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Master Class: Alternative & Sustainable Finance

Driving Sustainable Growth, Climate Resilience, Debt Sustainability, and Financial Stability

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from FSD Africa and partners









The role of FSD AFRICA

FSD Africa is a specialist development agency working to build and strengthen financial markets across Africa We work in over 30 African countries to mobilise "green plus" finance that will power economic and social development while delivering environmental gains and building Africa's resilience.

How we work



Grants and

returnable grants

We provide grants without the expectation of a financial return where a business is high potential but high risk. We also give grants to non-commercial projects with the potential for system-wide impact.



Data and knowledge

management

FSD Africa invests in research, analysis and intelligencegathering initiatives that give financial sector stakeholders access to market data and knowledge so they can make better investment decisions and manage risk more effectively.



Investment

capital

We finance high-risk businesses and funds operating in the financial sector that have the potential for high impact in financing green initiatives and are able to utilise a variety of different transaction structures including loans, guarantees and equity or quasi-equity.



Technical assistance

We provide advisory services and technical support to the public and private sectors. We collaborate with financial sector experts and co-design with partners technical assistance initiatives and capacity-building support programmes.



Networks and

partnerships

We have a wide and growing network of national, regional and international stakeholders to crowdfund, pool ideas and share risk, while expanding reach and building sustainability.











FSD Africa's key Capital Markets achievements

Regulatory Initiatives



Groundbreaking Transactions Supported by FSD Africa – US\$1.2 bn

Morocco

- 1st gender bond in Africa
- 1st green mobility bond

Nigeria

- 1st African green bond
- 1st corporate green bond
- 1st green Sukuk in Africa

Kenya

- 1st green bond issuance
- 1st Green REIT in Africa
- 1st Clean cooking bond

Tanzania

- 1st listed gender bond in Africa
- Largest (\$300m) green bond in Africa
- 1st sustainability bond in Africa
- 1st Water/Blue Bond

Mauritius

1st green bond in Mauritius

Kenya

- Dhamana Guarantee Company
- EABX Bond Exchange

Ethiopia

- ESX Exchange
- CS

WAEML

Electronic Trading Platform

Nigeria

- FMDQ green bonds
- InfraCredit Nigeria green warehouse & preparation facility

Rwanda

1st bond issuance by an unlisted entity

Market Infrastructure



EABX Public Limited Company (EABX)

Ethiopia Central Security Depository (CSD) – Ethiopia

Ethiopian Securities Exchange (ESX) Dhamana Guarantee Facility - initially Kenya, with future expansion plans to East Africa. Operationalisation of the Electronic Trading Platform (ETP) in the West African Economic and Monetary Union (WAEMU) region

Attraction of Sustainable Finance Instruments











Sustainable finance instruments are tools to expand the investor base (domestic and international)

Build instruments aligned with National Development Plans, Green Economy Plan, etc.

International / MDB support and access to credit enhancement and guarantees to crowd in regional and international investors

Utilizing capital markets (international and domestic) & blended finance to mobilize all sources of capital that seek gree

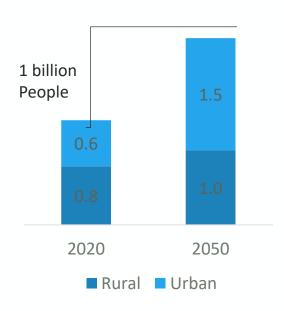






Context

Africa Population (Bn)



Data Source: UN Population Programme

Common Challenges:

- Poverty level 37.2% (462mn) in 2023
- Jobs for young population
- Social services health, education
- Urbanisation housing, infra
- Infrastructure deficit
- Food security
- Climate change

I am an African child - YouTube





Climate and Gender Nexus

'The climate crisis is not "gender neutral". Women and girls experience the greatest impacts of climate change



Livelihoods: Women bear a disproportionate responsibility for securing food, water, and fuel

Agriculture: Women account for majority of agricultural labour force in Africa

Conflict & Fragility: 80% of people displaced by climate change are women – UNEP



Terms and Definitions - What does Sustainable Finance mean to You?





