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FSD Africa Presentation



FSD Africa

Matteo Bigoni
Senior Climate Finance Specialist

Established in 2012 and supported by UK aid,

FSD Africa is a specialist development agency working to reduce poverty by strengthening financial markets.



OUR ASPIRATION

We believe building a financial system that is transparent, stable and accessible creates the conditions for a fair and sustainable future, where individuals, firms and governments alike can thrive and prepare for future challenges, from climate change to political instability.

We focus where the need is greatest, and where we believe the potential for impact is the most significant. This is about finance that benefits poor people, not just finance for the poor.



OUR BACKGROUND

Established in 2012 and supported by UK aid, we are a specialist development agency working to build and strengthen financial markets across Africa.

We work to reduce poverty through a market systems development approach. We aim to address the structural, underlying causes of poverty by improving financial market systems for large-scale, long-term impact long after our programmes end.



WHAT WE DO

From our headquarters in Nairobi, our team of over 60 financial sector experts work alongside a range of public and private sector partners to design and deliver ambitious programmes that make financial markets work better for everyone.

Depending on the project, we can deploy a combination of financial and non-financial tools; grants, investment capital, market insights or world-class technical assistance to ensure we achieve our objectives.

FSD Africa Green Finance Strategy



We are building a green finance strategy to coordinate and intensify our green finance work, beyond Green Bonds and across all our issue areas.

Lack of long-term capital in local currency

Dysfunctional credit markets

Lack of risk management and transfer instruments

Fragmented financial markets

Lack of early-stage and risk bearing capital

Financing the green sector

Working closely with financial firms, funds, regulators and Ministries in Africa and beyond to mobilise public and private capital towards (households, businesses and governments operating in) key clean growth and environmental value chain-based initiatives within Africa's green sector (products, projects, value chain priorities)

Greening the financial sector

Working closely with financial firms, funds, regulators and Ministries in Africa and beyond to better identify, understand, manage and monitor key climate and environmental risks and opportunities impacting the African financial sector and its clients (policy, regulation, mainstreaming).

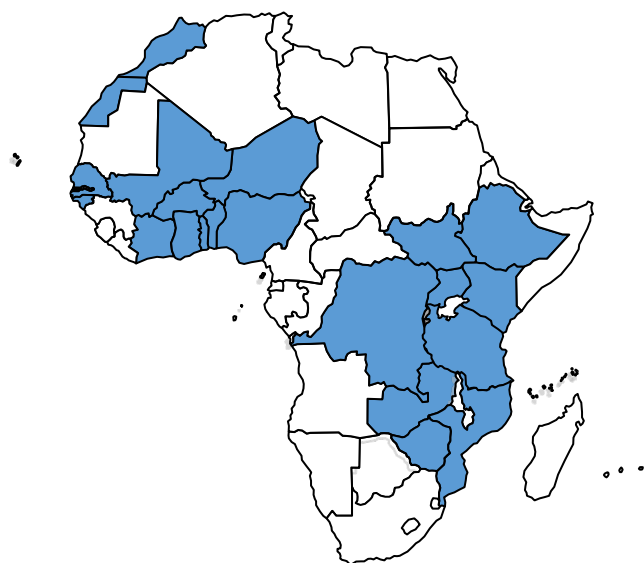
Greening FSD Africa & partners

FSD Africa Governance, Procedures & Policies

FSD Africa' tools

Across Africa, financial ventures often struggle to access the capacities they need to flourish. Many high-potential ideas fail before they have had a chance to fly. To help remedy this, we support our partners by drawing on a range of market development instruments.

Implementing 40+ projects in 28 countries across Africa



Grants

With no expectation of a financial return, grants are our most concessional tool. They are reserved for high-potential, but higher risk, commercial projects, or for non-commercial projects that have the potential for system-wide impact.

Returnable grants

With the expectation that most are repaid in full, we use returnable grants to support high-risk commercial projects. These projects build value for our partners and for FSD Africa. We recycle our share of any return into other projects.

Investment capital

Through FSD Africa Investments, our investment arm, we directly invest in high-risk businesses and funds operating in the financial sector that have the potential to change the way financial markets operate.

Market insights and advocacy

We invest in analysis by commissioning research that delivers insights to market players, and by funding agencies that generate external market intelligence. We also advocate purposefully with the aim of influencing policy and practice change.

Technical assistance

To tackle challenges that require specific technical solutions, our team of financial sector experts work with and advise a range of our public and private sector partners.

Convening

To overcome the negative effects of market fragmentation, we use our deep networks across the continent to create opportunities for learning transfer and collaboration both within countries and between countries – as well as beyond Africa.

