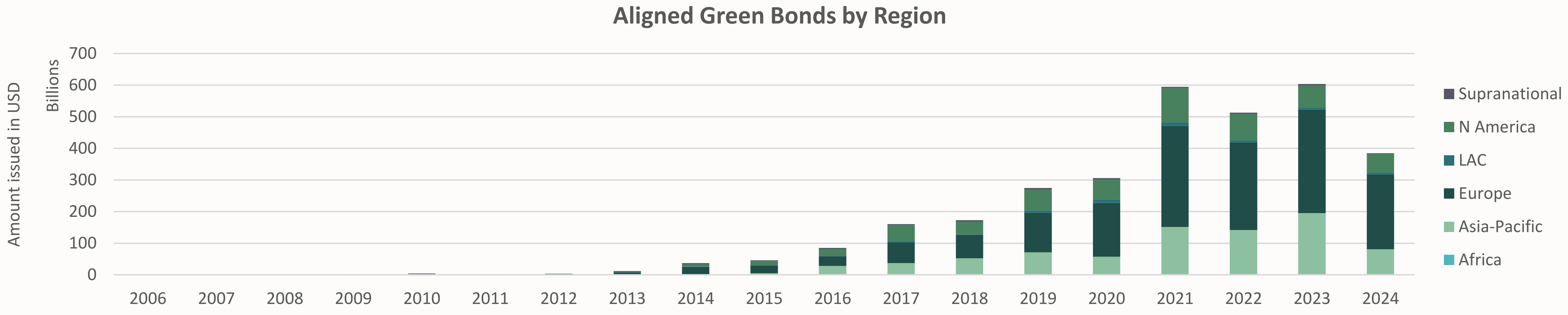
2017 Greenium: Climate Bonds' begins a seven year research project demonstrating green bond pricing benefits for issuers and investors

2020 Climate Bonds' Principles for a Credible Transition published.

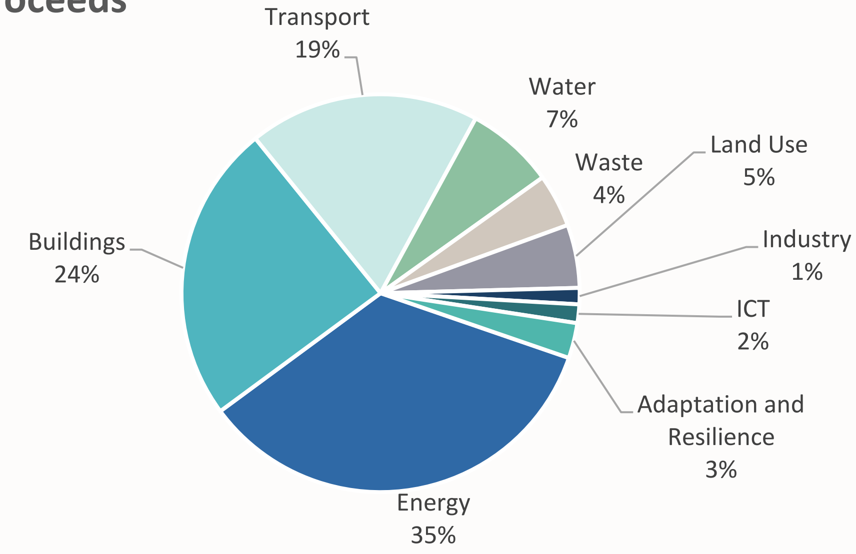
2024 Climate Bonds Certifies Japan's debut USD11bn transition bond

2024 cumulativ e aligned GSS+ volume reaches USD5.7tn

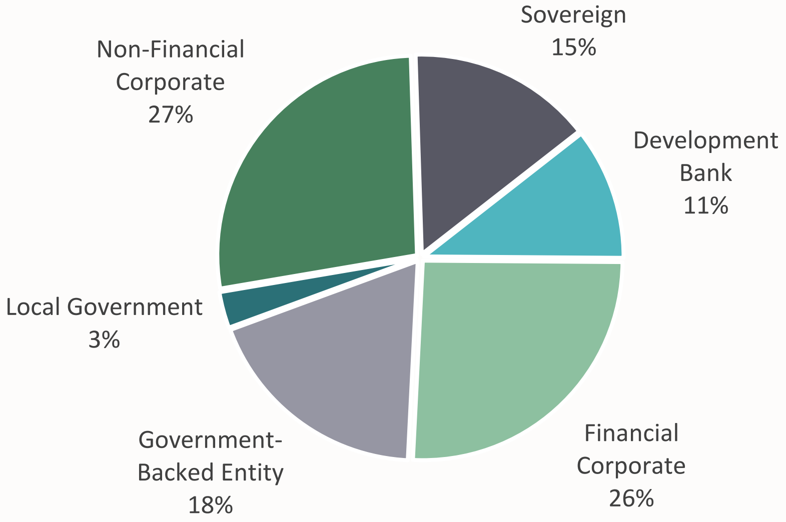
Green Bonds



Use of Proceeds



Issuer Type



Source: Climate Bonds Initiative H1 2024.

