

AFDB CLIMATE ACTION:

Redefining the Transport
Infrastructure system in Africa



Africa extreme weather events and pollution threaten vital infrastructure and people's life



**Adaptation
needs**

**Mitigation
measures
required**

Transport Infrastructure and Climate Change



22%

of global CO2 related emissions due to the transport sector

176K

deaths per year in Africa are due to outdoor air pollution (WHO)



3x more

car passengers and a doubling of oil demand for transport (2012-40)



Movement's disruptions

of people and good with direct impact on eco. productivity and social access



90%

of urban air pollution in developing countries due to vehicle (UN)

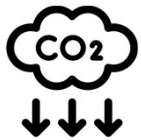


Increase cost

of repair, maintenance and more frequent rehabilitation



African countries are committed to tackle climate change



NDCs

2015 Paris Agreement to keep global warming below 1.5°C until 2030



USD 1.2 trillion

Cost of committed NDCs of all African countries, by 2030



Transport

75% of African NDCs indicated transport as key sector to tackle climate change



Barriers in financing low emission and resilient Transport Infrastructure



- Policies and enabling environments
- Leveraging finance
- Longevity and scale investments
- Uncertainty to climate conditions and potential impacts on design
- Strategic planning and programming
- Financial structuring
- Project preparation and technical design

Addressing the financial and capacity gaps

1. Senior Debt



- Adapted maturities (up to 20 years)
- Up to 5 years grace period
- 5 hard and 11 local currency loans
- Up to 1/3 of total project cost

2. Subordinated debt



- Interest rate premium
- Reasonable collateral

3. A/B loans & syndication



- A/B: 1/3
- Participation agreement
- Mitigate country risk with commercial bank partners

4. Guarantees



- Partial risk guarantee
- Partial credit guarantee
- Other risk mitigation products

5. Equity



- Indirect, through Private Equity funds
- Direct, maximum of 25%
- Quasi equity

6. Tech. assistance fund



- Feasibility studies
- PPP advisory
- Structuring support
- Capacity building
- Climate change ESIA

7. Affiliated partners



- Africa 50
- Africa Finance Corporation
- International Finance Corporation, etc.

Bank's Financial Instruments



Climate Finance instruments



Multi donor Trust Fund hosted at the bank



Canada
African
Development
Climate fund



Bank's Climate
funds & key
partnerships

External Funds where the Bank is accredited entity



GREEN
CLIMATE
FUND



GLOBAL ENVIRONMENT FACILITY



ADAPTATION FUND

Key partnership for readiness to unlock finance



GLOBAL
CENTER ON
ADAPTATION



Global Green
Growth Institute

AfDB and Climate Finance

AfDB's Climate Change Policy and new Climate Change Action plan 2021-26

USD 25 billion

Investment in climate finance, allocating equally split between adaptation and mitigation



40% commitment

Bank's approval of projects with climate finance



NDCs

Aligning Bank-financed investments with the objectives of the NDCs



African Adaptation Acceleration Program launched by Global Center for Adaptation in 2021

USD 25 billion

AAAP In partnership with AfDB pledged to double its financing USD 25 billion for adaptation by 2025



88%

To date, the 88% of Bank's projects based on climate informed design



USD 500 million

Green Bond issued by AfDB in 2015



USD 3.6 billion

In climate finance lent by the AfDB in 2019



The Bank and its climate partner's role



Goal: bridge the financial and advisory gap to develop resilient and low emission transport infrastructure projects