- **1. Sustainable Finance / Sustainable Investment:** the process of considering environmental, social, and governance (ESG) and other long-term factors when making financial / investment decisions. The goal is to invest in projects that promote long-term sustainability and economic prosperity. **Can include:**
- **Environmental considerations:** Mitigating and adapting to climate change, preserving biodiversity, preventing pollution, and the circular economy
- **Social considerations:** Addressing inequality, inclusiveness, labor relations, human rights issues, job creation
- **Governance:** Ensuring that public and private institutions are ethical, transparent and consider E&S factors in their decision-making processes
- **2. Climate Finance:** financial resources and instruments that address climate change, reduce GHG emissions and enhance the resilience of human and ecological systems to climate change impacts

Sources: Climate finance can come from public, private sources, eg

- Grants from multilateral funds, GCF, GEF, Adaptation Fund, WB CIF etc
- Loans from private financial institutions
- Blended instruments via Sovereign instruments by national governments
- Resources mobilized through carbon trading and carbon taxes
- **3. Sustainability Strategies and Management Systems** prioritised material focus areas and how to manage them (opps and risks)

Sustainable/climate finance is important for:

- Managing climate and other sustainability risks
- Meeting society's expectations for a more sustainable economy
- Aligning financial systems and services to promote long-term sustainability (economic growth)





Climate Finance Landscape

Report: Global Climate Finance Landscape in Africa 2024

Definitions:

Sustainable Finance – ESG in investment decision making – promoting long-term sustainability and economic prosperity

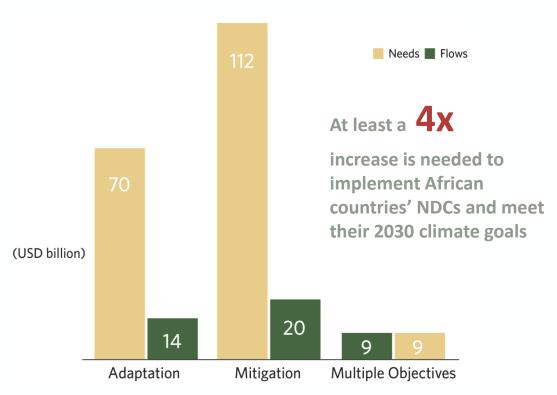
Climate Finance – finance and instruments that address climate and resilience – can be from any source – but often understood to mean grant funding

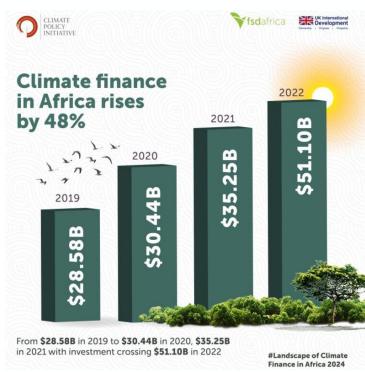






Needs still outweigh current climate finance flows in Africa



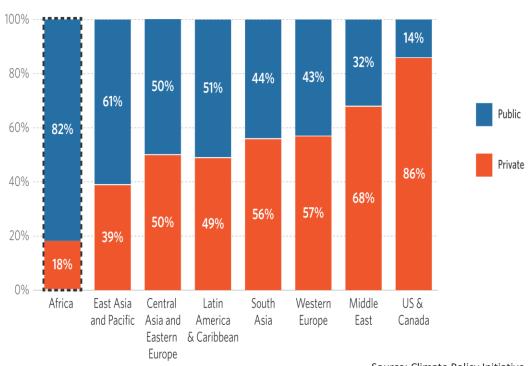


Source: Climate Policy Initiative





Private finance comprises only 18% of Africa's total climate flows, a far lower share than any other region globally



Source: Climate Policy Initiative

- International sources dominate with 87%
- Private finance was spread evenly across domestic (49%) and international (51%)
- Domestic finance could play a much greater role with USD
 2.4 trillion in AUM





Sustainable finance across asset classes and instruments

Debt Instruments

- Green/Social/Sust Bonds & Loans
- Sustainability-linked Bonds & Loans
- ESG Indexed Bonds& Loans
- Structured Bonds & Securitizations,
- Project bonds,
- Green Debt Funds (Listed & Unlisted

Equity/PE Instruments

- ESG/Sustainability Indices
- Green Listed Funds
- Green Property Funds & REITs,
- Green ETFs
- Green Equity e.g.
 TDB
- Green/Impact Private Equity Funds