Benefits of Green Bonds

INVESTOR BENEFITS

- Comply with regulation
- Invest in sustainable products and initiatives without taking on additional risk
- Develop better-informed investment strategies
- Broaden restricted investment portfolios
- Remove cost of environmental due diligence

ISSUER BENEFITS

- Increase investor demand and diversification
- Improve relationships with debt providers
- Strengthen issuers' leadership
- Enhance issuers' reputation and brand value
- Help communicate issuers' sustainability narrative and strategies
- Boost integration between finance and sustainability teams

SYSTEMIC BENEFITS

- Stimulate positive stock market reaction and improvements in financial performance
- Foster green innovations
- Help transition towards low-carbon and resource-efficient economies
- Contribute to public-private-partnerships development opportunities
- Facilitate climate policies

Pricing and greenium in labeled market

Bookbuilding

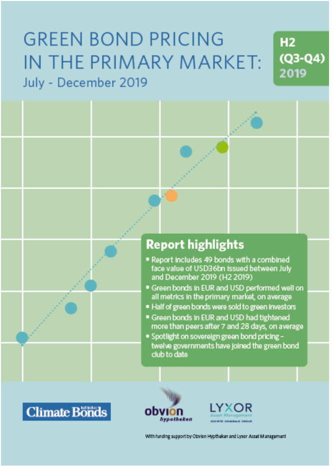
- Green bonds tend to attract larger book cover than vanilla equivalents
- Green bonds tend to experience larger spread compression than v.e.

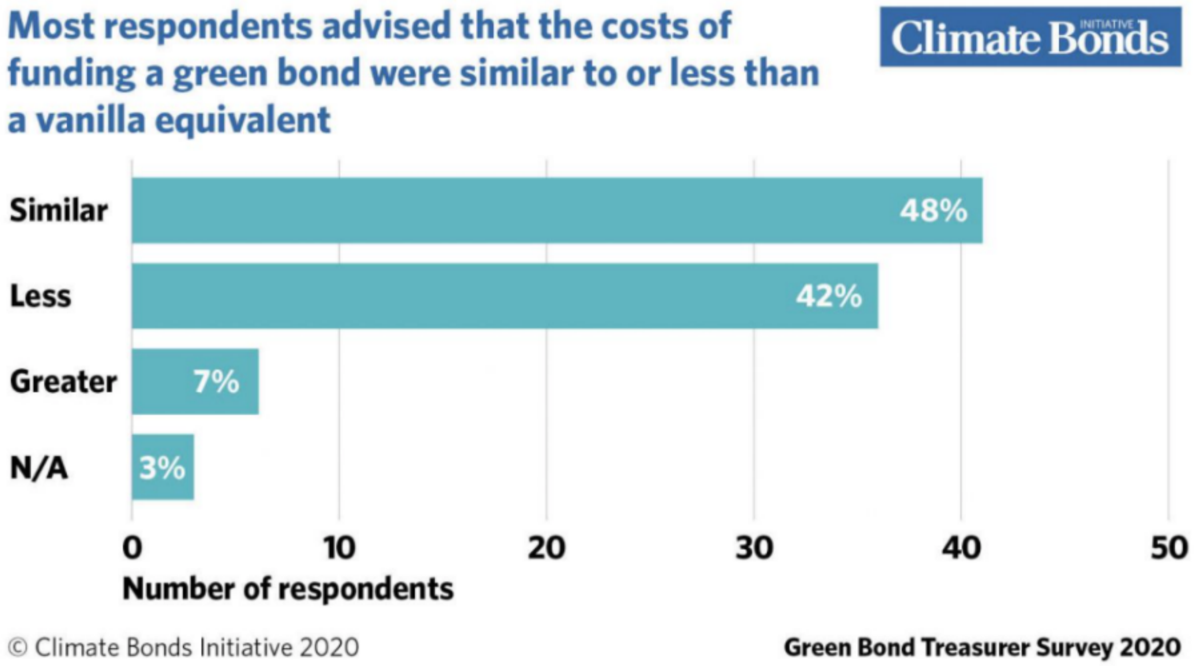
Pricing

- 20% greenium, 30% on the curve, 50% normal new issue premium
- 53% average of green bonds placed with investors describing themselves as green