Climate Bonds Initiative

Mobilising capital markets for climate action

Intelligence

Standards

- Science-based definitions
- International alignment
- CBI Taxonomy
- CBI Standards
- Taxonomy harmonization

Certification

- Green label Certification scheme under CBI Standards
- 259BN certified Climate Bonds up to DATE

Policy

- Country level analysis
- Market integrity
- Strategic issuance
- Securitization
- Improving risk-return profile
- Tax incentives
- Boosting demand
- Policy Data

Markets

- Analysis & Reports
- DATA - Labelled Green Bonds
- Bond Library

Influence

Market Development

- Dedicated Country Teams
- Government liaison on a global, national and regional levels
- Stakeholders network
- Regional Reports

Partnerships

- Gathering over 150 partners
- Special packages and benefits
- Exclusive access to DATA, reports and CBI experts

Events & Training

- Green Bonds Training Portfolio
- Online and In-person options
- Annual Conference for about 1000 global professionals
- Green Bond Pioneer Awards

Guidance

- High-level Guidance on Green Bond Issuance
- Technical assistance on Roadmaps and Frameworks



Agenda

Day 1

- | | |
|---|--------------------------------------|
| 1 | Labelling, Reviews and Certification |
| 2 | Taxonomies, Definitions and Criteria |
-

LABELLING, REVIEWS AND CERTIFICATION

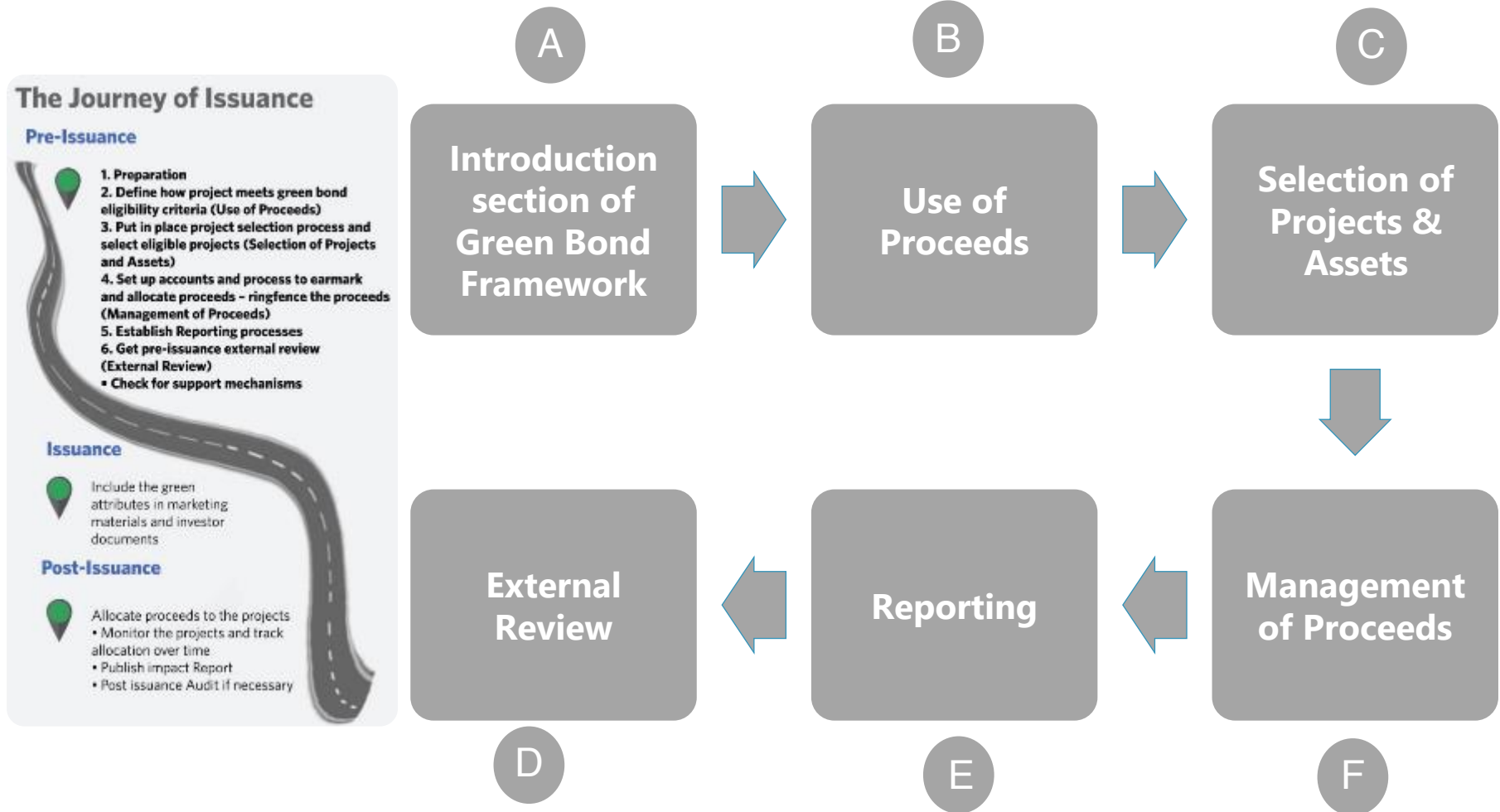
Comparing the process of issuances between regular bonds and bonds labelled green:

Green bond issuance journey



Pre-issuance

Step 1: Define the Green Bond Framework



External review methodologies

Second Party Opinion (SPO):

An issuer can seek advice from consultants and/or institutions with environmental expertise which are independent from the issuer. This is normally an assessment of the alignment with the Green Bond Principles and an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.

Assurance:

An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.

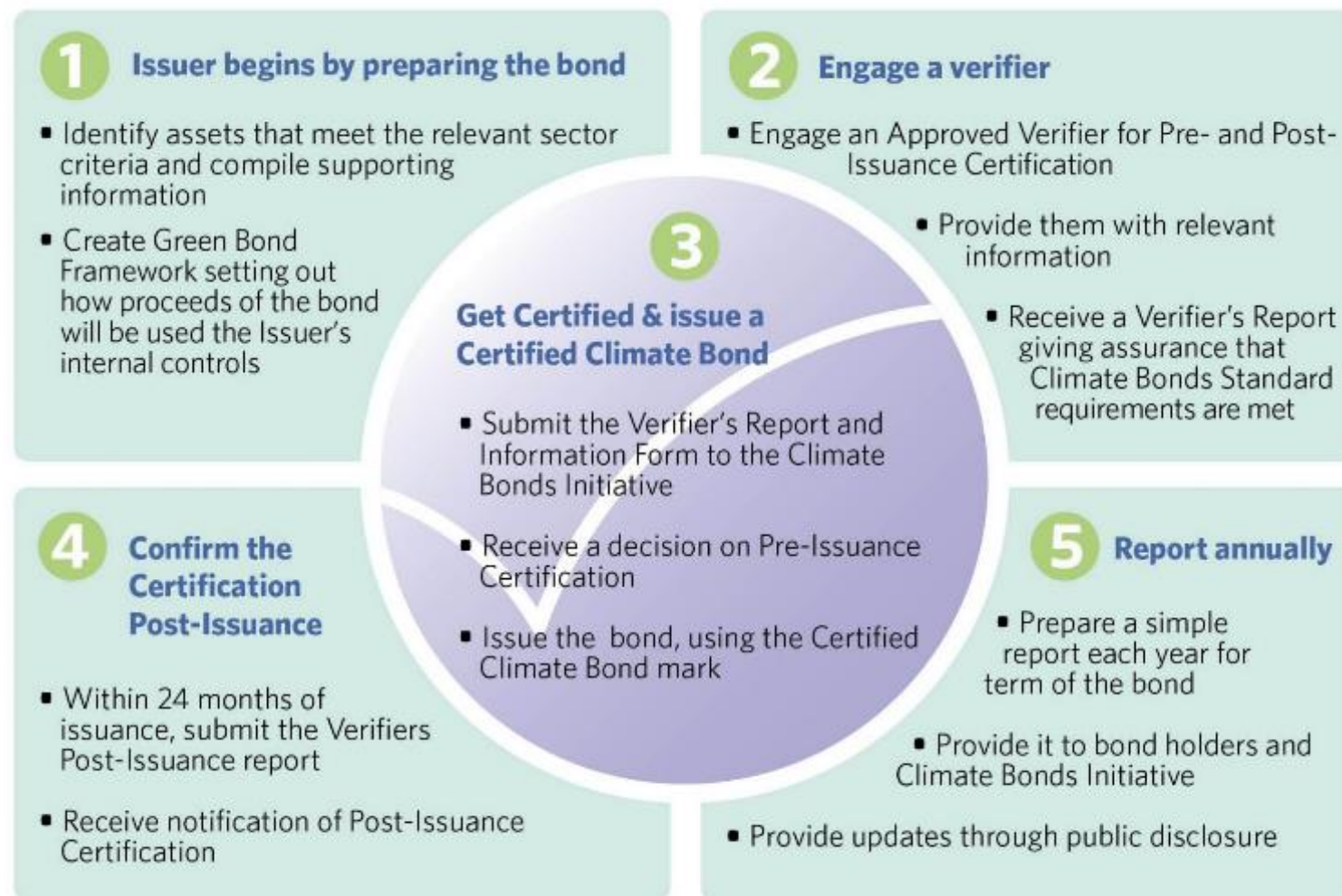
Certification:

An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

Scoring / Rating:

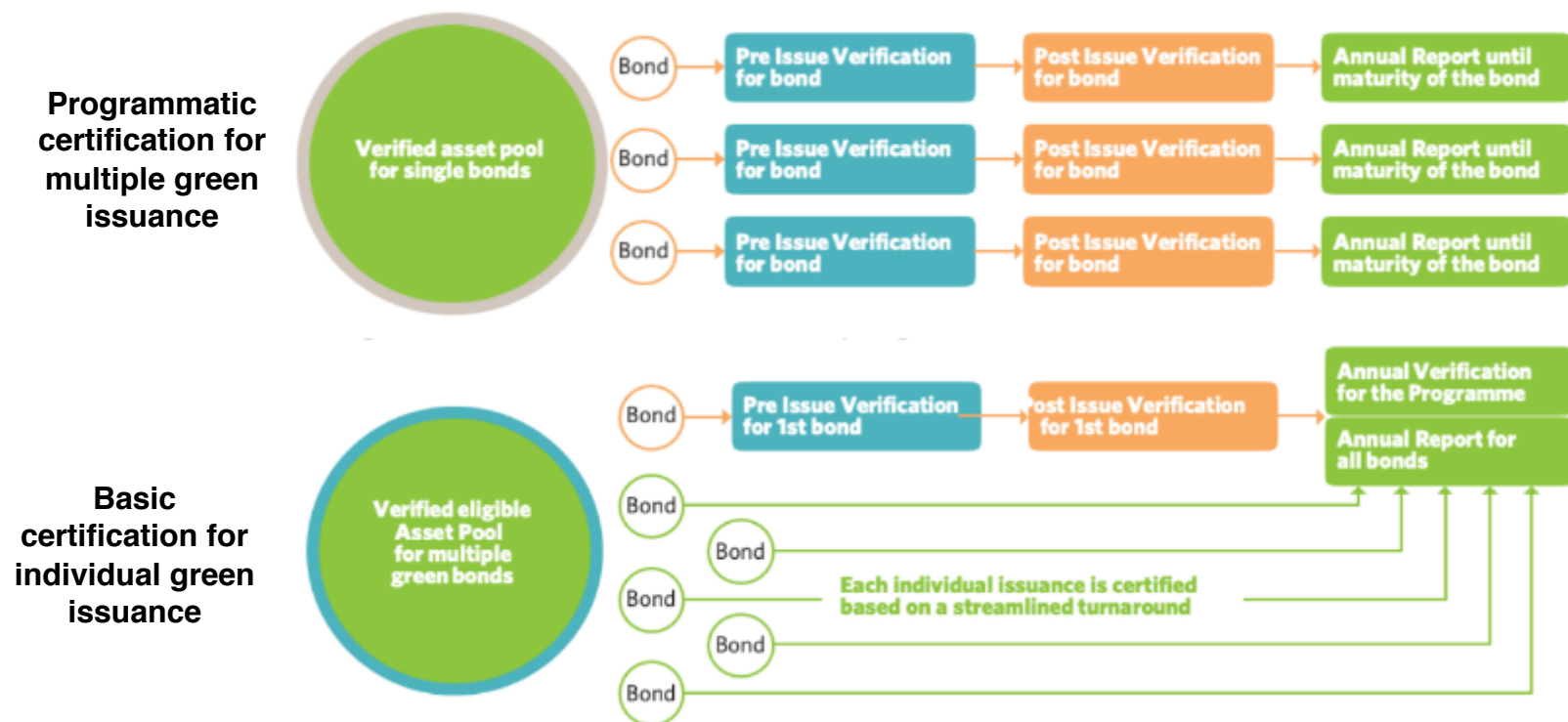
An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. Green Bond ratings are distinct from an issuer's credit ratings, which may nonetheless reflect material environmental risks.

Certification is seen by many as the future for ensuring the integrity of the green bond market



Programmatic certification

- A **simplified process** for Issuers who plan to issue **multiple bonds over several years**, against a large portfolio of green assets and projects.
- **As rigorous** as the normal Certification process and provides the same assurance.
- A much **simpler procedure** for confirming Certification of each issuance.
- Issuers **must do annual verification** for the duration of the program.



Climate Bonds Standard & Certification Scheme is seen as best practice globally



- The Climate Bonds Standard and Certification Scheme is a Fair Trade-like labelling scheme for green bonds. Rigorous scientific criteria ensure that it is consistent with the 2 degrees Celsius warming limit in the goals of the Paris Climate Agreement.
- The Scheme is used globally by bond issuers, governments and investors to prioritise investments which genuinely contribute to addressing climate change.
- The Climate Bonds Standard is fully aligned with the Green Bond Principles and the Green Loan Principles.
- It is made up of two parts:
 - a. Climate Bonds Standard details the management and reporting processes.
 - b. Climate Bonds Taxonomy and Sector-by-Sector Eligibility Criteria detail the climate credentials and technical thresholds which the assets must meet.