how to

1. Assess climate risk / challenge



2. Strategize, plan, and prioritize for adaptation and/ or mitigation



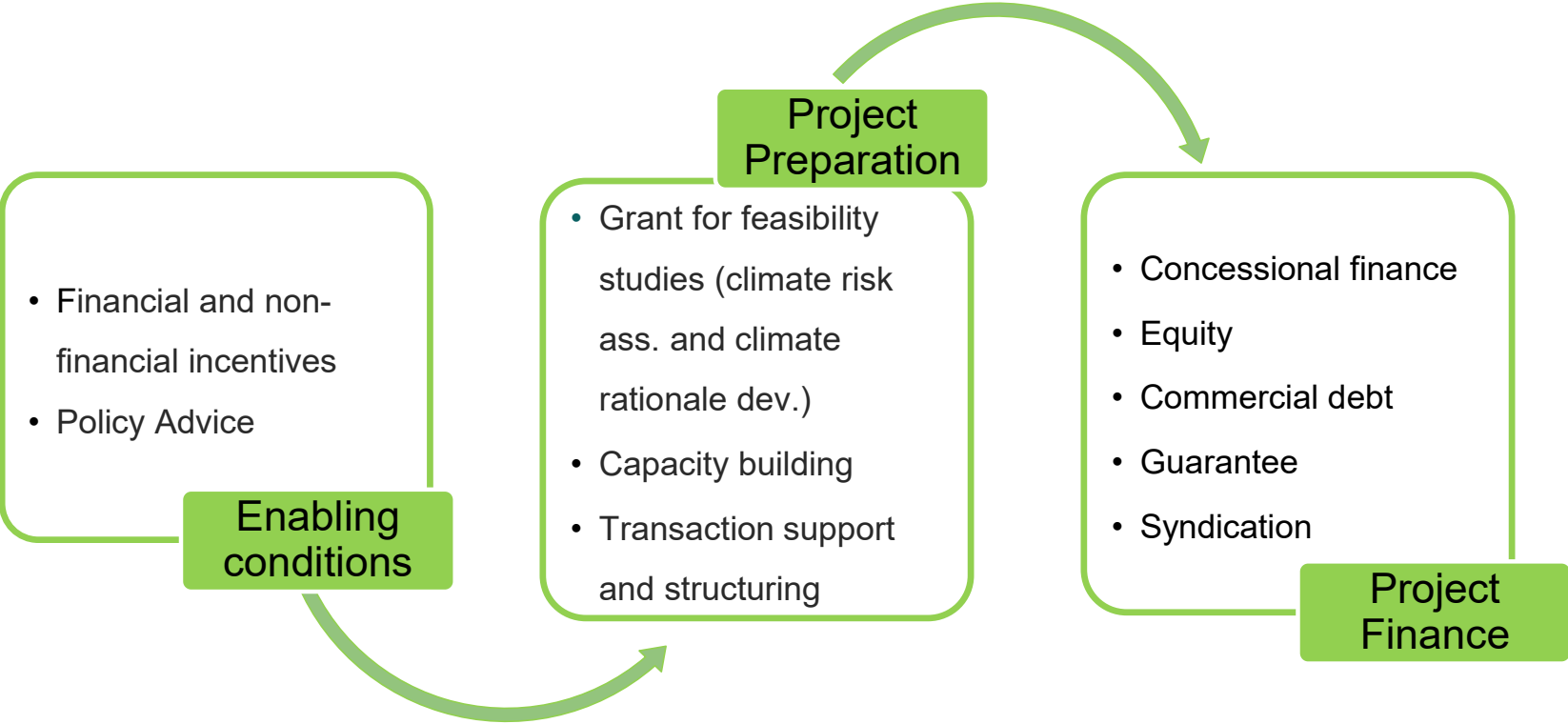
3. Mobilize resources to finance resilience and/ or mitigation



4. Build capacity for sustainability



Climate Finance Instruments intervene at various part of the project cycle



Africa Adaptation Acceleration Program (AAAP)

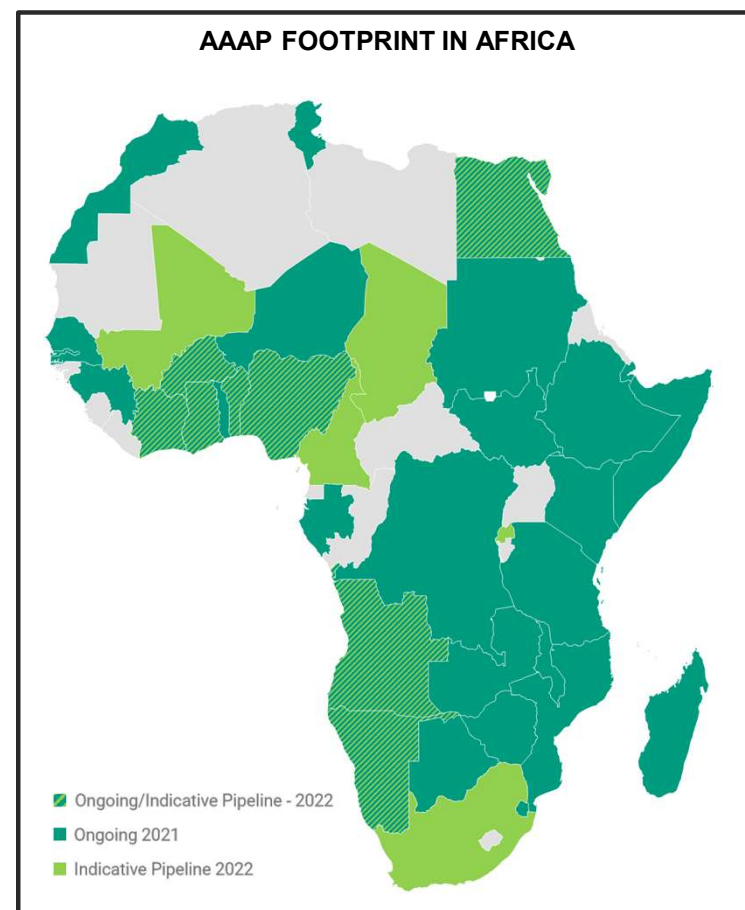
The **AAAP** is a comprehensive Africa-owned and Africa-led program that aims to mobilize \$25bn in adaptation investments across Africa