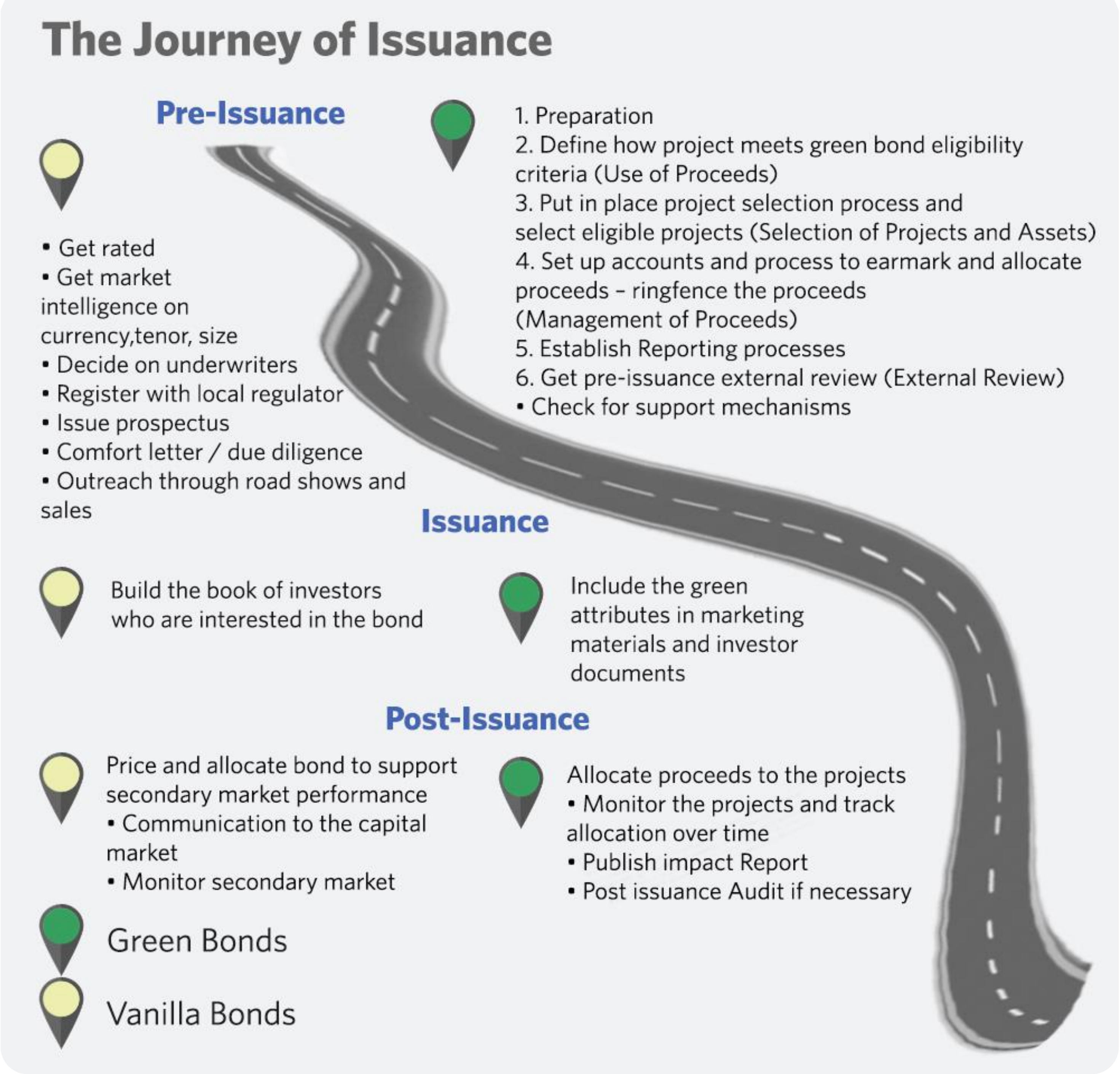
Secondary

- Green bonds tend to tighten more than equivalent indices in the secondary market
- Green bonds tend to tighten more than vanilla baskets in the secondary market