Insurance / Guarantee Products

Green credit guarantees & Credit enhancements

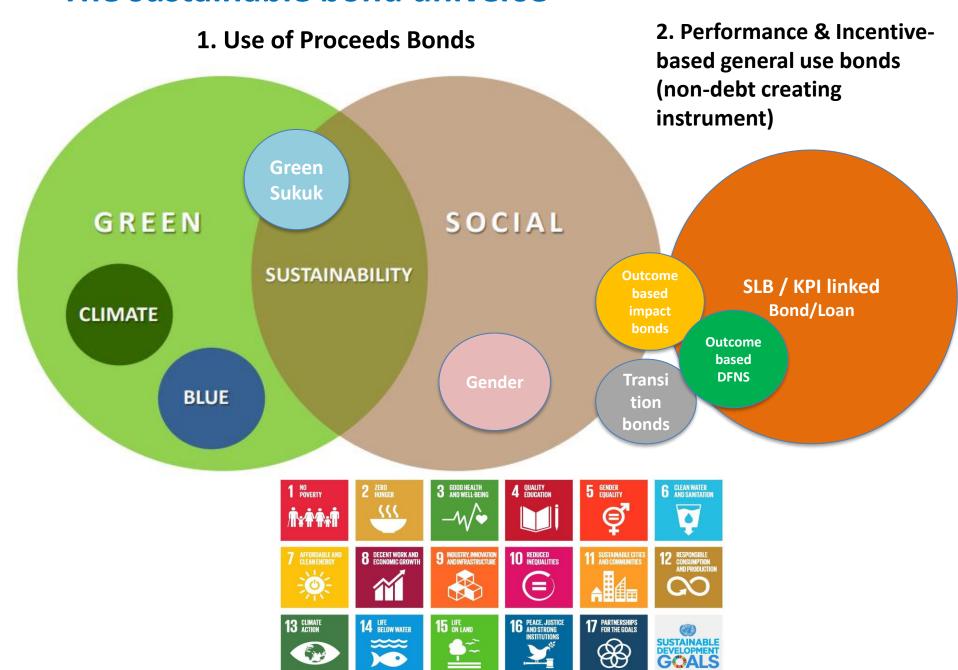
- Parametric weather insurance
- Catastrophic (CAT) bonds
- Resilience bonds

Outcome Based Financing

Payment for Ecological Services

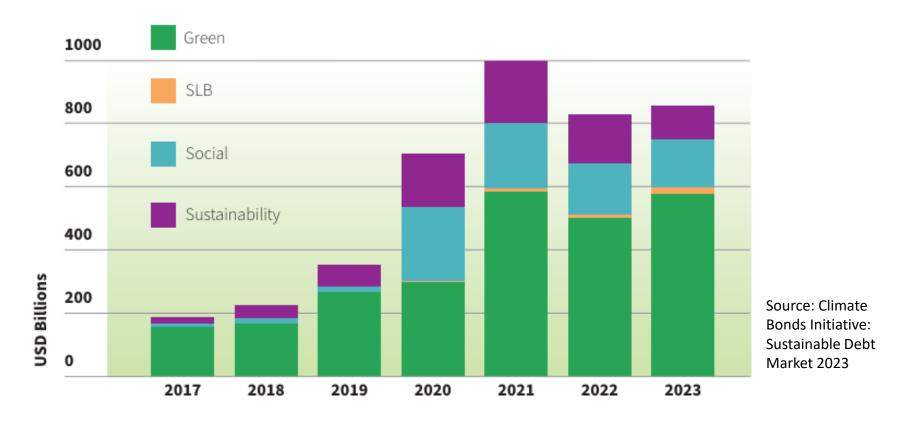
- Development Impact Bonds (e.g. Zebra Bonds)
- Debt-for-nature swaps
- Carbon Markets
- Carbon-Secured
 Sustainability-Linked
 Bonds

The sustainable bond universe



Labelled issuance - continued record growth - driven by investor demand

Aligned GSS+ issuance increased to USD870bn in 2023



- 50 sovereigns globally have issued GSSS bonds as of 2024
- 3 Sovereigns have issued SLBs to date (Chile, Uruguay, Thailand)
- Ten debt-for-climate swaps between 2018 and 2023 (not incl. in graph)

Investor demand example: UN Principles for Responsible Investment.

Domestic institutional investors and regulators – increasing ESG guidance

- 5,00 signatories from 60 countries representing over <u>USD 120 trillion in</u> assets
- Signatories commit to building ESG considerations into the investment process, thereby achieving better longterm returns and more sustainable investment markets
- Looking for green & sustainable investment products globally and in emerging markets.

