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# Solutions for a Changing Climate

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The African Development Bank's  
Response to Impacts in Africa

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## Message from the President



**“We have two challenges, fighting global poverty and fighting climate change. Fail the one, fail the other.”**

**Dr. Donald Kaberuka**  
**President, African Development Bank Group**

## Foreword

Climate change seriously threatens sustainable development, poverty reduction and the achievement of the Millennium Development Goals (MDGs), particularly in Africa. The adverse impacts of climate change are already manifesting themselves on the continent in more frequent occurrences of climate events such as floods, droughts, and heat waves. The major concerns for Africa’s key economic sectors with disastrous consequences include; a heightened threat of food security, inadequate water resource availability, degeneration in natural resources productivity, diminished biodiversity, decline in human health viability, increasing land degradation, increasing desertification, and coastal zone recession. Recent assessments have shown that the economic costs of climate change in Africa are likely to be significantly higher in relative terms than in other regions of the world.

The African Development Bank (AfDB) recognizes that climate change also provides an opportunity for Africa to adopt a development pathway that is climate resilient and less carbon-intensive—one that promotes clean, efficient energy technologies and the sustainable management of natural resources such as land, water and forests. Such a development pathway would help reduce the exposure of the vulnerable communities in Africa to the adverse impacts of climate change, while at the same time contribute to the global greenhouse gas emission reduction efforts. It is within this context that addressing the challenges of climate change on the continent remains a core priority for the Bank.

Climate finance continues to play a key role in making low carbon and climate resilient investments bankable by lowering cost of capital and buffering risks both for sovereign and non-sovereign operations. The AfDB is playing a key role as financier, partner, and advisor to its Regional Member Countries to assist them enhance access to available resources as well as capitalize on future financing opportunities.

Given its operational track record in Africa, the AfDB has a clear comparative advantage in implementing sustainable operations and programmes on the continent in the areas of clean and renewable energy, sustainable transport, smart agriculture and integrated land and water management whilst taking into cognizance health and social matters.

The African Development Bank, alongside its Regional Member Countries and development partners, is committed to promoting sustainable development for economic prosperity in Africa, and we welcome you to join us in fulfilling this important mandate.



# Solutions for a Changing Climate

This brochure highlights AfDB's response to climate change in Africa by illustrating successful programs and projects managed by the Bank together with development partners in key economic sectors including energy, transport, water and sanitation, agriculture and health. An overview of the climate related financing instruments hosted by and administered by the bank is also provided. In addition, the brochure also presents some of our work as a knowledge broker for the continent, as we develop and share pertinent knowledge products and organize programs that respond specifically to Africa's needs in the area of climate change.

# Climate Change in Africa

**Africa** is the second largest and second most populous continent in the world with a **landmass of about 30.2 million km<sup>2</sup>** and population of over **1 billion people**. The continent spreads across **6% of the total surface area of the earth** and accounts for about **15% of the world's human population**. Africa encompasses many climate regimes with its geographical area and location as key factors. The continent straddles the equator and it is the only one that **stretches from the northern to southern temperate zones**.

**Climate damages (as a percentage of GDP) are higher in Africa than any other region in the world.\***



The health impacts from climate change are expected to be particularly serious in Central and Southern Africa

The largest declines in agricultural yields within Africa are anticipated in central South-ern Africa (Zambia, Zimbabwe, Angola)

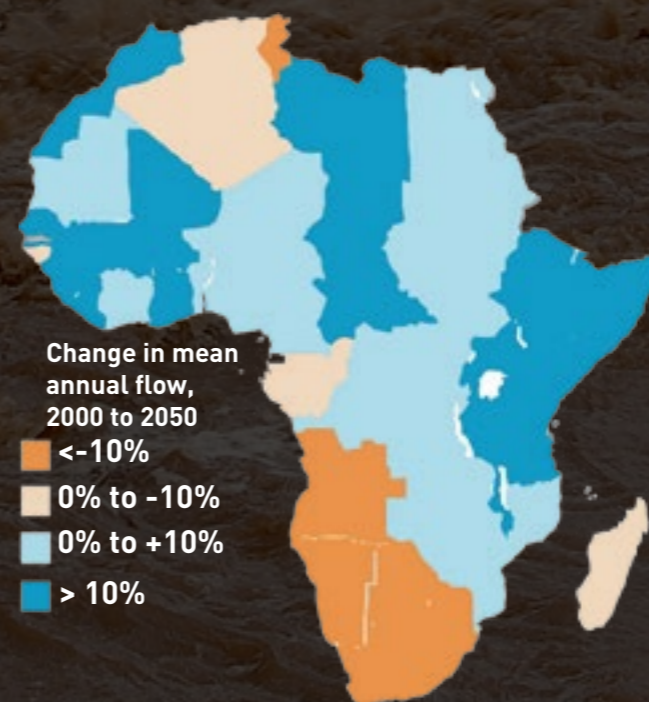


Darker shading represents countries where deaths resulting from climate change are highest, lighter shading where they are lowest.\*



Darker shading represents countries where productivity reductions resulting from climate change are highest, lighter shading where they are lowest.\*

South Western Africa is expected to see a decrease in water availability of more than 10 per cent as a result of climate change\*



\* AfDB 2011: The Cost of Adapting to Climate Change in Africa

**20%** more people in Africa will be at risk of hunger by 2050 due to the changing climate.\*

Climate variability and extreme weather events including floods, droughts and cyclones would trigger infectious disease epidemics such as malaria, dengue fever, and diarrhea.

**90%** Crop net revenues could fall by as much as 90% by 2100, with small-scale farmers being the most affected.\*

# Access to Climate Finance in Africa

“Until 2030, the estimated costs of climate change are around 3 percent of the continent’s GDP, or US\$40 billion each year.”\*

**\$40 Billion**  
Required each year in Africa ▲

Recent assessments show that Africa received only **US\$132 million between 2004 and 2011** from dedicated climate financing instruments to support adaptation. This is paltry when set against Africa’s needs of \$40 billion per year until 2030.\*

## Africa’s Internal Obstacles to Accessing Climate Finance



**4%**

Africa contributes only 4 percent of global emissions.

**68%**

In sub-Saharan Africa, 40% of the population lack access to safe drinking water sources and 68% do not have access to improved sanitation facilities.

**625 Million**

In sub-Saharan Africa, at least 625 million people do not have access to modern energy services and still rely exclusively on traditional biomass for cooking, heating and lighting.

# AfDB Climate Change Action Plan

Addressing the impact of climate change on the continent as well as maximizing opportunities presented is central to the core business of the African Development Bank (AfDB). The Bank addresses climate change as a cross-cutting issue and part of a broader accelerated development agenda for the continent. It has developed a 2011 – 2015 Climate Change Action Plan (CCAP) to guide the implementation of its Climate Risk Management and Adaptation Strategy (CRMA) and Clean Energy Investment Framework (CEIF), which jointly address the broader issues of adaptation and mitigation respectively.