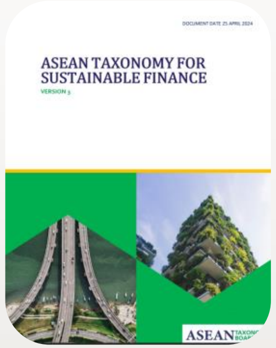




Green bond issuance process



Adopting guidance



Aligned with **ICMA**'s principles

Aligned with

ICMA's principles
and
MDB criteria

Alignment with

ICMA's principles,
MDB criteria
and
EU taxonomy

Alignment with

ICMA's principles,
MDB criteria,
EU taxonomy
and
CBI criteria

+

Do No Significant Harm and Social Safeguards

The role of key stakeholders

UNDERWRITERS

- Strategy & market proposition for the issuer
- Co-design GSS+ bond framework
- Ensure sustainable alignment
- Advice on pricing
- Create a bridge between issuers and investors
- Market education

- **BofA Securities**
- **Citigroup**
- **JP Morgan**
- **BNP Paribas**
- **Morgan Stanley**
- **Credit Agricole**
- **ING**
- **Societé Générale**
- **Deutsche Bank**
- **Goldman Sachs**
- **Santander**
- **Credit Suisse**
- **Jefferies**
- **ABN AMRO**

INDICES

- Climate Bonds provides green bond data to many index providers
- Different methodologies - not all labelled bonds are included
- Increasing focus on the ESG and sustainable credentials of the issuer.
- Provide a benchmark of performance

- **S&P Dow Jones Indices**
- **MSCI**
- **Barclays**
- **FTSE Russell**
- **Bloomberg**
- **Morningstar**
- **CRSP**
- **Solactive**
- **JP Morgan ESG indices**

EXCHANGES

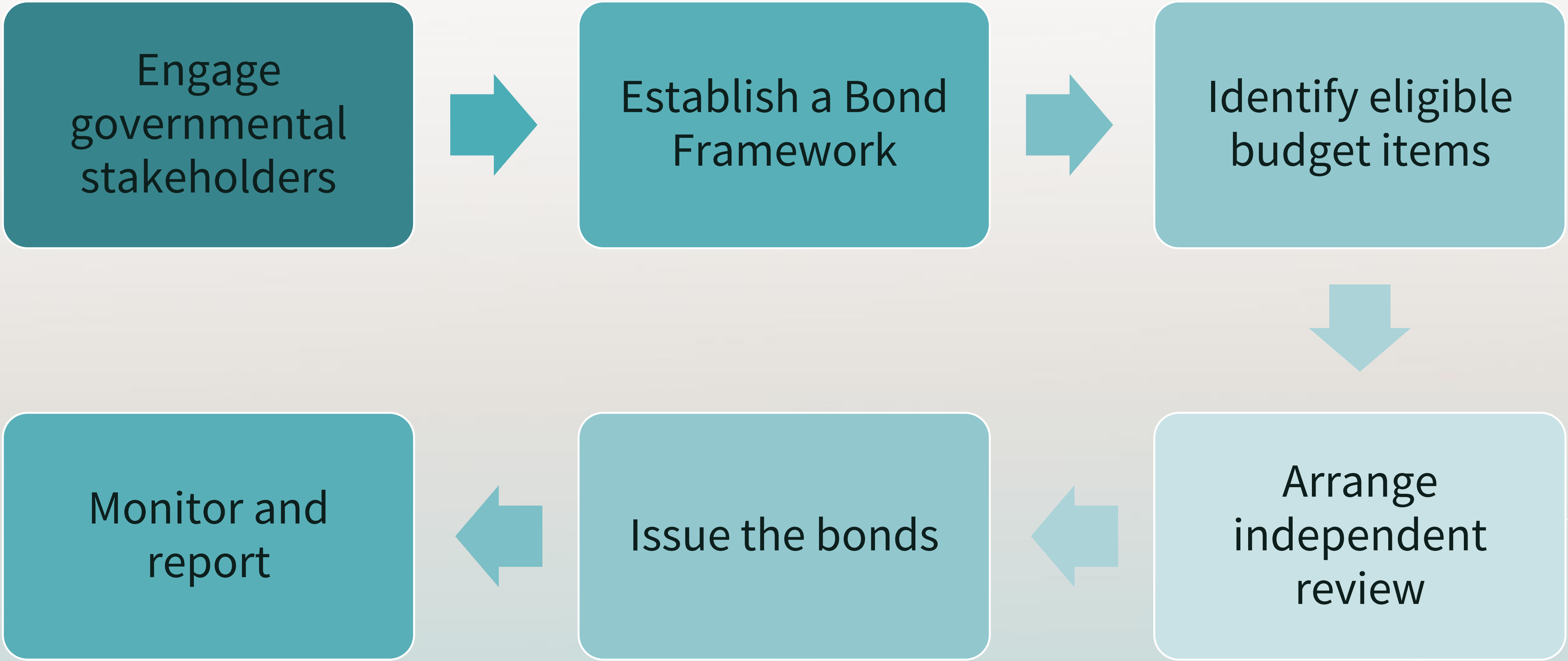
- Key actor for market development
- Often assume a regulator role
- Bring corporations and governments together with investors
- Ensure trading occurs in an orderly and fair manner