Requirements for Certification



- International Standard for Certification of green projects and assets.
- Science-based sector criteria aligned with Paris Climate Agreement.
- Clear definitions (thresholds and requirements).
- Fully aligned with the Green Bond Principles.
- Best practices for internal controls, tracking, reporting and verification.

Requirements in the Climate Bonds Standard are focused on **three main areas**:

1. **Internal procedures** and financial controls for the bond issuer
2. **Reporting arrangements** which have been set up by the issuer
3. **Eligibility** of projects & assets

Pre-issuance Verification is focused on the readiness of the issuer to meet the requirements and the likely eligibility of projects & assets

Post-issuance Verification is a more thorough assessment of whether the issuer and the bond meet all of the requirements of the Standards




Approved Verifiers under the Climate Bonds Standard



TAXONOMIES, DEFINITIONS AND CRITERIA

Climate Bonds Initiative's taxonomy

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							

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

[Download the latest version of CBI Taxonomy](#)

Guide to climate aligned assets and projects







Tool to identify key investments for a low carbon economy

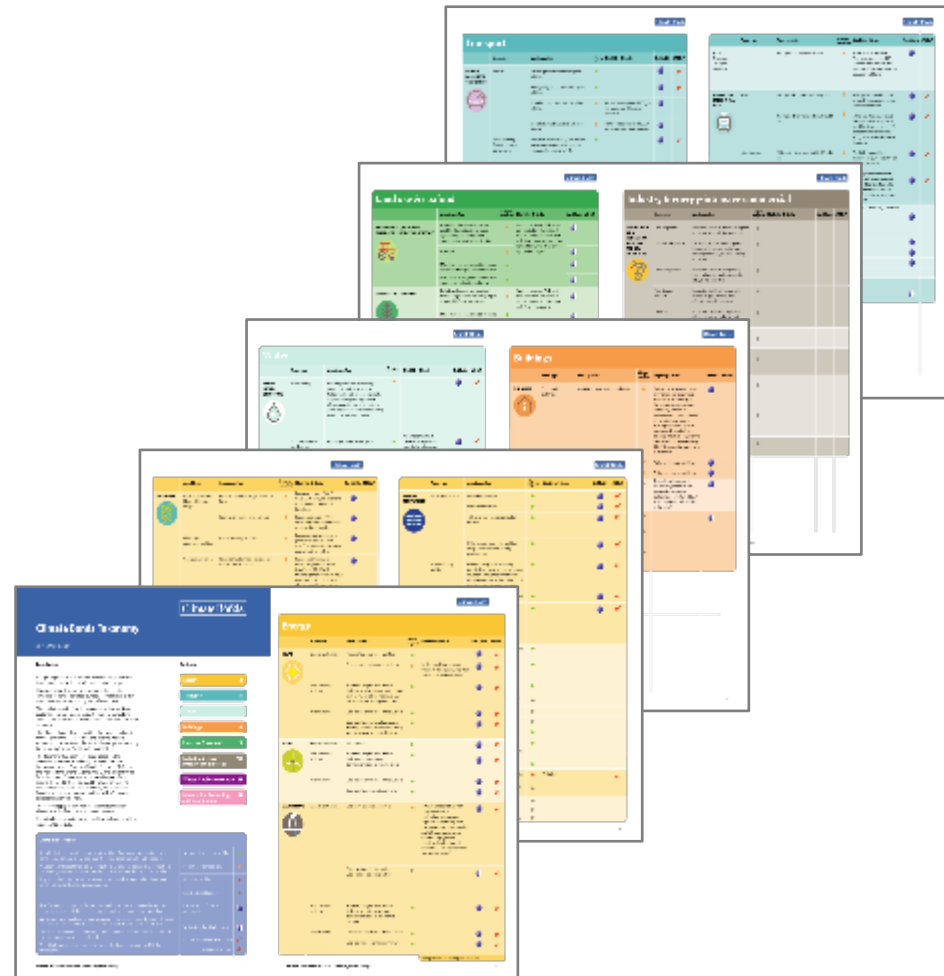
Science-based / Multi-stakeholder approach

Developed by technical and industry working groups

Resource for common green definitions across markets

CBI Taxonomy's traffic light and labelling system

Automatically compatible	
Compatible if compliant with screening indicator	
Not compatible	
More work required	
Climate Bonds Certification available	
Criteria under development	



Transition to Paris-aligned future

- Transition for high-emissions sectors such as mining, industries (steel, iron) or aviation towards Paris-aligned decarbonisation pathways
- Difference between stranded assets (fossil fuels) and sectors that are needed in a 2050 Paris-aligned future
- Transition can vary depending on **the sector**, **technologies** available and **regional approach** (such as Energy from Waste – EfW)
- Investors are still wary of the label “transition” because of the lack of standards and credible framework for transition
- Transition strategy for the entire company defining milestones and **credible Paris-aligned targets** (such as 50% CO2 Emissions Reduction by 2030).