More specifically, the CCAP comprises four overall channels of intervention. Building on the CRMA, the first channel of the CCAP is the promotion of climate resilient development by promoting sustainable land use and building resilience of key infrastructure. This will be reinforced by the AfDB “climate proofing” the projects which it supports. Second, the CCAP calls on the AfDB to promote low carbon development through enhanced investments in clean energy, sustainable transport and sustainable forestry management. The second and third channels are operational, and provide complementary financing and advisory service platforms, respectively. The financing platform seeks to not only mobilize increased donor resources, but to also strategically pursue the leveraging of vast private capital in order to meet the climate-friendly financing gap. The advisory services envisioned under the CCAP reach across all other channels of intervention in complementarity with operations.

In implementing its Climate Change Action Plan, the Bank Group intends to invest about \$6.4 billion over this 5-year period and will significantly scale-up investments to support climate resilient and low-carbon development in Africa. Interventions will be in the areas of renewable energy, sustainable transport, smart agriculture and sustainable land and water management. These climate change relevant investments will benefit from the Bank’s use of its privileged position to catalyse public-private partnerships in Africa. The AfDB is also supporting the strengthening of country policy and regulatory reforms as this are essential for transitioning towards a low carbon and climate resilient economy.

## African Development Bank Climate Change Programme

Climate Resilient Development	Low Carbon Development	Financing Platform
Promoting Sustainable Land Use & Water Resources Management	Enhanced Investments in Clean Energy (CE) & Energy Efficiency (EE)	Mobilising Concessionary Resources
Building Resilience of Key Infrastructure & Urban Systems	Promoting Sustainable Transport	Catalysing Private Capital
Climate Proofing of AfDB’s projects	Promoting Sustainable Land & Forestry Management	Maximising Market Mechanisms
<b>Advisory Services, Policy Reform &amp; Knowledge Generation/Competency Building</b>		

# Project and Programme Highlights

Alongside development partners, including key regional and international institutions other Multilateral Development Banks, UN organization, bilateral development agencies, non-governmental organisations as well Regional Member Countries, the AfDB is committed to and has a track record in supporting climate resilient and low-carbon investments in Africa—investments that produce visible and sustained outcomes. More donors and partners are invited to join the strengthening and scaling up of these efforts.

Please find a snapshot of AfDB project and programmes here followed by specific project examples.

**+80%**

The Malawi National Water Development Programme will serve 5.3 million more people, 19,822 management committees functioning, sanitation facilities for 80% of schools and public places, 80% access to household sanitation and hand washing facilities.

**+467%**

The combination of more land for cultivation and improvements to land already under cultivation has led to substantial increases in agricultural output, with total crop production growing from 4,503 to 25,573 metric tonnes a year with the Participatory Integrated Watershed Management Project (PIWAMP).

**170M\$**

The GEF will contribute up to USD 21.6 million to Public-Private Partnership Platform for Renewable Energy Technologies program while AfDB co-financing is estimated at USD 70 million, which will leverage approximately USD 170 million from the private sector.

## Increased Rail Traffic



The Tangier–Marrakech Railroad Capacity Increase Project will increase passenger traffic from 16 million in 2010 to nearly 23.5 million from 2016

## Water Resources



Namibia Integrated Resource Management Plan benefits the country's entire population, about 2.3 million people. Partly because of the project itself, the Government of Namibia has made a 180-degree turn in the way water resources are being managed and used

## Irrigation and Reforestation



Over 1 000 000 ha will be brought into productive use as a result of the AfDB's investments in irrigation and reforestation

## Women



A judicious and integrated management of Lake Chad Basin's natural resources is expected to increase the incomes of the target population, particularly women, by 67% on average, as well as improve food security

## Electricity



The Menengai Geothermal Project in Kenya has the potential to produce 1,600 MW with an estimated two million tonnes of carbon dioxide emission reduction per annum.

## Tons of CO<sub>2</sub> Saved



The 120-160 MW CSP plant project at Ouarzazate, Morocco will help Morocco avoid 240,000 tons of CO<sub>2</sub> equivalent a year.

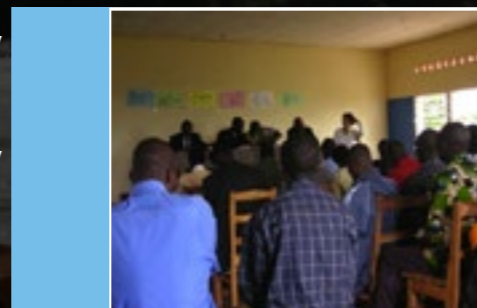


# Projects and Programmes by Topic

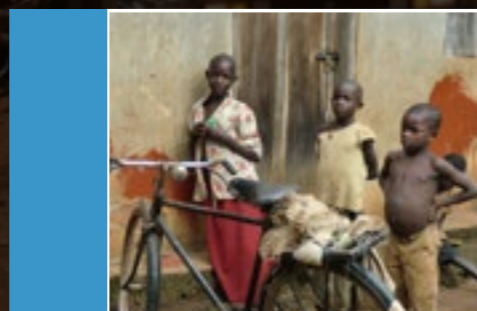
**Building Adaptive Capacity  
through Integrated  
Water Resources Management**



**Improving Community  
Resilience and  
Adaptive Capacity**



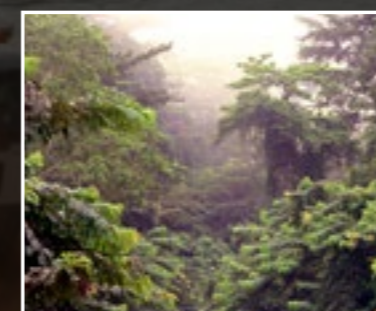
**Addressing  
Climate Change  
Health Risks**



**Investing in Climate  
and Weather Services  
for Development**



**Enhancing Investments in  
Clean Energy and  
Energy Efficiency**



**Enhancing Sustainable  
Land Use and  
Forestry Management, REDD+**



**Promoting  
Sustainable  
Transport**



**Supporting  
Innovative  
Technology**

# Building Adaptive Capacity through Integrated Water Resources Management

Increased hydro-climatic variability due to climate change has intensified water stress, particularly in the drought-prone areas of Africa. Hence, enhanced water resources management and storage infrastructure is critically needed. Integrated Water Resources Management (IWRM) is a process that promotes coordinated development and management of water, land and related resources in order to maximize economic and social welfare without compromising the sustainability of vital ecosystems. The IWRM approach is a cross-sectoral and holistic one; it recognizes water as an economic, social and environmental good that should be equally distributed to all demographics.