GLOBAL CENTER ON ADAPTATION

- GCA is the only international organization solely focused on adaptation.
- AfDB President Adesina and GCA CEO Patrick Verkooijen launched the Africa Adaptation Acceleration Program (AAAP) in January 2021.
- AAAP was endorsed by over 30 African Heads of State, the African Union, and Global Leaders..
- AAAP aims to mobilize \$25 billion in adaptation investments by 2025.
- The **Africa Infrastructure Resilience Accelerator (AIRA)** is a key pillar of AAAP

AAAP INFRASTRUCTURE RESILIENCE ACCELERATOR CORE FOCUS AREAS

- 1 Accelerate adaptation for green and resilient cities
- 2 Financing Nature-Based Solutions
- 3 Mainstream climate risk in national infrastructure investment portfolios
- 4 **Climate-resilient infrastructure PPPs**



Africa Infrastructure Resilience Accelerator (AIRA)



GOAL 2025

- Mobilize **US\$ 7 billion** in public and private investments for climate resilient infrastructure
- AfDB will mainstream climate risk into at least **US\$5bn or 80% of new AfDB** infrastructure projects by 2025

CORE FOCUS AREAS

- 1 Accelerate adaptation for green and resilient cities
- 2 Financing Nature-Based Solutions (NBS)
- 3 Mainstream climate risk in national infrastructure investment portfolios
- 4 Leveraging investments for climate-resilient infrastructure

KEY MILESTONES

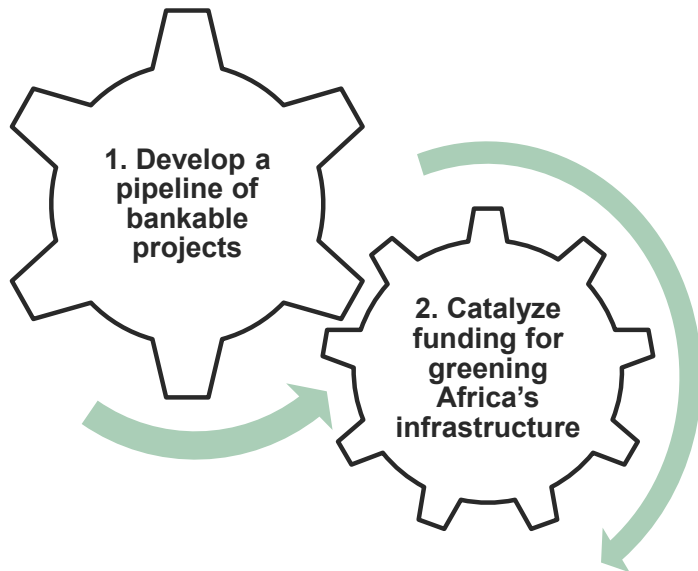
- AfDB-GCA resilient cities flagship in **10 cities with \$1bn in investments by 2022**
- **Integrate NBS into at least 10 investment projects by 2023**
- Investment of **\$400m committed** for climate-resilient infrastructure in **4 countries by 2022**
- Mainstream resilience into at least **5 private sector transactions by 2025**



Alliance for Green Infrastructure in Africa (AGIA)