Climate Bonds Initiative

- **White Paper** published in September 2020
- Only a minority of economic activities operate at zero or near zero emissions today (**energy**).
- For some high-emitting activities, feasible low- or zero-emissions solutions are available or credibly envisaged within a reasonable timeframe (**hydrogen** or **cement**) - transition should be towards those solutions.
- For others, there are no such solutions (**mining** or **aviation**), but substitute low-emission activities exist or are in development - transition should be away from.
- No transition to transition (**coal to gas** – stranded assets)

Climate Bonds Initiative – 5 Principles



1. In line with 1.5 degree trajectory

All goals and pathways need to align with zero carbon by 2050 and nearly halving emissions by 2030.



2. Established by science

All goals and pathways must be led by scientific experts and be harmonised across countries.



3. Offsets don't count

Credible transition goals and pathways don't count offsets, but should count upstream scope 3 emissions.



4. Technological viability trumps economic competitiveness

Pathways must include an assessment of current and expected technologies. Where a viable technology exists, even if relatively expensive, it should be used to determine the decarbonisation pathway for that economic activity.



5. Action not pledges

A credible transition is backed by operating metrics rather than a commitment/pledge to follow a transition pathway at some point in the future. In other words, this is NOT a transition to a transition.

Renewable Energy



Eligible projects and assets:

Solar electricity generation facilities

Wholly dedicated transmission infrastructure and other supporting infrastructure for solar electricity generation facilities including inverters, transformers, energy storage systems and control systems.

Solar thermal facilities such as solar hot water systems.

If there is fossil fuel back-up generation, then the back-up must account for less than 15% of the total energy produced by the facilities



Eligible projects and assets:

The development, construction and operation of wind farms.

Operational production or manufacturing facilities wholly dedicated to wind energy development.

Wholly dedicated transmission infrastructure for wind farms.



Eligible projects and assets:

New and existing geothermal projects with direct emissions of less than 100gCO₂/kWh.

Geothermal projects with mitigation technologies that will render the non-condensable gas releases to the atmosphere negligible.

Geothermal projects that have been reviewed and registered under the Clean Development Mechanism.



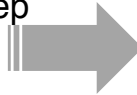
Eligibility	Criteria
Private light-duty and heavy goods vehicles	<ul style="list-style-type: none"> Per p-km or per t-km emissions of the vehicles lower than appropriate threshold <ul style="list-style-type: none"> Full electric vehicles automatically qualify Hybrid vehicles need to meet CO2 Emissions Threshold (transition)
Public passenger transport	<ul style="list-style-type: none"> All infrastructure, infrastructure upgrades, rolling stock and vehicles for electrified public transport automatically qualify, including electrified rail, and trams For fossil fuel or hybrid vehicles or rolling stock, the project qualify if per p-km emissions are below appropriate threshold (depends on load factor)
Dedicated freight railway lines	<ul style="list-style-type: none"> All infrastructure, infrastructure upgrades and rolling stock for electrified freight rail lines automatically qualify Non-electrified projects, products or supporting infrastructure qualify if per t-km emissions are below appropriate threshold <ul style="list-style-type: none"> Dedicated freight lines for fossil fuel transport excluded
Supporting Infrastructure	<ul style="list-style-type: none"> All supporting infrastructure qualifies if it contributes to achieving the emissions threshold



Eligible project & asset

Mitigation component

- Water is strongly linked to carbon emissions
- Water moved long distances or from deep underground, which is energy intensive
- Water treatment is especially ‘thirsty’ for energy



Climate mitigation: eligible if either:

- a. No emissions impact is expected
- b. Emissions impact is expected, and the issuer has estimated the GHG mitigation impacts that will be delivered over the operational lifetime of the project or asset. This impact should be defined in terms of the decreased emissions or increased sequestration relative to a business as usual baseline.

Adaptation & resilience component

- Climate change presents significant challenges for water management
- Water quality, quantity, and availability will be changing for decades to come and there is much uncertainty about these changes



Climate resilience

Issuers must have carried out a sufficient vulnerability assessment, and if necessary, prepared an appropriate management response plan to any climate risks identified therein. The Water Criteria contain a scorecard to check this.



Will your project meet the Water Criteria? It's an easy two-step

STEP 1

Comply with Mitigation Component

Water projects either decrease or do not increase GHG emissions from a business-as-usual baseline over the operational lifetime of the water asset or project. For desalination plants, meet a low carbon energy threshold.

