



# **ICAO ASSISTANCE FOR ACTION**

## **AVIATION & CLIMATE CHANGE SEMINAR**

### ***Presentation on AfDB's activities in CC***

***Montreal, October 23, 2012***

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# Outline of the presentation



1. AfDB & Climate Change – CCAP
2. Greenhouse Gas accounting
3. Bank's supported projects in air transport/CC
4. Conclusion

# Bank's CCAP

# Why the CCAP?

- CC poses global & local issue in term of environmental, social & economic aspects
- An assessment made in 2009 has shown that out of 206 approved projects since 2007, 66 (32 per cent) are vulnerable to climate change
- Opportunities exist for implementing better, greener projects and programs that will reduce our greenhouse gas emissions for a sustainable development

# Rationale for the CCAP

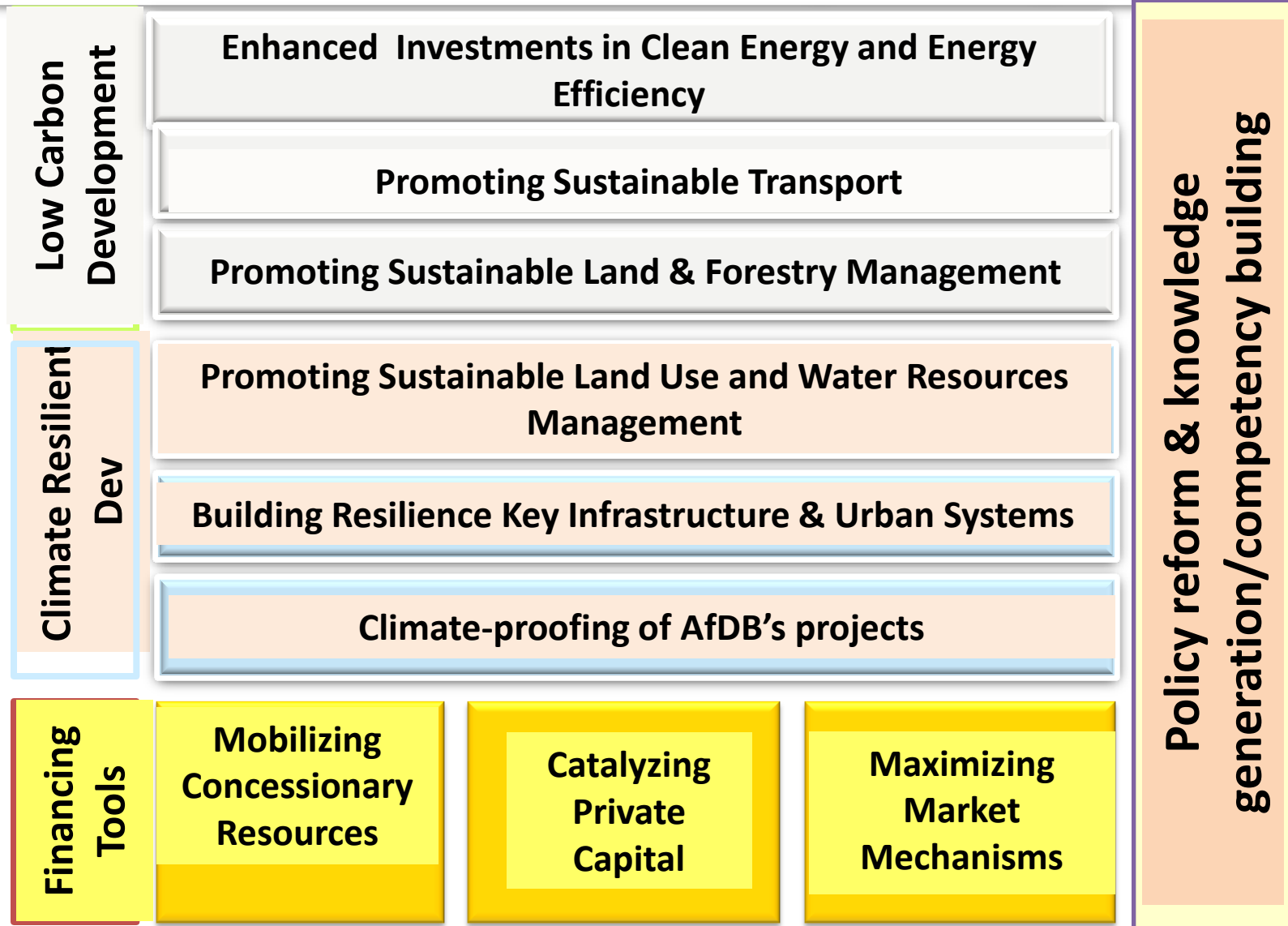
- **CCAP Goal**

Contribute to reducing Africa's vulnerability to climate change and supporting the continent to transition to a low carbon intensive growth path.