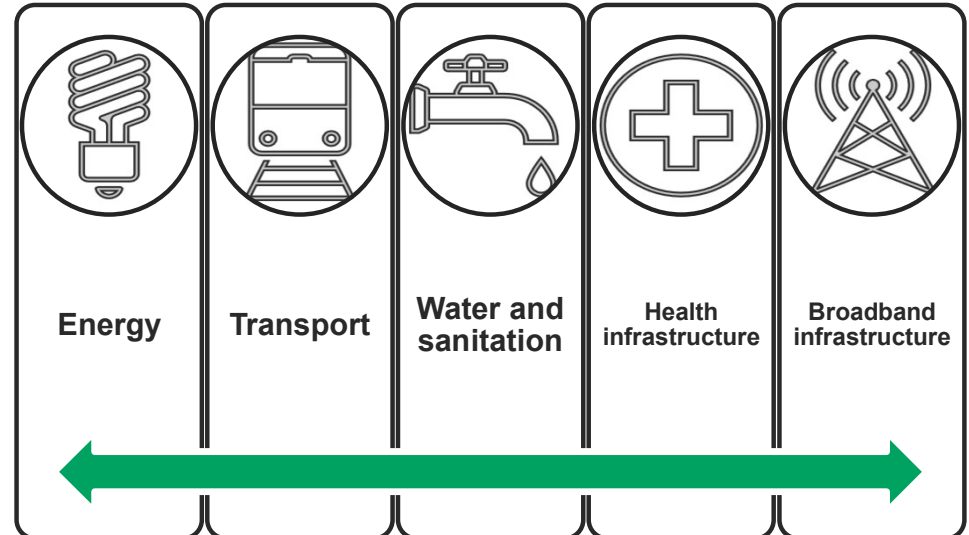


The AGIA is a special initiative that seeks to accelerate Africa's **just and equitable transition to Net-Zero** and bridge the continent's infrastructure gap in a low-carbon and climate resilient manner. AGIA's **core objectives** are:



AGIA is not a new institution or a replica of Africa50, but rather a delivery platform to provide much-needed financing to the infrastructure sector in Africa at speed and at scale

AGIA will pursue a **demand driven approach** to invest in climate-resilient infrastructure (**both urban and rural**) across several sectors, including:

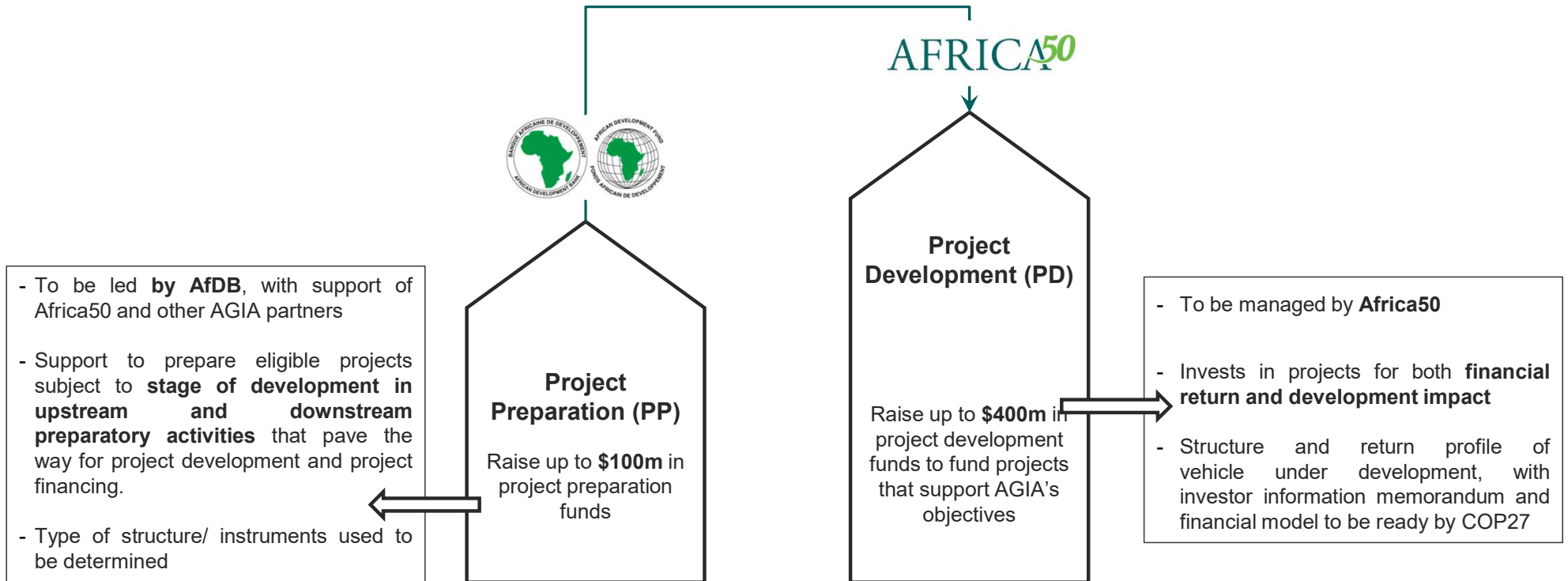


Target sectors will be **regularly reviewed** considering the needs of African countries as they transition to Net-Zero in a just and equitable manner.