PRINCIPLE 1	PRINCIPLE 2
WE WILL INCORPORATE ESG ISSUES INTO INVESTMENT ANALYSIS AND DECISION-MAKING PROCESSES.	WE WILL BE ACTIVE OWNERS ANI INCORPORATE ESG ISSUES INTO OUR OWNERSHIP POLICIES AND PRACTICES.
PRINCIPLE 3	PRINCIPLE 4
WE WILL SEEK APPROPRIATE DISCLOSURE ON ESG ISSUES BY THE ENTITIES IN WHICH WE INVEST.	WE WILL PROMOTE ACCEPTANCE AND IMPLEMENTATION OF THE PRINCIPLES WITHIN THE INVESTMENT INDUSTRY.
PRINCIPLE 5	PRINCIPLE 6
WE WILL WORK TOGETHER TO ENHANCE OUR EFFECTIVENESS IN IMPLEMENTING THE PRINCIPLES	WE WILL EACH REPORT ON OUR ACTIVITIES AND PROGRESS TOWARDS IMPLEMENTING THE



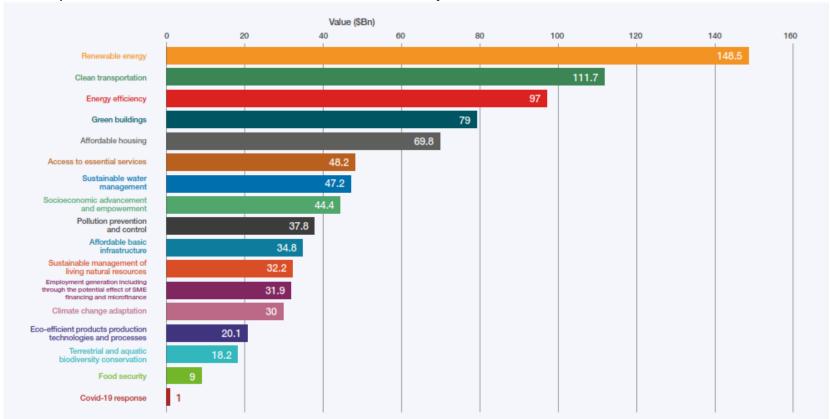
PRINCIPLES.





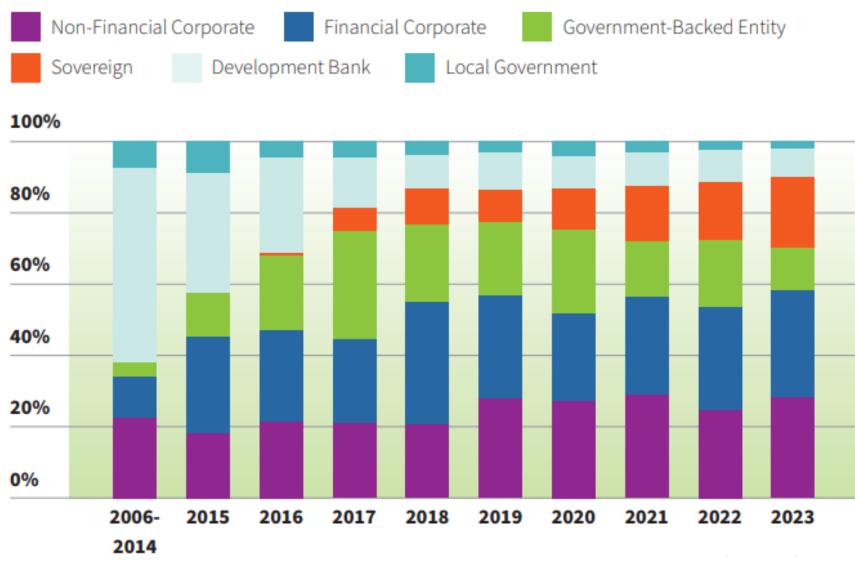
Global Sustainable Bond Market

Use of proceeds breakdown of bonds issued in 2023 by value



Source: Sustainable Bonds Insight 2024 – Environmental Finance

Issuers of GSSS bonds



Source: CBI 2024

Green Bond Market overview – regional breakdown of issuance

Half of the 2021 green volumes originated from Europe



LAC's Growing Influence in Sustainable Finance: LAC is the only region where sustainability bonds constitute the largest share of the aligned GSS+ debt market, reaching 47% by the end of 2023. Additionally, LAC is the only region to consistently increase its sustainability bond volume in the past four years, amounting to USD28.1bn in sustainability bonds, 26% of the global share.