- **Guiding Principles**

- Built on strong, robust operational and delivery capacity
- Maximizing synergies between mitigation and adaptation
- Compatible with the Bank's and Africa's priorities
- Addressing the Bank's operations requirement (human/physical resources, management arrangements, evaluation systems)
- Ensuring gender equity
- Built on lessons learnt and past experience

# AfDB's Climate Change Program



# Low Carbon Development

Sector	Projects and programs Actions
Transport	<ul style="list-style-type: none"><li>• Increase AfDB's sustainable transport lending by an average of 10% per annum</li><li>• Multi-modal and mass transit systems in 3 large African cities</li><li>• Projects addressing traffic congestion (e.g. grade separated interchanges, viaducts, bridges, railway transport; metro)</li><li>• Airports rehabilitation &amp; capacity building in air transport sub-sector</li></ul> <p><i>Reducing growth rate of energy consumption and GHG emissions from the transport sector; Project financing for sustainable bio-fuels projects</i></p>

# Climate-Resilient Development

Areas	Projects and programs Actions
<b>Building Resilience of Key Infrastructure and Urban Systems</b>	<ul style="list-style-type: none"><li>•Development of Regional Integration Strategy Papers (RISP)</li><li>• Investments in harbors and coastal zone protection, roads, water management infrastructure</li><li>• Urban drainage systems and revision of building codes and land use planning standards to minimize the risks of climate change</li></ul>



# Climate-Resilient Development

Areas	Projects and programs Actions
<b>Climate-proofing AfDB's portfolio</b>	<ul style="list-style-type: none"><li>• Screening of relevant projects for climate risks and taking steps to reduce such risks</li><li>• Improved design, location, maintenance of infrastructure to withstand adverse impacts of climate change at least cost</li><li>• Several capacity building initiatives for TMs and others</li></ul>

# Climate–Resilient Development

## Some projects

- **Climate-proofing AfDB's portfolio**
  - A screening tool is being developed to screen projects for climate risk;
  - Carbon neutral: AfDB establishes a program to offset business & travel emission

# Climate Resilient Development: Expected Outcomes

## Knowledge Generation/ Competency Building

### Infrastructure and Urban systems

- Increased no. of African cities that have developed and are implementing climate change adaptation and mitigation plans

# Climate Resilient Development: Expected Outcomes (Cont'd)

## Climate-proofing of AfDB's operations

- Screening of relevant projects for climate risks and taking steps to reduce such risks
- Improved design, location, maintenance of infrastructure

## Support to policy, institutional capacity and reforms

Mainstreaming of climate change adaptation  
Establishment of policies that will provide incentives to investors using priority adaptation technologies.

# Financing Platform

- **The financing platform will perform three main tasks**
  - Increase Africa's access to global funds: CIFs, GEF, etc.
  - Expand internal resource envelope available to climate change activities (SEFA, ClimDev, CBFF, etc).
  - Explore new funding avenues through public-private partnerships and capital markets (The Green Bond).
- **Expected outcome**
  - Increased resources for financing both resilient and low carbon development
  - Increased participation in the carbon market
  - Enhanced partnership with all donors

# Investment Plan 2011-2015

Sector	Expected Amount (UA billions)	(%)
Energy	2.06	32%
Transport	1.58	24%
Water	1.20	19%
Agriculture & Agro-Industry	1.10	17%
Other sectors	0.50	8%
<b>Total</b>	<b>6</b>	<b>100%</b>

# Investment Plan 2011-2015

- Investment in transport sector focusing on GES and vulnerability reduction and also resilience building.