Pillar 1: Project Preparation and Development windows



To achieve its objectives, AGIA will be implemented through two pillars. **Pillar 1 - Project Preparation and Development**, aims to raise up to **\$500 million** to transform projects from concept to bankable propositions, with a view to generating a **robust pipeline of green infrastructure projects** which may ultimately be funded by AGIA members and public/private institutional investors.

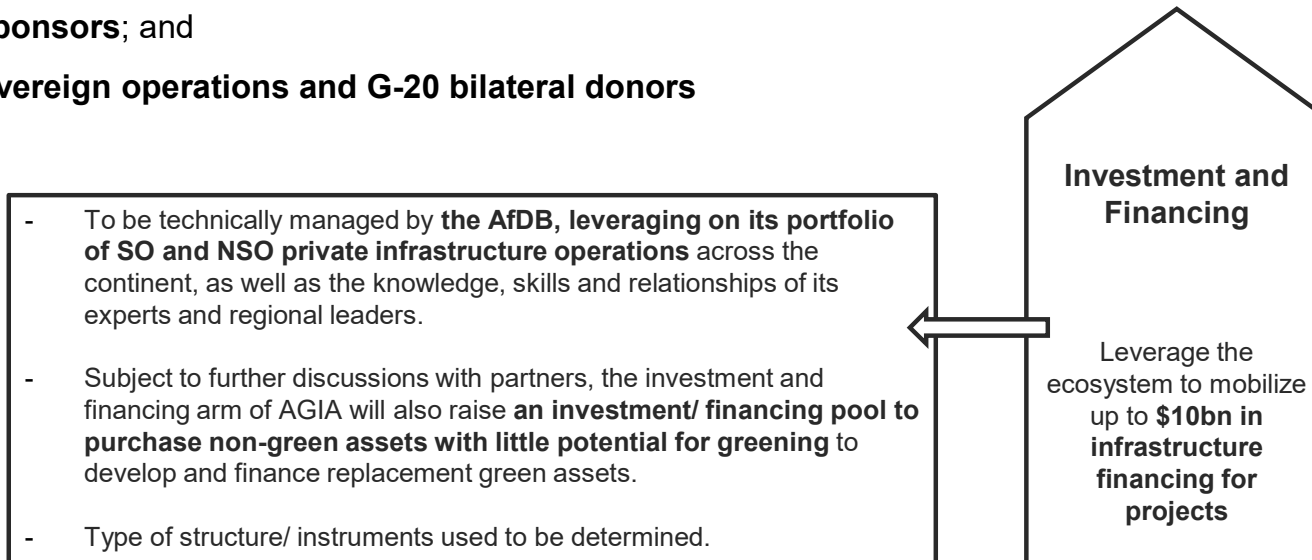


Pillar 2: Investment and Financing window



Pillar 2 will aim to mobilize up to **\$10 billion** in infrastructure financing such as **equity, lending, and risk mitigation instruments**, including but not limited to Partial Risk Guarantees, Partial Credit Guarantees, and concessional/blended finance schemes to enable the large-scale financing for projects supported under Pillar 1. Expected mobilization of funds under Pillar 2 will come from a combination of:

- i. **AGIA members** (founding and later entrants) with **preferred position, including first rights** to participate in resulting debt financing, equity investments, blended financing and de-risking tools;
- ii. **non-AGIA institutions** including DFIs, commercial FIs, foundations, public and private institutional investors;
- iii. **project sponsors**; and
- iv. **MDBs sovereign operations and G-20 bilateral donors**



Urban Municipal Development Fund (UMDF)

The UMDF is a multi-donor fund hosted by AfDB to improve resilience and better manage urban growth by providing municipalities and urban entities with tailored technical assistance such as urban planning and project preparation.



Productivity

- Analysis and advice on the design of integrated urban plans and/or sector strategies.
- Capacity development and assistance to attract investment into economic infrastructure.
- Activating AfDB's catalytic role to leverage international and national investments and resources for urban development.

Livability

- Integrated urban development plans, inclusive urban design, gender-sensitive spatial planning and participatory decision-making.
- Project preparation for essential infrastructure, water, electricity, public transport, waste.
- Urban regeneration, public space improvements.

Sustainability

- Facilitating learning between cities on climate action and improving resilience.
- Supporting climate-proofing investments, developing projects and programs that reduce GHG emissions or build resilience.
- Assisting cities in accessing green financing mechanisms or mobilizing climate finance.