Green / Sustainable Bond Issuance in Sub-Saharan Africa

Full Issuer Name	Amt_Issued	Currency	USDAmt_Issued	Country	IssuerType	UoPDescription
Nedbank	1,000,000,000	ZAR	62,484,064	South Africa	Financial Corporate	Green Building
ACME Solar Holdings	334,000,000	USD	334,000,000	Mauritius	Non-Financial Corporate	Solar projects
Nedbank	125,000,000	ZAR	8,572,959	South Africa	Financial Corporate	Green Building
Standard Bank of South Africa	200,000,000	USD	200,000,000	South Africa	Financial Corporate	Green buildings, EE, Water, RE
FirstRand Bank	225,000,000	USD	225,000,000	South Africa	Loan	EE & Smart Water Technologies
Arab Republic of Egypt	750,000,000	USD	750,000,000	Egypt	Sovereign	Clean Transport
Government of Ghana	35,000,000	EUR	41,513,500	Ghana	Loan	Water Infrastructire
NedBank	1,000,000,000	ZAR	68,240,000	South Africa	Financial Corporate	Renewable Energy
Acorn Holding	4,260,000,000	KES	40,500,000	Kenya	Non-Financial Corporate	Climate resilient student's hostel
Redstone Solar Thermal Power Plant	8,000,000,000	ZAR	566,560,000	South Africa	Loan	Solar
Federal Government of Nigeria	15,000,000,000	NGN	41,584,650	Nigeria	Sovereign	Forestry, Transport, Solar & Water
Nedbank	1,662,000,000	ZAR	115,976,520	South Africa	Financial Corporate	Renewable Energy
Access Bank	15,000,000,000	NGN	41,550,000	Nigeria	Financial Corporate	Flood Defense & Solar
North South Power Company	8,500,000,000	NGN	23,622,922	Nigeria	Non-Financial Corporate	Renewable Energy
Bank Windhoek	66,600,000	NAD	4,809,718	Namibia	Financial Corporate	Solar PV
The Republic of Seychelles	15,000,000	USD	15,000,000	Seychelles	Sovereign	Fisheries (resilience, mitigation & R&D)
Casablanca Finance City	355,000,000	MAD	37,985,000	Morocco	Government-Backed Entity	Green Buildng & Solar
Growthpoint Properties	1,100,000,000	ZAR	93,107,300	South Africa	Financial Corporate	Gren Building
Federal Government of Nigeria	10,690,000,000	NGN	29,720,000	Nigeria	Sovereign	Solar, afforestation
City of Cape Town	1,000,000,000	ZAR	77,229,000	South Africa	Local Government	Water, low carbon transport
Banque Centrale Populaire	135,000,000	EUR	150,876,000	Morocco	Financial Corporate	Renewable Energy
BMCE Bank	500,000,000	MAD	49,900,000	Morocco	Financial Corporate	Renewable Energy and EE
MASEN	1,150,000,000	MAD	117,070,000	Morocco	Government-Backed Entity	Renewable energy: solar
City of Johannesburg	1,458,000,000	ZAR	136,419,228	South Africa	Local Government	Solar, afforestation
Nedbank	4,000,000,000	ZAR	480,936,000	South Africa	Financial Corporate	Renewable energy (wind and solar)
Industrial Development Corporation	5,200,000,000	ZAR	650,743,600	South Africa	Development Bank	Green building
OneWatt Solar	3,000,000,000	NGN	7,300,000	Nigeria	Non-Financial Corporate	Solar
First National Bank (Namibia)	353,000,000	NAD	24,300,000	Namibia	Financial Corporate	Solar, green buildings
Standard Bank Namibia	400,000,000	NAD	27,536,800	Namibia	Financial Corporate	Solar, wind farms
Bank Windhoek	460,000,000	NAD	33,333,000	Namibia	Financial Corporate	Solar PV & Smart Agriculture
Emergence Plaza	10,000,000,000	CFA	17,800,000	Cote d'Ivoire	Non-Financial Corporate	Green building

Source: CBI and FSD Africa data 2024

Green Bond Guidelines and Standards

Using frameworks that are in line with international good practice, as provided by the Green Bond Principles and Climate Bonds Standard, can help attract more investors with an environmental or socially responsible mandate, who have familiarity and confidence in these frameworks

1. Sustainable Bond Principles – ICMA



Proceeds must go to green / Explain process for project selection; use 2nd party review / Track proceeds; use auditor to verify / Report each year on details

- 2. Climate Bonds Standard & Certification: incorporates GBPs into a standardized framework with green definitions
- 3. Other

Regional: EU Green Taxonomy, ASEAN, LAC, Africa

National Green Bond Guidelines and Taxonomies: Brazil, China, India, Kenya, Nigeria, South Africa.