Green Bonds
- Oslo, Mexico, Luxembourg, Johannesburg, Brazil, Frankfurt stock exchanges

Sustainable Bonds
- Stockholm, Taipei, London, Nigeria, Toronto stock exchanges

GSS Bonds
- Euronext, Argentina, Hong Kong, Korea, Singapore stock exchanges

The Issuance Process for Sovereign UoP Bonds



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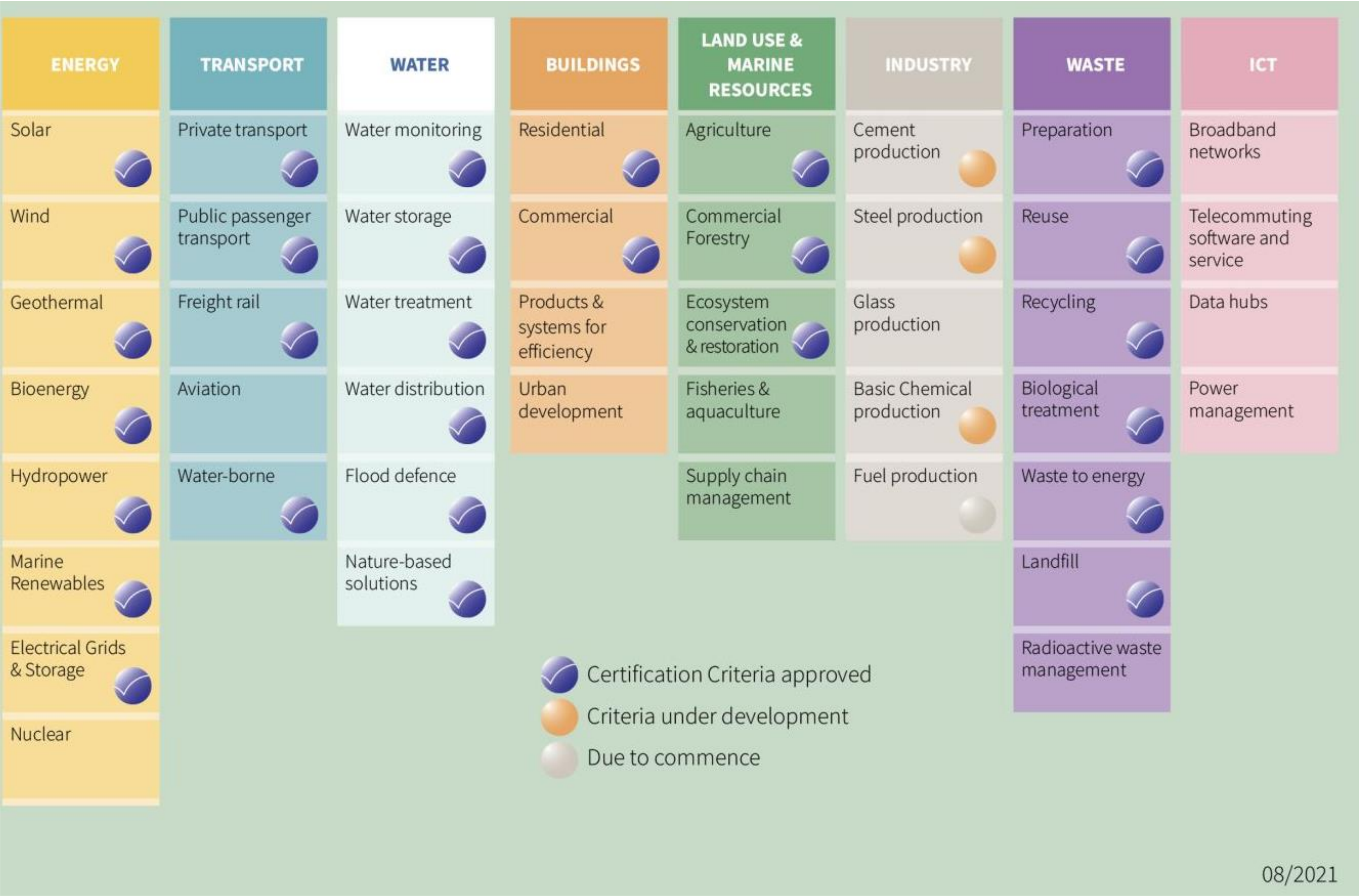
Green/Climate Bonds Taxonomy – tool to rapidly identify climate-aligned investments