# Others Investments

Investment for supporting policy, institutional capacity and reforms:

- **An estimated of US \$ 1 billion of the budget support to promote reform in RMCs.**
- **About US \$ 100 million to support knowledge and competency building.**



# Funding and Human Resources Capacity

- The CCAP will be funded through:
  - Bank's own resources (ADF-12, ADB)
  - Additional resources from existing global funds (bilateral and multilateral)
  - Post-Copenhagen Green Climate Fund
- Various Expertise is required for the CCAP:
  - The bank has a large pool of expertise
  - Staff
- Partnership is key for the implementation of this Action Plan

# Institutional Arrangements

## AfDB CLIMATE CHANGE ACTION PLAN 2011-2015

### Climate Change Coordination Committee (CCCC)

#### Regional

#### Department

ONRI lead the prioritization of regional projects and ensure strategic alignment with the Bank's regional integration strategy provision of soft support to RECs and continental organizations

**ORQR to establish the Africa Green Fund**

**Advocacy and coordination of the capacity building initiatives with EADI**

**Develop the screening tools including monitoring indicators necessary to monitor CCAP progress on targets and reports on corporate KPIs**

- **Project objective:**
  - Support on the ground the deployment of technologies for both climate change mitigation and adaptation
- **Project cost (GEF funded):** USD 15.7 million
  - Mitigation: USD 10 million
  - Adaptation: USD 5.7 million
- **Project components:**
  1. Enhance cooperation with development partners to maximize technology transfer and financing
  2. Enabling the scaling-up of technology transfer in policy, institutional and organizational national reforms addressing mitigation and adaptation (country and sub-regional levels)
  3. Integrate technology needs into programs, plans and investment priorities (AfDB investment level)

# Lessons Learned

- **The CCAP will build on lessons learned:**
  - Enormous coordination and transaction costs associated to the multiple channel of funding
  - Institutional capacity to package various instruments to leverage resources
  - Grand-based resources available not enough for poorest and fragile states
  - Skills strengthening inside and outside the Bank
  - Predictability and reliability of financial flows for delivering effective support
  - Ensuring that projects offer added-value and respond to client demand

# Risks and mitigation

## Risks that will be mitigated during the implementation of the CCAP:

- **Uncertainty about post-Kyoto and UNFCCC negotiations:**
- **Inability to generate substantial new finance and dedicated AfDB's resources to climate change:**
- **Development of a robust and credible results framework might be time-consuming:** A phased approach for short and medium term will be set up with key actions, deliverables and indicators
- **Limited staff skills and knowledge of climate change issues:**  
Capacity enhancement program

# Monitoring & Evaluation

- Development of a comprehensive results monitoring system to guide the implementation of the CCAP;
- Selection of key actions, deliverables and indicators for monitoring;
- Establishment of streamlined funding mechanisms for delivering investments at scale;
- Collaboration with other MDBs and UN partners for harmonizing information.

# **Green House Gas Accounting**

# Green House Gas Accounting

- Step I : defining the objectives of GHG accounting system (*Why, What carbon metrics; Organizational & operational boundaries – Approach Paper*)
- Accounting of GHG Emission/Reduction: Development of accounting tools (*How to quantify emission/reduction of activities – Procedures & Systems needed to support data collection*);
- Quality control & reporting : (*What is reported and how the results can be integrated in existing reports or need for stand-alone reports?*);

Resources: 300,000 < X < 600,000 USD / Phase I – Trust Funds & other sources – Dedicated team within the Bank

**Preliminary work underway for development of a basic GHG tool for the Bank**



# Activities – experiences in air transport sector

- **Ethiopian Airlines Corporate Loan (2011)**
  - First aircraft finance operation
  - Tremendous needs & opportunities related to intra-Africa travel vs Trans-continental travel ;
  - Importance of promoting competition in the sector vs picking winners – Contribute to increased connectivity and lower fares in the Continent
- **Partnership with Brazilian Development Bank - MoU signed in June 2012**
  - To accelerate Knowledge transfer;
  - To easily Visualize potential of African Aviation (Consumers/Lower fares; African Lines becoming safer, **more fuel efficient** and competitive ; African Gvts capturing additional taxes; Revenues to SMEs ; Job-seekers/benefiting from business linkages and labor intensive industry

# Activities – experiences in air transport sector

- **Addus Aircraft Leasing : 310 MUSD**
  - **Setting up Africa’s first regional aircraft leasing facility** through purchase of 6 new and 6 pre-owned Embraer 171/190;
  - Leasing operations – ran out of South Africa to benefit exclusively African Airlines;
  - **As regards Green & Sustainability facts** : Building efficiency and competitiveness of African Airlines; Developing intra-Africa connectivity will help lower the need to travel to Europe/Middle East to reach Africa destinations – **Cutting carbon emissions**
  - Investing in modern, fuel-efficient technology will help reduce CO2 emissions and improve Africa’s Aviation safety record