Rating Agency tools: Moody's/ S&P green assessment tools: quality of review & reporting

Globally accepted principles for labelling in the sustainable bond markets were established in 2014 (ICMA)

Principles for issuing Green, Social and Sustainability Bonds, Sustainability-Linked Bonds

- GBP, SBP and SBG ("the Principles") were launched by ICMA (International Capital Market Association) now serves as the secretariat for the Principles.
- Recently released Sustainability-Linked Bond Principles (2021)



Guidelines for Green, Social and Sustainability Bonds External Reviews



Four pillars of the Principles (UoP):

- 1. Use of Proceeds
- Process for Project Evaluation and Selection
- 3. Management of Proceeds
- 4. Reporting

Guidelines for External Reviews provide guidance on professional and ethical standards for external reviewers, as well as to the organization and content of their reports.

Guidelines for Impact Reporting



The ICMA Sustainable Bond Principles are based on four pillars

and also forms the content of the Sustainable Bond Framework



Use of Proceeds

Identify the set of 'green' projects and assets to be financed by the proceeds from the bond issuance



Process for project evaluation and selection

The process for selecting and evaluating eligible green projects



Management of proceeds

Define the process for tracking, allocating and spending the proceeds of the bond



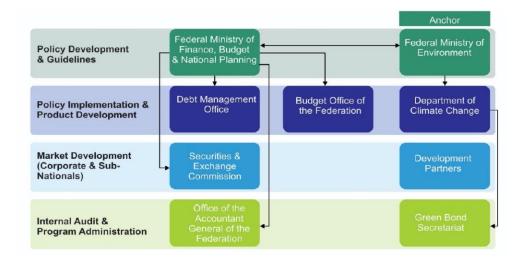
Reporting

Determines 'what' and 'how often' issuers have to disclose information to investors. This include Key Performance Indicators (KPIs) as well as associated methodologies for calculating CO2 emissions

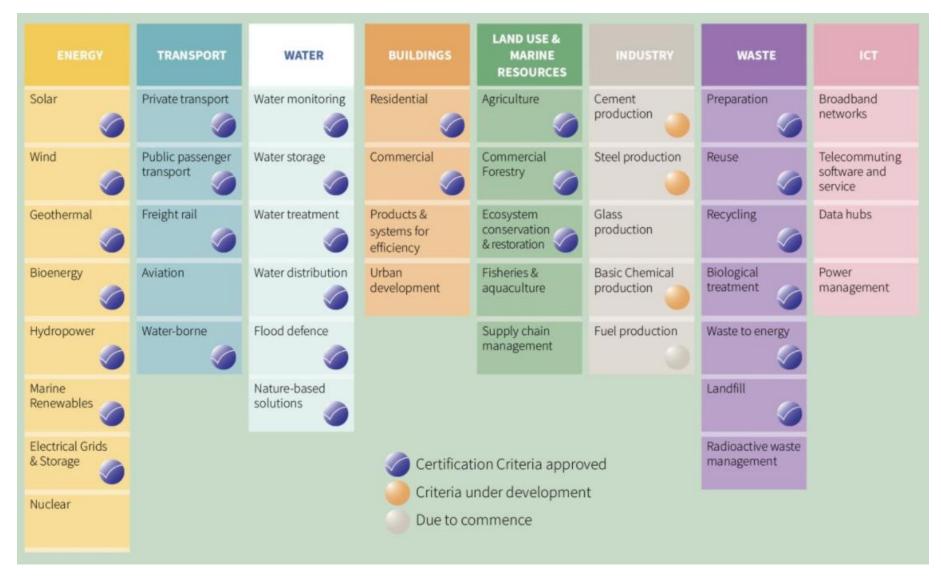
Pillar 2: Project selection process Example: Nigeria Sovereign Green Bond

The Green Bond Committee will include representatives from the following MDAs:

- 1. Ministry of Finance
- 2. Ministry of Economic Planning and Budget
- 3. Ministry of Environment
- 4. Ministry of Energy and Mineral Resources
- 5. Ministry of Transportation
- 6. Ministry of Agriculture
- 7. Debt Management Office (DMO)
- 8. Special Committee on Rehabilitation of Public Schools (SCRPS)
- 9. Lagos Waste Management Authority (LAWMA)
- 10. Lagos Metropolitian Area Transport Authority (LAMATA)
- 11. Lagos State Parks and Gardens Agency
- 12. Office of Sustainable Development Goals (SDGs) and Investment
- 13. State Treasury Office



International standards: Climate Bonds Taxonomy







Eligible projects and assets

- 1. Solar electricity generation facilities
- 2. Wholly dedicated transmission infrastructure and other supporting infrastructure for solar electricity generation facilities including inverters, transformers, energy storage systems and control systems
- 3. 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



Forestry Criteria

Forestry projects can be net emitters or net sinks of GHG emissions, and 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.