- **8 broad categories** of economic activity - climate mitigation and climate resilience/adaptation
- Provides **widely accepted definitions** for frameworks such as 'climate finance/investment' and 'carbon neutrality'
- Currently accounts for 18% of global labelled green bond issuance with **more than 40 CBI-accredited certification bodies** worldwide provide third-party certification



Taxonomies comparison

LIST OF TAXONOMIES	**STATE OF DEVELOPMENT** Published/In Development or Consultation/In Discussion	**DEVELOPMENT ENTITY** government-central bank/Other/Uncategorised	**REGIME** Voluntary (V)/Mandatory (M)/To be determined (TBD)	**APPROACH** Activity-specific/High level principles	**MEASUREMENT CRITERIA** Sector based thresholds/Other
ASEAN	Published	Govt - central bank	V	High level principles	Other
Bangladesh	Published	Govt - central bank	M	Activity-specific	Sector based thresholds
Canada	In Development/Consultation	Other	V	High level principles	Not yet stated
CBI	Published	Other	M	Activity-specific	Sector based thresholds
Chile	In Development/Consultation	Other	TBD	Uncategorised	Sector based thresholds
China	Published	Govt - central bank	M	Activity-specific	Other
Colombia	Consultation	Govt - central bank	V	Activity-specific	Sector based thresholds
EU	Published	Govt - central bank	M	Activity-specific	Sector based thresholds
India	In Development/Consultation	Govt - central bank	TBD	Activity-specific	Not yet stated
Indonesia	Published	Govt - central bank	V	Activity-specific	Traffic light criteria
IPSF	Published	Govt - central bank	V	Activity-specific	Not yet stated
ISO	Published	Other	V	Uncategorised	Other
Japan	In Development/Consultation	Govt - central bank	TBD	High level principles	Other
Malaysia	Published	Govt - central bank	M	High level principles	Sector based thresholds
MDBs-IDFC	Published	Other	V	Activity-specific	Other
Mongolia	Published	Govt - central bank	V	High level principles	Other
Philippines	In Development/Consultation	Govt - central bank	TBD	Not yet stated	Not yet stated
Russia	Published	Govt - central bank	V	Activity-specific	Sector based thresholds
Singapore	In Development/Consultation	Govt - central bank	TBD	Activity-specific	Sector based thresholds
Sri Lanka	In Development/Consultation	Govt - central bank	TBD	Not yet stated	Not yet stated
South Africa	In Development/Consultation	Other	V	Activity-specific	Sector based thresholds
South Korea	Published	Govt - central bank	M	High level principles	Sector based thresholds
Vietnam	In Development/Consultation	Govt - central bank	TBD	High level principles	Sector based thresholds

In discussion: Australia, USA, Georgia, Thailand, Dominican Republic, Hong Kong, Mexico

Expanding frontiers: Climate Bonds is developing clear definitions for adaptation and resilience activities

- **Adaptation and resilience (A&R) means future-proofing economies, ensuring communities, nature, and businesses can thrive in a changing climate.**
- Mobilising adaptation finance is especially important in developing countries with negligible emissions – adaptation finance has currency and buy in where mitigation does not.
- Global goal on adaptation and resilience is a central component of the Paris Agreement

Risk and impacts are intensifying

- 40% (3.6bn people) live in high-risk areas
- Weather disasters up 400% in 40 years → USD2.9tn in damages
- Agricultural yields could drop 30% by 2050
- One million species are at risk of extinction

Opportunity to grow investment

- Estimated USD194–366bn annual finance gap (10–18x current flows)
- 95% of adaptation finance comes from the public sector—private capital must be channelled

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Investment Types

The total of 1444 climate investments have been identified in this phase of development.