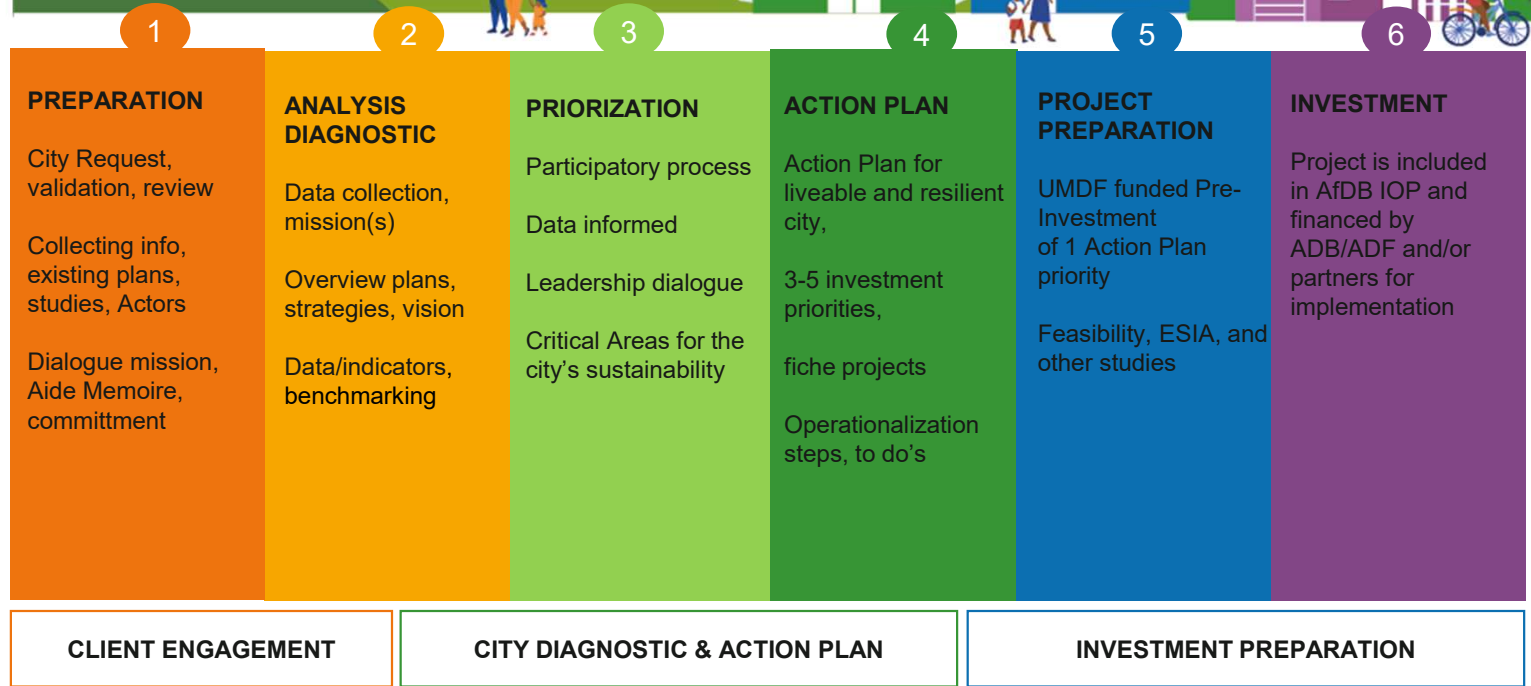
Good Governance

- Partnering with governments at a national and sub-national level to support fiscal reforms.
- Technical assistance to strengthen systems of revenue collection, expenditure administration as well as building creditworthiness.
- Preparing cities to access financing from AfDB and other sources.
- Build institutions or PPPs for infrastructure investments

AfDB / UMDF Cities Program



- High impact program in 30-40 reform & investment focused cities across Africa
- 2-year engagement process



Where we are working



Morocco/ Marrakech BRT System Project s' Preparation



Cameroon National Urban Development Program

Tunis Waste Management Project's Preparation

Bizerte Smart city Project's financing

Kenya Urban Data platform for secondary centres project's preparation

Our UrbanData Platform

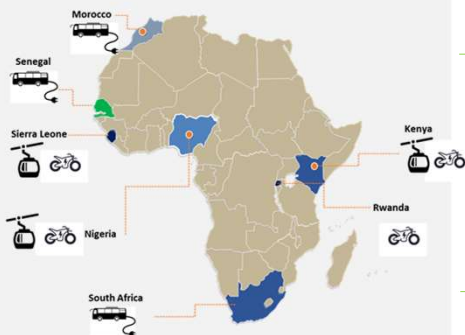
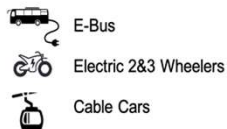
Horizontal and Interoperable