## The Mano River Union Ecosystem Conservation and International Water Resources Management Project

**Description:** The project aims to strengthen on-going and introduce new conservation efforts in the Upper Guinea Forest, which covers part of Sierra-Leone, Guinea, Côte d'Ivoire and Liberia. This unique biodiversity hotspot has an estimated 9,000 vascular plants, 25 per cent of which are endemic. Increased population, limited economic opportunities for local populations and a lack of institutional capacity to design and enforce ecosystem management measures are threatening this important ecosystem, which has shrunk to a mere 15% of its original size (current remaining surface is estimated at 93,000 Km<sup>2</sup>).

**Impact:** This regional project covering the Upper Guinea Forest in Côte d'Ivoire, Guinea, Sierra-Leone and Liberia will benefit the population whose livelihoods are connected to the forest.

**Funding:** The overall project cost is estimated at USD 31 million where the Global Environment Facility (GEF) is financing USD 6.3 million and the African Development Bank (AfDB) including other donors in the area will finance the remaining. The African Development Bank will channel a GEF grant of USD 6.3 million to the Mano River Union Secretariat.

## Zambia Multipurpose Small Dams Project

**Description:** The Africa Water Facility (AWF) is providing the funding that will be used to modernize and update the guidelines that govern and promote investments in multi-purpose small dams with the aim to give greater relevance to the selection of potential dams using criteria based on community interest and environmental protection. The project focuses on drought-prone areas of the Eastern, Central and Southern provinces of Zambia.

**Impact:** This project should ultimately result in attracting the massive investments required to proceed with its implementation. The dams are expected to directly improve the lives and livelihoods of an estimated 90,000 people, and indirectly benefit about a million people living in rural areas, thus enhancing water security in more vulnerable parts of the country.

**Funding:** AWF is mobilizing EUR 950,000 alongside the Government of Zambia's contribution of EUR 150,000

## Namibia Integrated Water Resources Management Plan

**Description:** The AWF supported the preparation of an IWRM plan for more sustainable use and management of water resources in Namibia—one of the most arid countries in Africa.

**Impact:** The project benefits the country's entire population, about 2.3 million people. Partly because of the project itself, the Government of Namibia has made a 180-degree turn in the way water resources are being managed and used, while taking into account long term climate considerations

**Funding:** AWF provided EUR 498,200 in grant resources alongside a contribution by the Government of Namibia amounting to EUR 150,000.

## Malawi National Water Development Programme

**Description:** The objectives of the Malawi National Water Development Programme are to increase access to sustainable water supply and sanitation services for people living in cities, towns, market centres and villages, as well as to improve water resources management at the national level. The main components of the programme encompass water supply systems provision and management, sanitation and hygiene improvement, capacity building, program management and water resources management. The programme commenced in July 2008 and has a 5-year duration

**Impact:** The expected results following the implementation of this programme include the provision of rehabilitated as well as new water points and schemes with 100% functionality to serve 5.3 million more people, 19,822 management committees functioning, sanitation facilities for 80% of schools and public places, 80% access to household sanitation and hand washing facilities and 100% of existing GFS catchments protected with around 200m of vegetated buffers..

**Funding:** Through the African Development Fund (ADF), the AfDB has mobilized EUR 16.2 million in concessional loans and EUR 11.4 million in grants. AN additional RWSSI Trust Fund grant for EUR 3.5 million complemented the Government's contribution equivalent to EUR 18.3 million. Other donors contributed the equivalent of EUR 108.4 million.



# Improving Community Resilience and Adaptive Capacity

The Bank alongside host country governments, donors and other developmental partners are making a concerted effort in order to ensure that African societies and economies are able to withstand the negative impacts of climate change, as well as recover quickly and in a cost-effective manner from climate-related disasters.

## Pilot Programme for Climate Resilience (PPCR)

The Pilot Program for Climate resilience (PPCR) is part of the Strategic Climate Fund under the Clean Investment Funds. The PPCR is designed to support countries as they undertake scaled-up climate action and transformational change by integrating climate resilience in their national development planning. The PPCR is at work in the following African countries – Mozambique, Niger and Zambia.

**Mozambique's** strategic program for climate resilience under the PCR will help to mainstream climate change in central budgets and planning, sectoral investments and the private sector. It aligns with Mozambique's National Adaptation Programme of Action (NAPA) to improve the capacity of roads and coastal cities to withstand climate change, transform hydro-meteorological services, and enhance climate resilient agricultural production and food security. The plan encompasses nine projects, two of which are being implemented by the AfDB with USD 32 million from the PPCR.

The PPCR intervention in **Niger** is discussed in more detail on page 21.

**Zambia's** strategic program for climate resilience will help strengthen early warning weather systems, integrate climate resilience in infrastructure planning and investments, and help farmers in the most affected areas of southern and western Zambia adapt to climate change while protecting the natural ecosystem.

## Drought Resilience and Sustainable Livelihoods Programme in the Horn of Africa, Multinational

**Description:** Following the incidence of recurrent droughts and the human, livestock and environment implications, the AfDB carried out a Regional Study on Sustainable Livestock Development in the Horn of Africa (HOA), as part of its Economic Sector Work (ESW), which was financed under the Multi-Donor Water Partnership Programme in 2008 and finalized in 2010. The study was carried out in close collaboration with the Inter-Governmental Authority on Development (IGAD) and its member countries (Djibouti, Ethiopia, Kenya, Somalia, Sudan, South Sudan and Uganda). The general objective of the study was to collect and analyze information with a view to preparing implementable strategic interventions that would alleviate the major constraints of water, pasture and livestock development in the region. This Drought Resilience and Sustainable Livelihoods Programme was conceptualized based on the outcome of the AfDB financed 2008-10 Regional Study, and is expected to run for 5 years.

**Impact:** The objective of the programme is to enhance drought resilience and improve sustainable livelihoods of the pastoral communities, leading to improved livelihoods and rural incomes, Improved resilience of pastoral production system, and strengthened regional economic and institutional integration.

**Funding:** The AfDB is considering a USD 112.8 million contribution coupled with a USD 7.7 million capacity building grant from IGAD for the project, alongside a USD 11.3 million contribution by the Government of Kenya.



## Lake Chad Sustainable Development Support Programme

**Description:** The Lake Chad basin, which spans across five countries including Cameroon, Niger, Nigeria, the Central African Republic and Chad, is drying up. In the 1960's this fresh water lake covered 25,000 square kilometres but today it covers only approximately 2,500 square kilometres. It is also about half as deep as it once was at 3 feet rather than 6 feet. The basin's ecosystem and natural resources, which the farmers, grazers and fishermen in the region depend on, have been badly affected. This depletion has been caused largely in part by climate change.