Scope:

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









Eligible project & assets

- Commercial buildings: Buildings must be in the top 15% of their city in terms of emissions performance. This threshold in emissions reduces to zero by 2050.
- Residential buildings: Existing building codes, energy rating schemes (e.g. US Energy Star) and energy labeling schemes (e.g. Energy Performance Certificates in the UK) are used as proxies for determining the 15% threshold.
- Upgrade projects: Building improvements that achieve emission reductions of 30% to 50% from a baseline will qualify for certification. Any type of building can qualify under this approach.







Green bond financing in the agricultural sector: Climate smart agriculture

Crop productivity / yield increase

- Land use management: Increased output per unit of land (allowing land to be used for other crops); balanced land-use through inter-cropping; Increased farm yields; soil health improvements; integrated pest management
- **Precision Agriculture:** High quality agri-inputs and precision farming techniques (such as use of drones, soil testing, sensors, efficient irrigation, & GPS-enabled machineries) to improve productivity and competitiveness. Increasing production efficiency sustainably reduces pressure to expand land area exploited by farmers (avoided deforestation);
- Climate-Smart Water Management: An investment that materially reduces the use of water per unit of production. Efficient use of water resources will enable farmers to protect ground water resources, reduce water consumption and improve farming yields. Opportunities include rainwater capture and usage, modern irrigation equipment, mulching, furrow irrigation and soil moisture retention optimization of water resources along the production cycle, etc. Efficient use of water is one of the key measures to adapt to changing climate conditions.
- Renewable energy / Energy efficiency including fuel efficiency / clean transport, equipment and machinery, eg use of solar PV, solar powered pumps, etc. Another possibility included solar power generation for the farm and export to the grid.
- **Drought resilient crops:** Use of seeds and crops with enhanced resilience to droughts, pests, and diseases

Post harvest loss reduction

• **Reduction of Crop Losses:** Food loss is estimated to be equivalent to 6-10% of human-generated greenhouse gas emissions. The use of more efficient farming and harvesting technology, efficient warehouse facilities, better transport, and better farm management will reduce post-harvest losses and GHGs;

Livestock

• Improve efficiency in Animal Protein: Helping animal protein producers to increase their productivity through a wide range of measures, including manure management, improved nutrition and animal health, better genetics, and other feed-to-food conversion efficiencies in livestock and aquaculture can reduce GHG emissions per kilogram of meat or liter of milk.

Agro forestry

Intercropping with trees provides enhanced income to farmers, increases soil moisture holding capacity and fixes nutrients like nitrogen, as well as carbon in the soil (carbon sequestration), and trees reduce greenhouse emissions the farm.

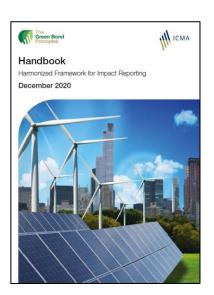






Annual Sustainable Bond Report

ICMA Harmonized Framework for Impact Reporting



- Sector Specific Guidance and Reporting Metrics
 Renewable Energy
 - Renewable Energical Core Indicators
 - Other Indicators (Examples)
- Energy Efficiency
 Core Indicators
- Other Indicators (Examples)
- Sustainable Water and Wastewater Management Core Indicators
- Other Sustainability Indicators
- Waste Management and Resource Efficiency Guidance and Definitions
- Core Indicators
 Other Sustainability Indicators
- 5. Clean Transportation Guidance and Definitions
- Core Indicators
 Other Sustainability Indicators
- 6. Green Buildings
 Guidance and Definitions
- Core Indicators
 Other Sustainability Indicators
- 7. Biodiversity
- Core Indicators
- Other Sustainability Indicators
- Guidance and Definitions for Additional Human Rights and Social Disclosures 8. Climate change adaptation
- Exemplary Indicators
 Other Sustainability Indicators
- Appendix
 V. Reporting Templates
- Renewable Energy Energy Efficiency
 - Sustainable Water and Wastewater Management

Allocation report

- A summary of the eligible green projects/assets to which the Green Bond proceeds have been allocated and a brief description of the project categories;
- A detailed explanation of the amounts allocated to each eligible green project;
- The remaining balance of unallocated proceeds at the end of the reporting period



FSD Africa's Technical Assistance for private sector Sustainable Bond issuance during;