Designed for Smart City

Designed for IoT

Green Mobility Facility for Africa

Map of Countries and Technology considered under the Green Mobility Facility



Project location	Kenya, Morocco, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa
Low Emission Objective	Promote Green Mobility for Public Transport in urban areas in Africa Technologies: Electric Vehicles (Bus Rapid Transit & E-Motorbikes) and Aerial cable car transit systems projects in 7 countries. Resulting into the improvement of urban transit in Africa by decarbonizing the sector and creating an enabling environment to scale up green mobility through replicability in other parts of Africa
Value of the Project	<ul style="list-style-type: none"> • Total facility cost : USD 900 million • GCF: USD 300 million • SEPA, FAPA, AfDB: USD 300 million • Other lenders JICA, AFC interested • CTF, SEFA and other lenders interested
Climate mitigation measures	<ul style="list-style-type: none"> • Green job creation • Support the continent in shift in the use of low emission sustainable transport. • Greenhouse gas emission reductions Total reduction of 2,175,000 tCO₂ eq. over the lifetime of the infrastructure (20 years) • Reduced air & noise pollution, travel efficiency and improved passengers' well-being.
Status	<ul style="list-style-type: none"> • Under Preparation: Project Concept Note • GCF Funding Proposal • Planned Board Approval – Q1 2023.

Banjul PORT 4th Expansion Project



Overview of Tanbi Wetland Complex and Banjul Port in Gambia



Project location

The Gambia

Adaptation Resilience Objective

- Addressing climate hazards in the expansion of the Banjul Port to enhance resilience and improve capacity of the assets and support services
- Aligning the project with the New Port Master Plan (2019-2038) and the great Banjul area, adopting an integrated approach to urban regeneration
- Regenerating and preserving mangroves in the Tanbi Wetland Complex as an important coastal defense.

Value of the Project

- Total project cost : USD 114, 6 million
- AFDB: USD 21.75 million | USD 5 million for climate adaptation measures
- EIB: USD 60 million sovereign concessional
- EU: grant up to USD 13 million for climate adaptation measures

Climate adaptation contribution measures

- Develop a climate risk assessment to identify climate hazards and impacts to the asset, people and services in the Banjul Port
- Prioritize adaptation and resilience options, with focus on Nature-Based Solutions (NBS),

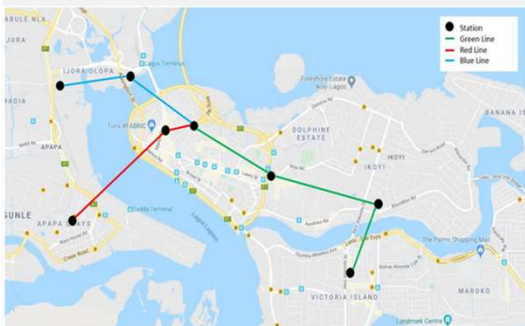
Status

- Under Preparation: Project Concept Note
- Planned Board Approval – Q3 2022.

Lagos Cable Car Transit



Lagos Cable Car Route Map



Project location	Nigeria
<p>Low Emission Objective</p>	<ul style="list-style-type: none"> • The project goal is to develop, construct and operate the first phase called the Green Line of the Lagos Cable Car Transit (LCCT) project, an aerial cable car public transport system • The project will also support the transport sector transformation in Nigeria in having a plan to implement the green mobility strategy and develop an affordable pricing policy that can be replicated on the continent.
<p>Value of the Project</p>	<ul style="list-style-type: none"> • Total project cost : USD 300 million • GCF: USD 26 million • CTF: USD 20 million • AfDB: USD 30 million • Other lenders JICA, AFC interested
<p>Climate adaptation contribution measures</p>	<ul style="list-style-type: none"> • Nigeria – second largest GHG emitter on the continent. • Support the megacity in shift in the use of low emission sustainable mass transport. Otherwise, the residents of the city will continue using informal polluted system of transport with unhealthy combustion of engines that will be in the long run more expensive and less efficient. • Greenhouse gas emission reductions for the project are expected to equal 24,059.07 tCO2 eq. per year. • Reduced air & noise pollution, travel efficiency and improved passengers' well-being.
<p>Status</p>	<p>Under Preparation: being considered under the GMFA</p>