**Impact:** A judicious and integrated management of the basin's natural resources is expected to increase the incomes of the target population, particularly women, by 67% on average, as well as improve food security.

**Funding:** The African Development Bank provided a grant for about half the funding of a 6-year USD 95 million Lake Chad Sustainable Development Support Programme that began in 2009.

## Climate Adaptation for Rural Livelihoods and Agriculture (CARLA)

**Description:** The project is implementing measures for improving resilience and adaptive capacity in the areas where the African Development Bank's Smallholder Crop Production and Marketing Project (SCPMP) is taking place, with a particular focus on the vulnerable areas and communities. The project objective is to improve resilience to current climate variability and future climate change by developing and implementing cost-effective adaptation strategies, policies and measures that will improve agricultural production and rural livelihoods.

**Impact:** The project will benefit the rural population in the six districts that have been identified in the National Adaptation Plan of Action (NAPA).

**Funding:** The project total cost is estimated at USD 6.2 million out of which the Global Environment Facility (GEF) is co-financing USD 3 million and the remaining is distributed among UNDP and the Government of Malawi.

# Addressing Climate Change Health Risks

Climate change and variability affects in detrimental ways some of the most fundamental determinants for good health: clean air and water, sufficient food, adequate shelter and freedom from disease. A warmer and more variable climate increases the transmission of water, vector and food borne diseases, and also threatens to change the prevalence of those associated with air pollutants and aeroallergens. Climate change could alter or disrupt natural systems thereby bringing new challenges to the control of infectious diseases, as a changing climate makes it possible for diseases to spread or emerge in areas where they had been limited or had not even existed before.



### Climate Change Health Risk Assessment (CCHRA) Project

**Description:** Studies in five countries will be undertaken to support undertaking climate change health risk assessments, in order to provide underpinning evidence to guide the development of national adaptation and mitigation strategies.

**Impact:** By the end of the project, the capacity of the study countries will be enhanced to undertake and manage climate change related health risks. In addition, mechanisms will have been established to support climate change-resilient health policy formulation; and lessons learned would have been collected and knowledge management components established and shared, as an important element of the sustainability and replicability strategies of this project. The achievement of these outcomes will constitute a significant enhancement in adaptive capacity for Africa. In the long term, project actions will enhance adaptive capacity not only by building systems and processes for better integration of climate change risks into the health sector, but also in terms of impacts by improving human health in general.

**Funding:** The AfDB is supporting the project by mobilizing USD 434,500 in grant resources.

### The African Integrated Surveillance System on Environment and Health (AISSEH) Project

**Description:** The project focuses on technical and institutional capacity building for the monitoring and management of environmental factors most relevant to health, health outcomes most influenced by the environment, and policy action deemed to reduce and prevent the risks. This will be achieved through training a critical mass of national staff in various areas of environmental health, equipping/renovating national centres, laboratories and stations in 20 countries, procurement of data collection and management devices (hardware and software), rolling out the use of new technologies, remote sensing and geographical information system, fostering in country and inter-country cooperation and technical networking. The project intends build an integrated system that will facilitate the link between diverse sources of information in relevant scientific areas of health and environment.

**Impact:** The project will ensure the integration of policy analysis data on various health and environment aspects and create tools for assessment and reporting in 20 African Countries. The project intends to facilitate the link between diverse sources of information in relevant scientific areas of health and environment linkages. It will help decision-makers to formulate succinct, policy-relevant messages suitable for various user groups – including general public, environmental and health managers, decision makers and scientists. The system will track trends in indicators that focus on environmental factors most relevant to health, health outcomes most influenced by the environment, and policy action deemed to reduce and prevent the risks. It will therefore be of key importance assessing the level of achievement of health and environment related MDGs.

**Funding:** The AfDB is considering a contribution of USD 39 million.

# Investing in Climate and Weather Services for Development



The need for the provision and use of appropriate climate-related information in development planning is fundamental to addressing Africa's climate change risks. The World Meteorological Organization has noted that Africa requires, at a minimum, eight times the current number of meteorological stations to provide adequate climate services to effectively support development. This situation is compounded by the fact that even the few functional stations are faced with substantial challenges that include limited trained personnel and obsolete equipment, contributing to their inability to report as required. There is a general consensus to strengthen the capacities of Africa's Regional/National Meteorological and Hydrological Services to support development in the continent, while meeting the challenges posed by climate change.

## Niger's Climate Information Development and Forecasting Project

**Description:** This project aims to improve the national climate observatory system, research and optimize climate modelling, strengthen the national early warning system, and expand communication on climate information to end users. It was approved by the Pilot Programme on Climate Resilience (PPCR) Sub-Committee as part of the Strategic Climate Fund under the Climate Investment Funds in June 2012. In addition to climate projection, forecasting, and disaster prevention, the climate data generated will form the basis of a weather index-based crop insurance scheme to be implemented in collaboration with International Finance Corporation (IFC).

**Impact:** More comprehensive and accurate hydro-meteorological data means Niger can better understand current and potential future climate in all eight regions of the country so adaptation responses can be tailored to address the vulnerabilities of specific populations, particularly rural communities that rely on rain-fed subsistence farming. The project will ultimately reduce the risk of farming and strengthen food production and agricultural development to meet the food security requirements of Niger.

**Funding:** USD 13 million will be channelled from PPCR, through the AfDB, to Niger.

## Operationalizing the Climate for Development in Africa Program (ClimDev-Africa)

In the bid to further enhance the provision of adequate climate and weather services, the African Union Commission, the African Development Bank and the United Nations Economic Commission for Africa, have established the USD 135 Climate for Development in Africa program (ClimDev-Africa) with support from several donors. The program seeks to strengthen the capacities of Africa's climate institutions to be able to generate and widely disseminate appropriate, useful and useable climate information. Additionally, the program seeks to enhance the capacity of Africa's policy makers to be able to use such data routinely in development planning.

To demonstrate its commitment to this initiative, the African Development Bank has contributed a USD 30 million grant to strengthen the capacities of four African regional climate centers: the African Centre for Meteorological Applications for Development (ACMAD), the Agro-meteorology and Hydrology Regional Centre (AGRHYMET), IGAD Climate Prediction and Application Centre (ICPAC) and the Drought Monitoring Centre (DMC). Additionally, the AfDB contribution seeks to enhance the capacities of selected African scientists to generate appropriate climate-relevant information and disseminate these through appropriate channels to intended end-users.