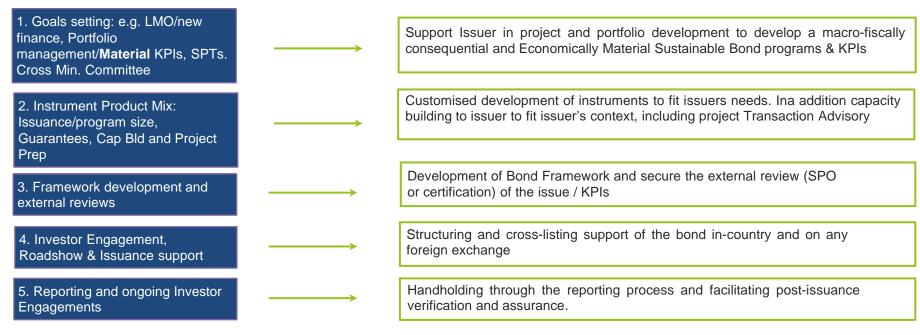
- -bond preparation
- -issuance
- -post-issuance

Technical Support Support Issuer in project evaluation against Green/Social 1. Portfolio Review & Bond Criteria. Alignment with Dev Plan, Debt Management Strategy strategy. Customised capacity building to issuer to fit issuer's context. 2. Capacity Building Cross-Ministerial efforts. National Green Bond Reg. Guidelines 3. Framework development Development of Bond Framework (BF) and secure the external review (SPO or certification) of the issue and external review Structuring and cross-listing support of the bond in-country 4. Issuance support and on foreign exchange if relevant Handholding through the reporting process and facilitating 5. Reporting post-issuance verification and assurance.





FSD Africa's Technical Assistance – Sustainable GSSS Bond issuance for Sovereigns



This is all pursued with or without the context of an adjustment program/fiscal consolidation cycle. A strategic **Debt Sustainability Analysis is done** to ensure that the solution developed addresses key needs like fiscal space, mitigating **refinancing** risk, increasing average time to maturity, lowering debt service costs, and increasing investment into the productive, inclusive, sustainable economy, such as **Energy Sector Reform**, **Green Industrialisation**, **Agri and Urban Infra**

Development of an African Sustainable Finance Taxonomy



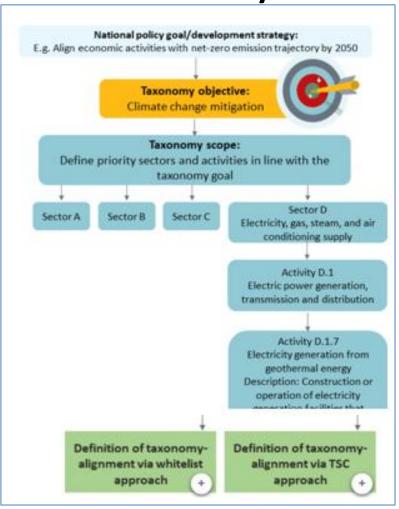






Under development:

- Taxonomy objectives, structure, economic activities
- 2. Market consultation
- 3. Draft Taxonomy by Feb 2025



Green taxonomies

Social taxonomies

Taxonomies of unsustainable activities

Traffic light taxonomy

Different types of sustainable finance taxonomies cater to different needs/priorities

- The implementation of taxonomies varies by country and depends heavily on whether there are complementary sustainable finance policy instruments in place.
- The sectors and activities a taxonomy covers and how taxonomy alignment is defined will vary depending on the objective(s) of the taxonomy and the country in which it is applied.
- Countries may choose to mix components of different taxonomies. The following types of taxonomies are flexible and can be adapted depending on a country's needs.

Global status of taxonomy development



Source: UN CC Learning

Opportunities for Green/Sustainable Financing in WAEMU

- ☐ Green/Sustainable bonds are tools to tap into international and domestic capital markets to finance green projects and assets.
- Green Bonds can also be an **important vehicle to increase the funding** available for **adaptation and mitigation projects** in WAEMU.
- Deployment of Green Bonds **may help enhance investor interests**, as higher governance requirements is attractive for investors, especially foreign ones.
- Accessing the international capital markets will also be a key alternative for Green Bond issuance, especially for financing in countries with shallow domestic bond markets.
- There exists a possible symbiotic relationship between the ESG investments and Green Bonds; more supply of Green Bonds help raise market awareness in ESG investments and increase investor demand for Green Bonds, especially amongst investors who are ESG-conscious.

VIMAL PARMAR, CF















Gender Bond Toolkit

Green Bond Toolkit