STEP 2

Comply with Adaptation & Resilience Component

Water infrastructure and its surrounding ecosystem are resilient to climate change, and have sufficient adaptation to address climate change risks.

To demonstrate that, issuers should complete a **scorecard** made up of six sections:

Section 1. Allocation: Addressing how water is shared by users within a given basin or aquifer.

Section 2. Governance: Addressing how/whether water will be formally, negotiated, and governed.

Section 3. Technical Diagnostics: How/whether changes to the hydrologic system are addressed over time.

Section 4. Nature-based Solutions: (for nature-based and hybrid infrastructure only) addressing whether issuers have sufficient understanding of ecological impacts at/beyond project site with ongoing monitoring and management capacity.

Section 5. Desalination Plants: (for desalination plants only) addressing whether specific A&R issues for desalination have been addressed.

Section 6. Assessment of the Adaptation Plan: Checking the completeness of the coping mechanisms to address identified climate vulnerabilities.



Scope

In Scope

Perennial and non perennial crop production

Production unit

Including inputs, capital goods, production, outputs, waste management, and primary processing or storage before point of sale

Associated conservation areas

Non production unit

Products and services for mitigation or adaptation and resilience for crop production

Out of Scope

Supply chain

- Production and transport of purchased farm inputs
- Secondary processing or storage
- Distribution, packaging, handling and other logistics
- Wholesale and retail markets
- Controlled environment agriculture
- Livestock production



Criteria for Assessing Agricultural Production Unit

If you are certifying a bond that is financing the **whole agricultural production unit**. You must meet both the mitigation and adaptation and resilience criteria.

Mitigation Criteria

M1: No conversion of high carbon stock lands.

Yes

M2: No clearing of woody vegetation over 3 metres in height after 2020 on the production unit in question.

Yes

M3: Low-emission crop and animal management. Meet either:

M3.1: Climate aligned % reduction in GHG emissions (tCO₂e) over the investment period, compared to emissions at the start of that period. Or:

M3.2: Evidence that following low-emission agricultural best practices.

Yes

Certifiable

Adaptation and Resilience Criteria

Clear boundaries and critical interdependencies between the farm holding and the system it operates within are identified.

Yes

An assessment has been undertaken to identify the key physical climate hazards to which the production unit will be exposed and vulnerable to over its operating life.

Yes

The measures that have or will be taken to address those risks mitigate them to a level so that the production unit(s) are suitable to climate change conditions over its operational life and do no harm to the resilience of the defined system they operate within, as indicated by the boundaries of and critical interdependencies with that system as identified in item 1 in this checklist.

Yes

The issuance is required to demonstrate that there will be ongoing monitoring and evaluation of the relevance of the risks and resilience measures and related adjustments to those measures will be taken.

Yes

Not Certifiable

Eligible use-of-proceeds relating to agriculture production systems might include capital and operating expenditure relating to:

- (1) Inputs (e.g. land, seeds, fertilizer, energy, information)
- (2) Capital goods (e.g. land, equipment, housing)
- (3) Crop-based transformation processes (e.g. crop cultivation and planted trees)
- (4) Agricultural outputs (e.g. grains, vegetables, fibre)
- (5) Waste management (composting, crop residue processing, recycling)
- (6) Primary processing and storage before point of sale.