# COSCAP

- **WEST AFRICA [ECOWAS – UEMOA]**

- Harmonization of national technical rules: Studies carried out – Harmonization completed with regard to ICAO Annexes 1, 6 & 8
- Setting up of a Regional Civil Aviation Safety Agency: Agency in place & headquartered in Abuja
- Yamoussoukro Decisions: Studies on Regional technical maintenance centres & Database: Procurement process for consultants' recruitment on-going

- **CENTRAL AFRICA**

- Harmonization of national technical rules: Studies carried out – Harmonization yet to be approved by Ministers
- Setting up of a Regional Civil Aviation Safety Agency: yet to be approved by Ministers



# Priority Air Safety Project – DRC : 160 MUSD/ADF Grant – 22 MUSD/DRC

## Restore air transport and air navigation safety in DRC by:

- a) (i) rehabilitating airport infrastructure and air navigation equipment;
- b) building the capacity of technical staff in charge of air traffic control and monitoring of the sub-sector;
- c) contributing to sustaining RVA activities

# Priority Air Safety Project - DRC

- **As regards Green & Sustainability facts :**
  - The expected project positive impact concerns: (i) potential reduction in the risks of air transport accidents and incidents; (ii) optimization of flight routes and altitudes, reduction in approach navigation and ground running time, thus leading to a reduction in climate warming greenhouse gas emissions, which could have been on the increase with increasing traffic; and (iii) greater consideration of health issues in project airports.
  - In addition, the project intends to set up 11 (eleven) solar energy plants nationwide which will constitute a source of non-polluting and cheaper energy for such isolated stations located far from urban areas and sources of electrical energy.

# Priority Air Safety Project - DRC

- **As regards Climate change**

Climate change was one of the main concerns in designing PPSA for two reasons:

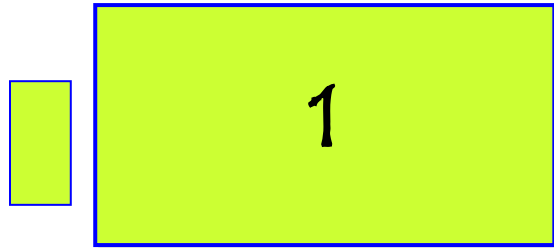
**The resulting increase in traffic**: improvement in the performance of air navigation control systems will lead to better flight management, meaning more regular flights for airlines, optimization of the routes and altitude and reduction in approach navigation. This will lead to a reduction in fuel consumption which will in turn limit the emission of the greenhouse gases responsible for climate warming.

In addition, strengthening the Civil Aviation Authority's inspection capacity will make it possible to introduce greater selectivity in aircraft certification and take off the air all aircraft not meeting the obligatory pollution and noise standards prescribed by ICAO.

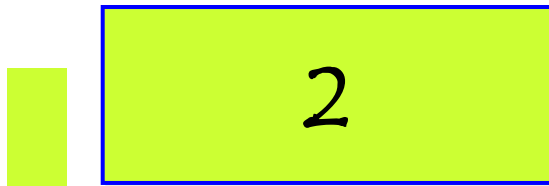
**Energy supply**: the project plans to: (i) modernize obsolete power plants; and (ii) equip 11 (eleven) remote single-site stations with solar energy. The installation of new fuel-efficient generators and the installation of solar facilities at remote single-site stations throughout the country's airspace will help to combat climate change by mitigating cumulated greenhouse gas emissions.

**Combined effect of these actions will contribute to reducing the project's impact on climate change.**

# ***Conclusion***



***Energy & power projects represent the lion share of our investments***



**Over the past few years, the focus of our infrastructure strategy has turned green**

**Through many mechanisms our investments aim at reducing carbon emissions and minimizing the environmental impact of economic activity**

# Conclusion (Cont'd)

Climate and CC=

*Sub-set of the environment*

CC effects and  
adaptation/resilience  
not properly  
captured in  
traditional concepts

**Example:** environmental impact assessment focus on the impact of operations & activities and much less the other way round  
**Need** for a CC screening tool separate from traditional safeguards system  
**Transport sector** including Civil Aviation = Key sector  
**Cooperation** with specialized institutions [ICAO] is vital – **Ex.: Latin Am. Dev. Bank** Action Plans to serve as a basis to streamline cooperation with states & RECs



**THANK YOU FOR YOUR ATTENTION**