SA Taxi



Project location	South Africa
Low Emission Objective	The USD 1bn programme for the financing of 6,700 SMEs in SA's commuter transit segment through a more efficient SA Taxi, a vertically integrated company providing finance, insurance, dealership. Fully aligned with National Green Transport Strategy .
Value of the Project	<ul style="list-style-type: none">• Total project cost : USD 1 billion• AfDB: USD 107 million long term loan• Other lenders interested
Climate contribution	<ul style="list-style-type: none">• Energy efficient taxis• Tracking of Drivers and Incentive systems to reward drivers• The project will help reduce CO2 emissions in SA taxi industry by 2.7%.
Status	Under Implementation

Electromobility Angola



T'Leva start-up



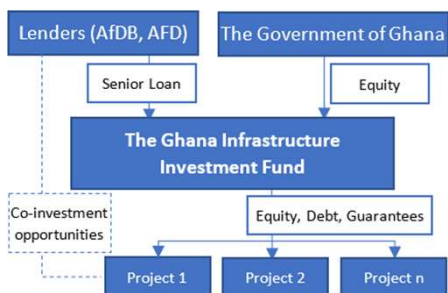
E-bus with swappable batteries in China



Battery Swapping station for e-mopeds

Project location	Angola
Objective	Electric Mobility Market report recommends to operationalisation of current existing pilot projects of e-motorbikes, cars and e-buses with battery swapping as charging technology
Value of the Project	Cost has not yet been determined
Climate contribution	<ul style="list-style-type: none"> • Green job creation • Support the continent in shift in the use of low emission sustainable transport. • Greenhouse gas emission reductions Total reduction of 2,175,000 tCO₂ eq. over the lifetime of the infrastructure (20 years) • Reduced air & noise pollution, travel efficiency and improved passengers' well-being.
Status	Study Under Preparation

Ghana Infrastructure Investment Fund



Project location	Ghana
Low Emission Objective	<ul style="list-style-type: none"> FEC is a subnational development finance institution owned by the Kingdom of Morocco. Its mandate is to finance various local gov. infrastructure projects. It also aims to provide tech. assistance to help local governments identify, plan, and implement their projects as well as to adequately measure the dev. impact. FEC aims to finance public as well as commercially viable infra. projects and will cover diverse needs such as urban dev., urban mobility, rural electrification and sanitation.
Value of the GIIF	Established in 2015 with initial seed capital of USD250m, fully paid-in. Follow-up capital injections from petroleum revenues amounting to USD76m over 2015-2017.
Climate contribution	<ul style="list-style-type: none"> Support the pipeline of resilient and low-emission transport infrastructure projects in the national vehicle funds. Contribute to channel Climate Finance Instruments in the fund
Status	Under implementation

Fonds d'Équipement Communal (FEC) (Community Infrastructure Fund)



Project location

Morocco

Objective

- Mobilize, manage, coordinate and provide financial resources for investments in a diversified portfolio of infrastructure assets and projects thus contributing to Ghana's infra. development and overall economic development objectives.
- Flexible in instruments: equity, quasi-equity, mezzanine, debt, guarantees, refinancing,...
- Over USD 200m approved for 8 projects already

Value of the Project

The AfDB provided a long tenor EUR 100 million loan under the new sub national financing policy of the AfDB. AfDB catalysed financing from several other entities.

Climate contribution

- Support the pipeline of resilient and low-emission transport infrastructure projects in the national vehicle funds.
- Contribute to channel Climate Finance Instruments in the fund

Status

Under implementation



FONERWA: Rwanda Green Fund



Status:

- 7 calls completed
- A call for proposal scheduled every 6 months
- Project/programme proposal screening

Project location	Rwanda
Objective	<ul style="list-style-type: none"> • FONERWA is a cross-sectoral financing vehicle (fund) through which env. and climate change finance is channelled, programmed, disbursed and monitored. • The Fund – a ground breaking initiative and the biggest of its kind in Africa – was officially launched in Oct/14. • FONERWA is an instrument to facilitate direct access to international environment and climate finance, as well as to streamline and rationalise external aid and domestic finance, e.g. GCF.
Capitalization (as of 2016)	<ul style="list-style-type: none"> • Gov of Rwanda: USD 4m • DFID: USD 37.4m • KfW: USD 8.9m • UNDP: USD 5m
Climate contribution	<ul style="list-style-type: none"> • 30 projects have been approved. • Over 4,400 ha of land, protected against soil erosion • Over 3,000 ha of watersheds and 'water bodies' protected • Over 2,400 households with improved access to off-grid clean energy
Status	Under implementation



Key transport sub-sectors, Climate Measure Type matrix





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