Donors are welcome to support this flagship African program, and highlighted below are some of the examples of project proposals received:

- 1 Strengthened meteorological infrastructure and human capacity for enhanced service provision and early warning of weather and climate related disasters in Tanzania. The objective of the project is to strengthen the capacity of the Tanzania Meteorological Agency in providing reliable, accurate and timely meteorological services. The expected outcomes of the project are the reduction in vulnerabilities of the communities from weather and climate related disasters thereby contributing to the protection of life and property including meeting national environment and poverty eradication goals. The estimated cost of the project is EUR 3.4 million.
- 2 Satellite-based Water Monitoring and Flow Forecasting System in the Niger River Basin by the Niger Basin Authority (NBA). The objective of the project is to build on the recent upgrade of the HYCOS monitoring system of the Niger Basin by piloting a satellite-based system. The expected outcome of the project is to enhance the NBA capacity to timely forecast and monitor drought and predict its effects and to allocate water to drought affected areas. The estimated cost of the project is EUR 2.5 million.
- 3 Improvement of Weather Network Observations in Mali (Nationale de la Météorologie du Mali). The objective of the project is to improve the collection and transmission of weather data to end-users by upgrading existing weather stations. The expected outcome of the project is the protection of lives and goods during extreme meteorological and hydrological events and to contribute to productivity increase and efficiency of economic and social activities. The estimated cost of the project is EUR 1.3 million.

# Enhancing Investments in Clean Energy and Energy Efficiency

The increased provision and use of energy and its associated services is a fundamental element of enhanced economic development. Increased access to energy is a proven link to economic development and hence poverty alleviation. Africa has the world's lowest electrification rate; nearly 75% of the African population lack access to electricity. However, in recent years there has been rapid urban growth leading to increases in aggregate commercial energy demand and linked emissions. On average, the demand for access to modern energy in Africa is growing faster than the supply. Simultaneously, the need for Africa to comply with the global agenda of greenhouse gas reduction while ensuring economic growth remains a key issue. Balancing demand with the need to promote clean energy that relies on renewable energy resources is essential for a low-carbon development pathway.

## Promoting Solar and Wind Energy for Rural Water Supply in Ethiopia

**Description:** The objective of the project is to promote and pilot the use of solar and wind energy for water pumping in rural areas of Ethiopia. The development of a long-term investment plan for these technologies under the Universal Access Programme (UAP) where they are most appropriate and suitable is also initiated.

**Impact:** The energy required for pumping water is typically costly and polluting. Promoting the use of solar and wind energy will reduce greenhouse gas emissions and costs over time, particularly in the context of rural Ethiopian agriculture.

**Funding:** The total cost of the programme is EUR 2,165,680. The Africa Water Facility (AWF) grant contribution is EUR 1,991,880 and the contribution from the Government of Ethiopia is EUR 173,800.

## Concentrated Solar Power in the MENA Region

**Description:** The Middle East and North Africa (MENA) region's Clean Technology Fund (CTF) Investment Plan will accelerate the global deployment of concentrated solar power (CSP) by investing in the CSP expansion programs of five countries in the MENA region: Algeria, Egypt, Jordan, Morocco and Tunisia.

**Impact:** The 120-160 MW CSP plant project at Ouarzazate, Morocco is the first project to be approved and launched in May 2012. Its development marks an important step in Morocco's national plan to deploy 2,000 MW of solar power generation capacity by 2020 to support national objectives of energy security, job creation, and energy exports. The first phase of the Ouarzazate project will develop a parabolic trough plant through a PPP between the Moroccan Agency for Solar Energy (MASEN) and a private partner. Ouarzazate Phase 1 will involve the installation of 120-160 MW to come on line by 2014 and will help Morocco avoid 240,000 tons of CO<sub>2</sub> equivalent a year.

**Funding:** The AfDB is channeling USD 300 million from the CTF with its own contribution of USD 512 million to CSP projects in Tunisia, Egypt and Morocco.



## Cabeólica Wind Power Plant, Cape Verde

**Description:** The Project consists of the construction, operation, and maintenance of four onshore wind farms on four islands of the Cape Verde archipelago. The wind farms will provide a total of 25.5 MW of electricity to the grid on each island. In 2009 97% of the country's 86 MW in installed capacity came from diesel and fuel oils. Since 2003, power generation in Cape Verde had increased at an annual rate of 8%; nonetheless, Cape Verde witnessed higher levels of power outages as the increase in capacity was counteracted by comparatively greater increases in demand. Additionally, Cape Verde witnessed one of the highest electricity generation costs in the world because of the dependence on oil derivatives and high transport costs.

**Impact:** Not only did the Project help to address the power deficit in Cape Verde, but the positive environmental affects have been quite significant. Cabeólica has helped to decrease greenhouse gas emissions by reducing CO<sub>2</sub> emissions by at least 85,000 metric tons per year. In addition, economic analyses suggest that the project produced an economic internal rate of return in excess of 15%. Moreover, the project has allowed Cape Verde to rely on domestic resources rather than imported oil thereby protecting the country from the volatility of world oil prices and the inefficiency of diesel and fuel operated plants.

**Funding:** The AfDB provided a EUR 15 million senior loan to InfraCo-eleQtra, working through a PPP with the Government of Cape Verde.

## Menengai Geothermal Project, Kenya

**Description:** Developed by the state-owned Geothermal Development Company (GDC) with investment from the African Development Bank (AfDB), the Kenya Menengai Geothermal project aims to produce electricity for 500,000 households. Located in the African Rift Valley, the Menengai project is being developed in phases, with phase one providing 400 MW by 2015. In total, the project has the potential to produce 1,600 MW with an estimated two million tonnes of carbon dioxide emission reduction per annum.

**Impact:** As well as domestic use, the project will cater to 300,000 small businesses and provide a further 1,000 GWh to other businesses and industries on completion. The Menengai Geothermal Project will be critical to Kenya's efforts towards achieving energy sustainability and independence.

**Funding:** The AfDB has approved the financing for the project, consisting of a loan of USD 125 million from the African Development Fund and a grant of USD 25 million from the Scaling-Up Renewable Energy Program under the Climate Investment Funds (CIF), for which the AfDB is an implementing agency.

## Enhancing Sustainable Land Use and Forestry Management, REDD+

Africa's rate of deforestation is about twice the world rate, and the continent is losing more than 4 million hectares of forest cover every year. Deforestation and poor agricultural practices account for about 65% of Africa's emissions. Addressing climate change requires action in reversing deforestation in the continent. The Bank has invested substantially in preserving Africa's forests, and it has contributed substantially to reducing greenhouse gas emissions particularly in the Congo Basin Forests.



### Participatory Integrated Watershed Management Project (PIWAMP)

**Description:** The PIWAMP was developed to address soil degradation and water management issues, taking into consideration the concerns of the farmers and the government and their desire to improve household food security and rural incomes. Prior to the project the land was not cultivable due to lack of access to some of the fertile lowland areas and degradation of the uplands as a result of soil erosion and the lowlands due to siltation. The project's main beneficiaries have been poor smallholders dependent on traditional upland crops (groundnuts, millet, sorghum) and lowland rice cultivation for their livelihoods.