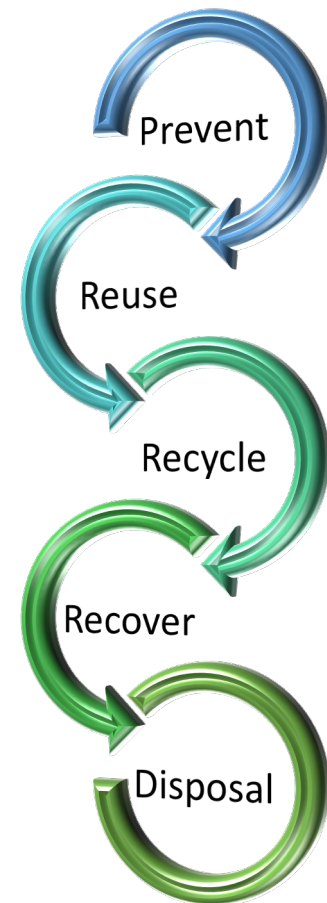
Waste

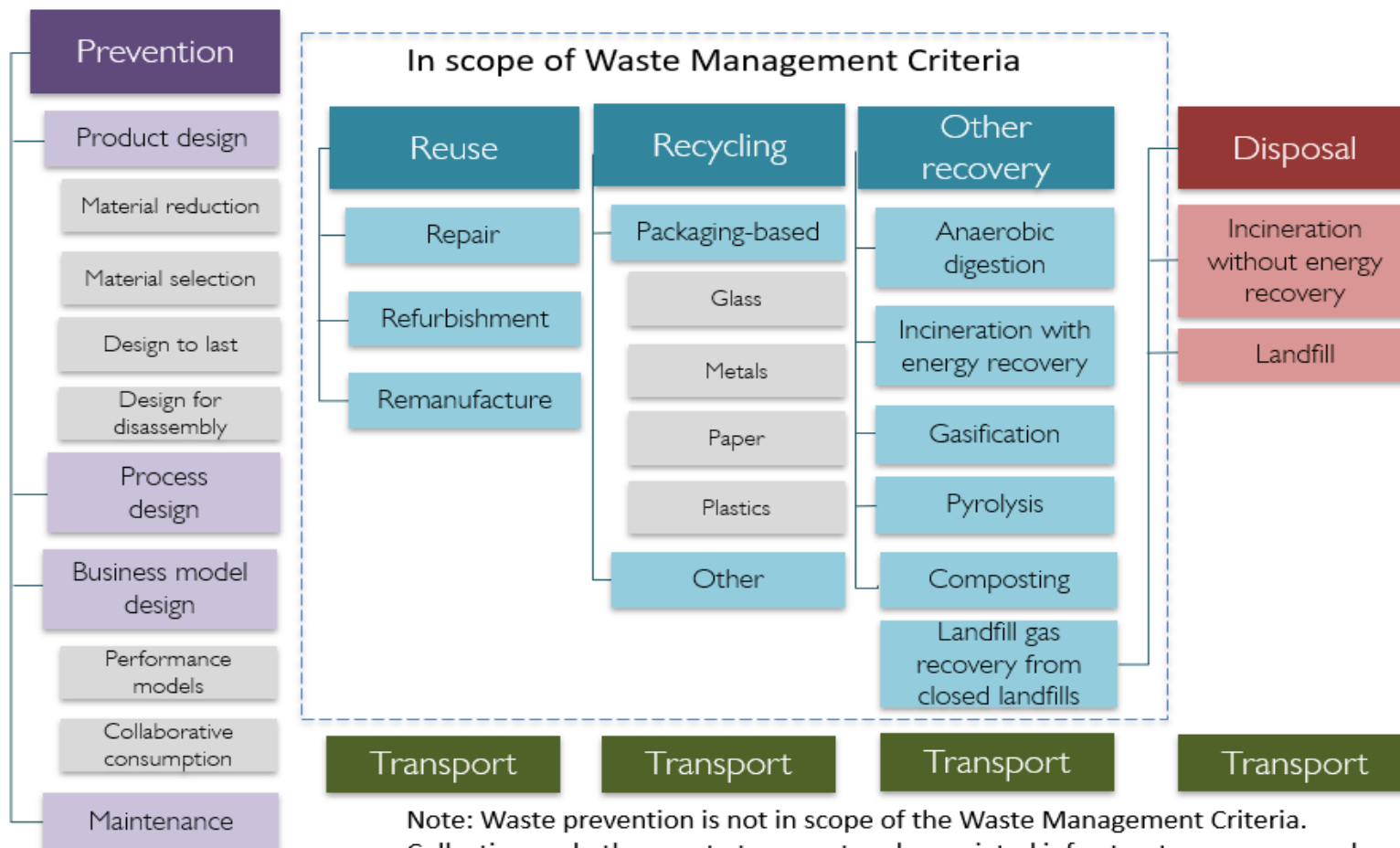
Scope – treatment of municipal solid waste



Treatment of municipal solid waste (MSW) **only** with following exception:

- Also includes refurbishment etc. of Waste of electrical and electronic equipment (WEEE).
- Focus on the middle of the waste management hierarchy.
- Other methods of management, including pyrolysis and gasification followed by chemical recycling were discussed but were not included at this stage due to the variability and the lack of life cycle data.







Assets covered

Facilities which produce power and/ or heat/ cooling by the thermal processing of residual waste, including rejects from recycling/ composting/ anaerobic digestion (AD)

Section 1

The issuer identifies the climate related risks and vulnerabilities to the asset/site.

Section 2

The issuer identifies the impacts in larger context (spatially and temporally) beyond the asset/site (i.e. the impacts of the underlying assets and projects on the broader ecosystem and stakeholders in that ecosystem).

Section 3

The issuer has designed and implemented strategies to mitigate and adapt to these climate risks and vulnerabilities.

Eligibility Criteria

For EfW facilities outside the EU only (i.e. **transition in the EU**):

- Plant efficiency $\geq 25\%$; and
- Bottom ash recovery; and
- $\geq 90\%$ recovery of metal from ash; and
- Average carbon intensity of electricity and/ or heat over the life of the plant \leq waste management allowance; and
- The capacity of the plant does not exceed the calculated residual waste at any time in the plant's life.

N.B. EfW facilities within the EU are not eligible for certification.