Enabling measures
110

Enabling activities
125

Adapted activities
243

Adapting measures
966

Resilient Theme

The total of 429 automatically eligible investments have been identified.

Agri-food systems
84

Resilient social systems
26

Resilient Natural Systems
36

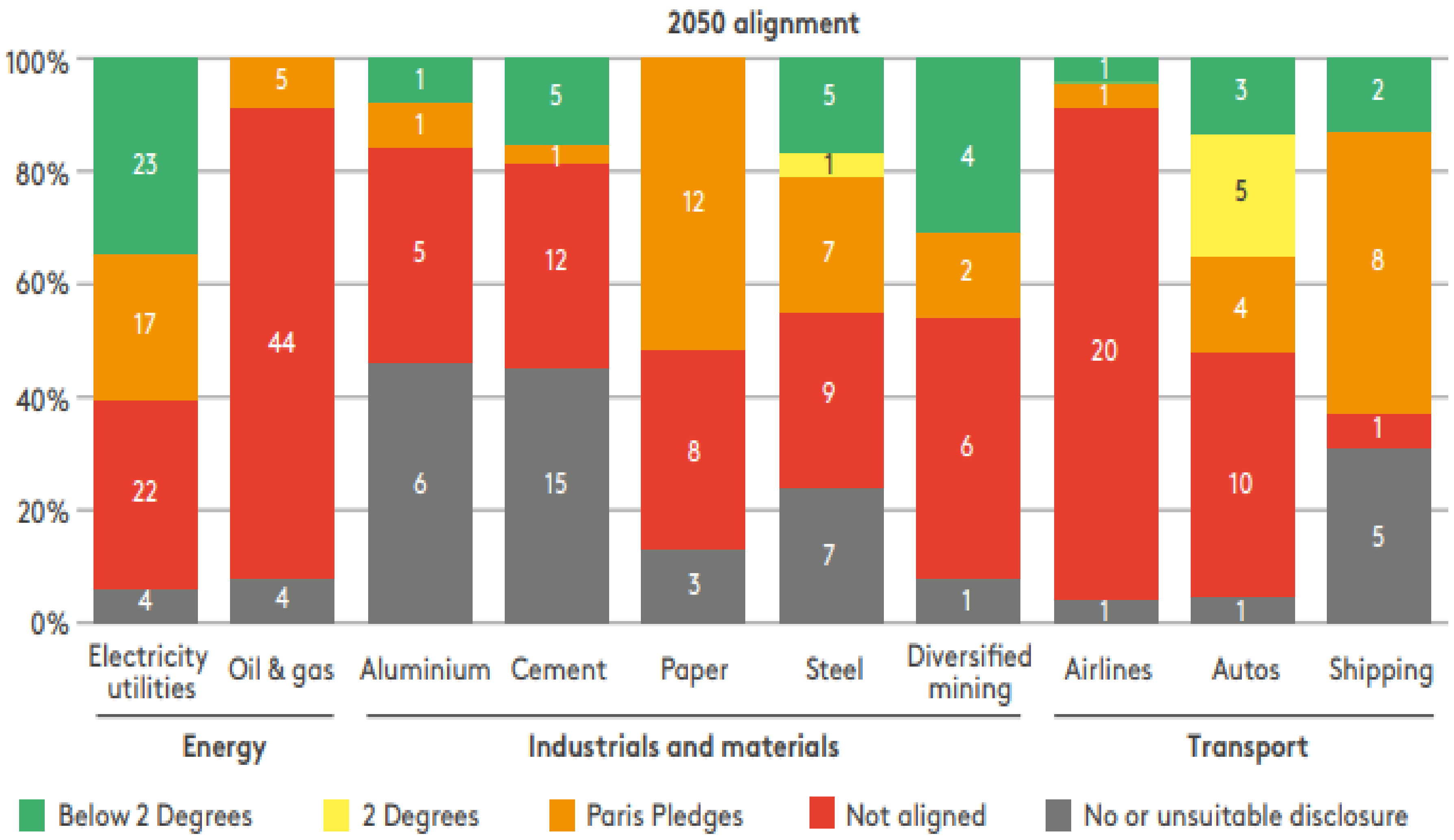
Resilient Health Systems
82

Resilient Infrastructure
36

Resilient Industry & Commerce
72

Resilient Cities & settlements
93

Future steps - most sectors will see major transformation



Source: TPI: State of Transition Report 2021

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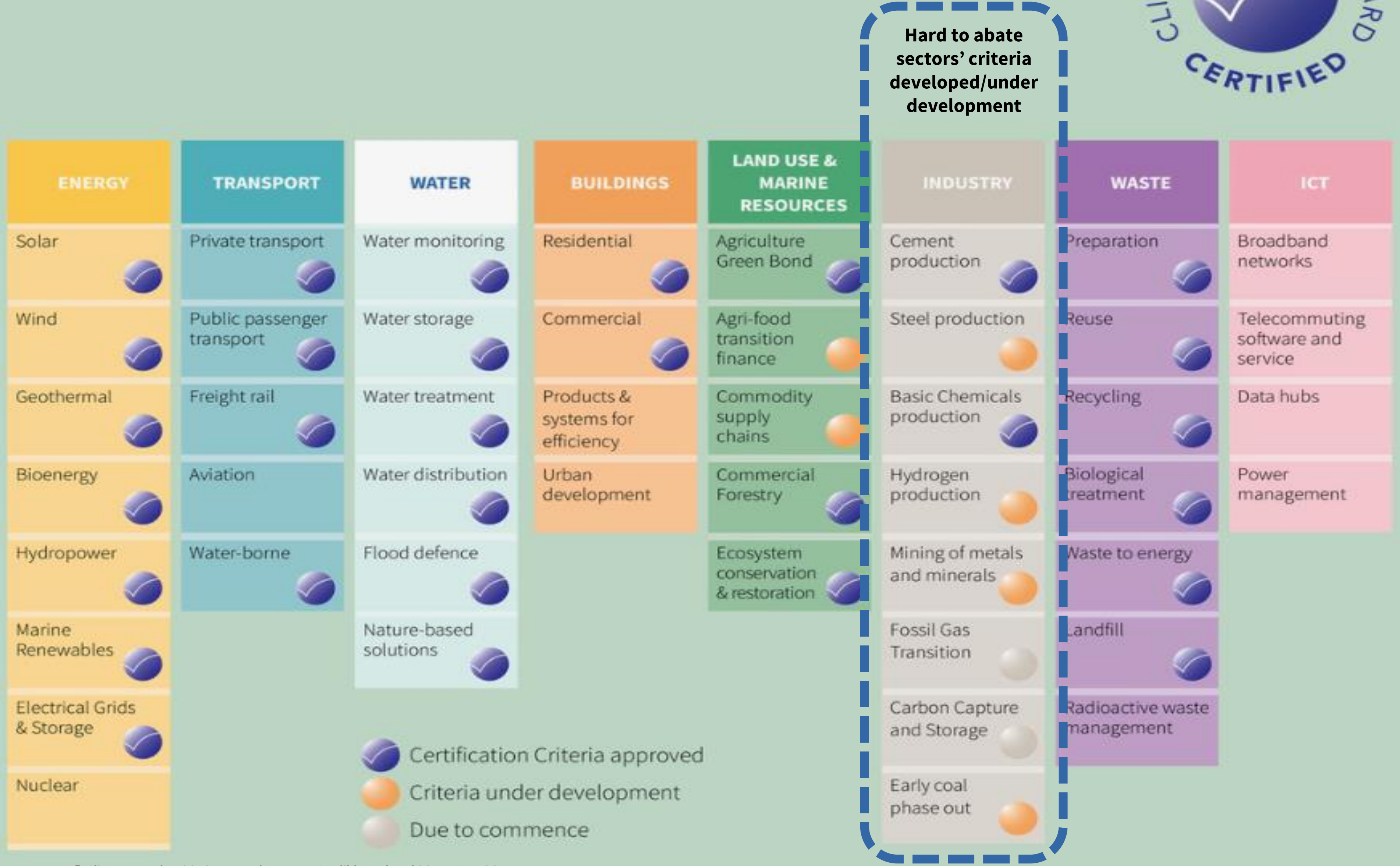
Global: CBI’s taxonomy structure



Big opportunities and challenges for GSS+ bond market in Asia

Opportunities

- Countries reaffirming climate targets - NDC updates
- Demand outstrips supply
- Investment opportunities in the new sectors – TMT, Hydrogen, EV, Food&Ag, SAF, Methane
- Transition of hard-to-abate sectors
- Resilience & adaptation (A&R) financing
- Green sovereign and muni issuance – links to economic stimulus
- Green windows

Challenges:

- Standard alignment
- Incentives and cost allocation
- Capacity limit
- Silos
- Climate target gaps

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