**Impact:** The most significant output has been that 5,800 hectares of land in the lowlands have become available for cultivation after the construction of 33 kilometers of spillways and 68 kilometers of dykes. The construction of 195 kilometers of contour bunds and a sizeable number of diversion bunds has reduced soil run-off and erosion, and the flooding of settlements has decreased. Additionally, less soil erosion in the uplands and less siltation in the lowlands (connected phenomena) has substantially helped maintain soil fertility. The combination of more land for cultivation and improvements to land already under cultivation has led to substantial increases in agricultural output, with total crop production growing from 4,503 to 25,573 metric tonnes a year and the project areas' contribution to national rice production increasing from 3.57% to 12.08%.

**Funding:** The AfDB provided USD 7 million from the Nigeria Trust Fund (NTF) alongside other donors, including IFAD and beneficiary contributions, to cover the USD 17.5 million project.

### Quantification of Carbon Stocks and Emissions in the Forests of the Congo Basin

**Description:** The project aims at quantifying forest carbon emissions from forest loss and degradation using carbon accounting methodologies as per the guidelines of the Intergovernmental Panel on Climate Change (IPCC). It also seeks to help develop national carbon accounting strategies, and thus positions the country to benefit from future forest carbon payment schemes. The project is also building the capacity of the satellite observatory for Central Africa (OSFAC) to monitor forest carbon.

**Impact:** OSFAC now has staff with unique skills on the Wall-to-Wall methodology (forest cover change), NDFI (degradation), stock change and gain-loss methods (for carbon stocks emissions), all recommended by UNFCCC. This is a combination that is unavailable elsewhere in a single Center in the Congo Basin. All forest cover change Landsat mosaic ETM+ data (1990 – 2010) analyses scripts, tutorials and purpose-built hardware and Software are available at project offices – OSFAC Kinshasa and OSFAC Brazzaville.

**Funding:** Through the AfDB, the Congo Basin Forest Fund (CBFF) has delivered EUR 1.24 million for this project.

### Alternatives to Mangrove Destruction for Women's Livelihoods in Central Africa

**Description:** The project aims at promoting profitable aquaculture and improved fish smoking techniques that require less mangrove wood. These new techniques are expected to reduce the demand for mangrove wood as fuel for fish smokers, a practice that accounts for more than 80% of mangrove forest losses in Southern Cameroon. The new techniques are also expected to help reduce fish post-harvest losses and thereby increase local revenues from the sales of prawns and smoked fish.

**Impact:** After two years of implementation, the 1,246 women involved in fish smoking in the 9 villages targeted by the project have adopted wood saving techniques for fish smoking. 300 improved fish smoking stoves have been built and all women have abandoned the traditional smoking techniques. Reasons for such quick positive results are reported to be: reduction of time spent to smoke one basin of fish that has been reduced from one week to 2 days; reduction of number of visits to the ophthalmologist due to less exposure to the smoke; and increase of revenues fostered by the increased in smoked fish sales.

**Funding:** Through the AfDB, the Congo Basin Forest Fund has contributed EUR 274,315 for the project.



# Promoting Sustainable Transport

Africa has several opportunities for developing greener transport links that ensure more inclusive economic growth, engender further social integration, and contribute to militating against climate change.



## Aldus Aircraft Africa Leasing, Multinational

**Description:** The Project consists in setting up Africa's first regional aircraft leasing facility through the purchase of six new and six pre-owned Embraer 170/190 Jets. Leasing operations, run out of South Africa, will exclusively target African airlines.

**Impact:** The Project aims at building the efficiency and competitiveness of African airlines. By developing intra-Africa connectivity, the Project will help lower the need to travel through Europe and the Middle East to reach intra-Africa destinations, thereby cutting carbon emissions. At the moment, the average age of aircraft operating in Africa is 14 years, twice the global average. By investing in modern, fuel-efficient technology, the Project will help reduce CO<sub>2</sub> emissions and improve Africa's aviation safety record.

**Funding:** Acting as Lead Arranger, the AfDB will endeavour to raise up to USD 170 million in financing from the market, including DFIs and commercial lenders. Loan disbursements are to be contingent on the proper execution of lease agreements with six or seven African airlines.

## Tangier–Marrakech Railroad Capacity Increase Project, Morocco

**Description:** This project is part of an on-going national development strategy in the transport sector of Morocco. It includes upgrading and modernizing infrastructure and transport services to increase Morocco's economic competitiveness. The project will be implemented from 2011 to 2016 and aims to strengthen the rail infrastructure to meet the growing annual passenger and goods traffic on the Tangier-Marrakesh axis.

**Impact:** The project aims at improving rail transportation competitiveness on the main Tangier-Marrakesh railway line. The project will lead to an improvement in rail traffic fluidity and an increased frequency of shuttle, mainline, and freight trains, which will lead to increased population mobility in the project area. It is also hoped that the project will result in more use of rail transport in place of road transport and thus a reduction in CO<sub>2</sub> emissions. Annual passenger traffic on the line is expected to increase from 16 million in 2010 to nearly 23.5 million from 2016

**Funding:** The AfDB is providing EUR 300 million to the Government of Morocco for the project.

## Lagos Cable Transit, Nigeria

**Description:** With over 16 million inhabitants, Lagos is one of the most densely populated cities in the world. Rapid urban growth, decades of inadequate urban planning, and a challenging natural topography have resulted in road congestion and related pollution. The average commuter in Lagos spends over 3 hours in traffic every day. In 2008, to respond to the lack of formal mass transit systems in Lagos, a Bus Rapid Transit (BRT) system was introduced to cater to some 200,000 commuters. However, due to severely congested road and bridge system, other ground-based solutions have limited impact. Thus, the Lagos Cable Transit system is being pursued.

**Impact:** By taking cars and buses off the street, the Project stands to significantly reduce congestion and carbon emissions in Lagos. The Project stands to provide an affordable and reliable mass transit system for over 350,000 people in Nigeria's economic capital. The Project stands to impact the lives of up to 350,000 commuters through 10 km of Tricable Ropeway Technology, reducing commuting times from 2 to 3 hours to 15 minutes.

**Funding:** The AfDB has been appointed as Mandated Lead Arranger in this transaction. In addition to providing a USD 60 million senior loan, the AfDB has played a leading role, advising Project Sponsors on scaling up this project from pilot to city-wide mass transit solution. The AfDB has also played a leading role in applying for Carbon Credits from the UNFCCC.



## Supporting Innovative Technology

The development and deployment of technology plays an increasingly critical role in the global response to the challenges of climate change. Vulnerable communities in particular require both financial and technological support to adapt to climate change..

### The Climate Change Centre of Technology Project

**Description:** The project is designed to support the development and transfer of climate technologies in African countries as a way to help reduce greenhouse gas (GHG) emissions and vulnerability to climate change. The project will be implemented through the three following components: (i) enhancement of cooperation with development partners to maximize technology transfer and financing; (ii) enabling the scaling-up of technology transfer in policy, institutional and organizational national reforms addressing mitigation and adaptation; and (iii) integrate technology needs into programs, plans and investments priorities.

**Impact:** The three-year project will provide a platform for disseminating knowledge and bring together key stakeholders to develop innovative financing mechanisms for both mitigation and adaptation technology transfer across the continent. The centre will be located at the African Development Bank headquarters and will respond to AfDB's regional member countries request to support their activities in terms of climate technology transfer.

**Funding:** The pilot phase of the project is estimated to USD 15.8 million and will be entirely financed by the Global Environment Facility (GEF).



### Public-Private Partnership Platform for Renewable Energy Technologies

**Description:** This program will promote the scaling up of renewable energy technologies in Africa through non-grant co-financing. By supporting projects that increase the power supply from renewable energy sources, this three-year program will help expand the GEF's reach and contribute to delivery of universal power supply and GHG reductions continent-wide.

**Impact:** Synergies will be found with other Bank-sponsored instruments promoting renewable energy technologies such as the Clean Technology Fund (CTF), the Program on Scaling-Up Renewable Energy in Low Income Countries (SREP) and the Sustainable Energy Fund for Africa (SEFA).

**Funding:** The GEF will contribute up to USD 21.6 million to this program while AfDB co-financing is estimated at USD 70 million, which will leverage approximately USD 170 million from the private sector.

### Green Tech Financial Facility

**Description:** The Green Tech Financial Facility is a vehicle for investments in private-sector driven green technology projects. At its inception, the Green Tech Financial Facility is being explored and developed in-house through a preparation grant from the Sustainable Energy Fund for Africa (SEFA). This SEFA grant will support the Bank in structuring and launching an investment facility aimed at increasing private capital flow channeled to private sector-led projects that implement carbon-reducing and clean technologies for Africa. The optimal structure and fund management protocol for the financial facility will be informed by thorough market research and analysis.

**Impact:** The grant will also support the design of a Technical Assistance Facility to provide capacity and implementation support to the investee companies. This grant furthermore aligns with SEFA's equity investment window and ABREC could thus become a vehicle for SEFA (as a co-investor) to direct investments to SMEs along the clean energy value chain.

**Funding:** The Sustainable Energy Fund for Africa (SEFA) approved on 17th August 2012 its first grant for a total of USD 825,000 to finance the concept phase of the Green Tech Financial Facility.

# A Knowledge Broker for Africa

The AfDB, as a “Knowledge Broker,” has been actively promoting the generation, translation, dissemination and sharing of information, geared towards providing timely and relevant advice to Regional Member Country representatives, including the African Negotiators on climate change. Since 2006, the AfDB has been positioning itself as a centre for knowledge and ideas on African development. The Bank has been conducting high quality research and leveraging policy-relevant innovation that is aligned to its priority areas of operations and programs. This process has been facilitated by enhancing and mobilizing knowledge services both internally within the Bank and externally from networks of African and non-African institutions and think tanks.

## Generating Africa Specific Technical Reports

The AfDB has led and contributed to the development of several technical documents on climate change and related development issues on the continent with the aim of providing knowledge and facts that are disaggregated at relevant scales for the continent. Some of these technical pieces include:



1. Getting Africa Ready for the Operationalization of the Green Climate Fund (GCF)
2. The Cost of Implementing Sustainable Development in Africa
3. The Cost of Adaptation in Africa
4. Africa Ecological Footprint Report
5. Review of the High Level Panel on Climate Financing (AGF) Report and Next Steps for Africa
6. Monitoring and Evaluation Frameworks and the Performance and Governance of International Funds

## Tool Kits and Guidance Products

**1** The AfDB's **Climate Safeguards System (CSS)** has been developed to assist project teams assess the climate risks in their operations, as well as provide the necessary options for addressing relevant issues. The CSS includes a tool for climate screening in the most vulnerable sectors, a screening manual, and an Adaptation Review and Evaluation Procedures (AREP). The Finnish Trust Fund supports this activity.

**2** **Building Blocks for Nationally Appropriate Mitigation Actions (NAMAs)** This guidebook intends to help countries in Africa better understand the concept of NAMAs and the processes in developing these.

**3** The AfDB, in collaboration with the OECD, UN and WB produced **A Toolkit of Policy Options to Support Inclusive Green Growth** that was submitted to the Development Working Group of the G20.

**4** **The PoA Handbook for Africa** has been developed and published with the aim of explaining and promoting the Programme of Activities (PoAs) under the CDM to development actors in Africa.

## Strengthening the African Voice

The AfDB has scaled up efforts to optimally apply its privileged position as a convener and voice of Africa to influence policy directions and decisions on climate change. It has a clear obligation to lead such efforts given its significant value as a trusted continental institution with a unique African character.

In recent times, the Bank has played a key role in mobilizing a strong and unified African voice on climate change, working together with the Africa Union (AU), the United Nations Economic Commission for Africa (UNECA) and the African Ministerial Conference on the Environment (AMCEN). The establishment of the African Pavilion during COP 17 was a flagship partnership product in 2011. This was the first time Africa had a dedicated platform at the conference for high-level engagement.

In recognition of the critical role played by the African Group of Negotiators (AGN), the AfDB has sustained a continuous commitment since 2008 to provide legal, technical and financial support to the AGN. This support is seen to enhance the AGN's ability to ably and effectively represent the continent during the climate change negotiation process. The Bank provides capacity building and develops relevant analysis to inform and strengthen the AGN representation of the African Common Position. The AfDB also sponsors a critical mass of negotiators to attend the climate change talks every year.

The AfDB co-hosts the Africa preparatory process for the COP with a view to building a consensus on Africa's key priorities and concerns to be reflected in the outcomes of these conferences. The Bank also co-hosted the Africa preparatory process for the UN Conference on Sustainable Development, Rio+20.

## Boosting Capacity Development



### Programme for the Development of Nationally Appropriate Mitigation Actions (NAMAs) in Africa

The AfDB is implementing a number of activities aimed to assist African countries to prepare their NAMAs. Through capacity building workshops on climate change, the AfDB has been raising awareness on the importance of NAMAs for developing countries. Furthermore, building on a workshop held in 2011 during the UNFCCC negotiations in Panama and a side event titled “NAMAs: A catalyst For Low-Carbon Development in Africa” hosted at COP-17 the AfDB, in collaboration with Ecofys, has developed guidelines (Building Blocks for Nationally Appropriate Mitigation Actions, 2012) to assist countries prepare their NAMAs. The guidelines are an initial step to enhancing capacity building and engagement with member countries on NAMAs as they develop their low-carbon development and green growth national strategies.

The level of readiness is key to how countries respond to the opportunities presented by NAMAs. A survey was distributed in early 2012 to evaluate country appetites for NAMA ideas. Ethiopia, with its Climate Resilient Green Economy Strategy, has been the earliest to engage; the AfDB has supported its development of a NAMA in the transport sector. A plan is underway to assist other countries including Mauritius (energy sector), Uganda (agriculture sector) and The Gambia (agriculture sector). The AfDB is also actively supporting Africa’s engagement in the climate negotiations with regards to shaping NAMAs and other climate change instruments, to ensure they respond to the needs of the continent.

### Partnership on Sustainable Low Carbon Transport (SLoCaT)

The AfDB is one of the partner organisations of the Partnership on Sustainable Low Carbon Transport (SLoCaT). The overarching goal of the partnership is the mobilization of global support for the reduction in the growth of greenhouse gas (GHG) emissions generated by land transport in developing countries (Africa, Asia and Latin America). SLoCaT members assist with the improvement in the knowledge generation and dissemination on sustainable low carbon transport while helping the development and catalyse more effective policies.

### Regional Training Sessions on Climate Change and Safeguards

Since 2010, the Bank Group has provided trainings under the theme of “Mainstreaming Climate Change and Environmental and Social Safeguards in Bank Operations” to about 350 experts and officials from the five sub-regions in Africa. The training sessions took place in Uganda, Zambia, Nigeria, Senegal, Cameroon and Morocco to enable key in-country development actors to gain a broad understanding of climate change and safeguards policy, as well as operational requirements to enhance the quality of implemented projects. Post-training evaluations showed that 95 percent of the 350 trainees found the workshop to have enhanced their general understanding of climate change and the Bank Group’s environmental and climate change safeguards procedures.

### Africa Carbon Forum

The African Development Bank is one of the strategic partners and organisers of the Africa Carbon Forum (ACF). The ACF is a trade fair and knowledge-sharing platform for carbon investments in Africa. It provides a platform for the discussion of the latest developments in the carbon market and how the Clean Development Mechanism (CDM) and other mitigation mechanisms can be successful in Africa. The ACF includes deal facilitation sessions where carbon project developers can showcase their projects. It brings together the main stakeholders of the carbon markets including project owners, project developers, national climate change focal points, national Clean Development Mechanism offices, Investment Promotion Agencies, Designated National Authorities (DNAs), service providers, financial institutions and intermediary companies. From 2008 till date, four African Carbon Forums have taken place in the following countries: Senegal (2008), Kenya (2010), Morocco (2011) and Ethiopia (2012).

### Africa Carbon Support Programme

The AfDB set up the African Carbon Support Programme (ACSP) in 2012 with funding from the Fund for African Private Sector Assistance (FAPA), supported by the Government of Japan. The programme provides direct technical support, awareness and training to AfDB staff, project owners and government agencies to assist them in integrating the Clean Development Mechanism (CDM) financing aspects into projects that are supported by the Bank.

Part of the ACSP program includes strengthening the operational DNA capacities for those countries where CDM projects have been identified, developed and commercialized. Capacity building workshops on the CDM were provided to three RMCs through their “CDM Designated National Authorities” (DNAs) in Mali (March 2012), Botswana (September 2012) and Burkina Faso (October/November 2012). In addition to the workshops, country specific training material has been developed and provided to the DNAs for their own use in promoting the CDM.

Through the ACSP, the Bank has played a lead role in the development and facilitation of the accreditation of a new methodology of the CDM that is Africa relevant. The methodology, “AM0108: Interconnection between Electricity Systems for Energy Exchange,” was approved by the CDM Executive Board of the United Nations Framework Convention on Climate Change (UNFCCC) during its 69th meeting held in Bangkok in September 2012. This methodology will pave the way for energy projects in Africa to receive additional revenue streams and therefore leverage additional investments for critical infrastructure.

# Leveraging Climate Finance for Africa

As the AfDB implements its Climate Change Action Plan, investing up to USD 6.4 billion between 2011 and 2015, the resources will be drawn from the Bank's own internal funding, bilateral trust funds and climate finance instruments. The AfDB will further enhance its investments through a more streamlined and efficient use of its various climate related financing instruments. The AfDB will also support other innovative approaches including the mobilization of domestic resources by countries. This section gives an overview of the funding mechanisms AfDB is engaged with.



## Climate Investment Funds (CIF)

The Climate Investment Funds (CIFs) are a set of financing instruments designed to initiate transformation to low-carbon and climate-resilient development through scaled-up financing channelled through the Multilateral Development Banks (MDBs), including the AfDB. The CIFs provide developing countries with grants, concessional loans, risk mitigation instruments, and equity that leverage significant financing from the private sector MDBs and other sources.

The CIFs comprise the Clean technology Fund (CTF) and the Strategic Climate Fund (SCF). They are one of the largest fast-tracked climate financing instruments in the world (USD 7 billion), and the AfDB has been involved with the CIFs since inception in 2008. The Bank expects to channel one third of all CIF financing to Africa - approximately USD 900 million.

### Climate Investment Funds

Clean Technology Fund (CTF)		Strategic Climate Funds (SCF)		
CTF Worldwide	USD 5 Billion	SCF Worldwide	USD 2 Billion	
CTF in Africa	USD 1.9 Billion	SCF in Africa	USD 615 Million	
AfDB Channeling	USD 757 Million	AfDB Channeling	USD 250 Million	
Demonstrate, deploy and transfer of low-carbon technologies for low-emmission development		Targeted programs to pilot new approaches to initiate transformation with potential for scaling up climate resilience		
		Pilot Program for Climate Resilience (PPCR)	Forest Investment Program (FIP)	Scaling up Renewable Energy Program in LDCs (SREP)
Renewables, energy efficiency, urban transport, commercialization of sustainable energy finance		Mainstream Resilience in Development Planning	Reduce emissions from deforestation and forest degradation	Create economic opportunity, increase energy access through renewables
Egypt, Morocco, Nigeria, South Africa, and MENA Region (Algeria, Egypt, Jordan, Morocco, Tunisia)		Mozambique, Niger, Zambia	DRC, Burkina Faso, Ghana	Ethiopia, Mali, Kenya, Tanzania, Liberia

## Global Environment Facility (GEF)

The Global Environment Facility (GEF) was established in 1991 as the financial mechanism for the Conventions on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), Stockholm Convention on Persistent Organic Pollutants (POPs), and the United Nations Convention to Combat Desertification (UNCCD). The GEF is responsible for operating four funds including the GEF trust Fund, the Least Developed Countries Fund (LDCF), the Special Climate Change Fund (SCCF) and the Nagoya Protocol Investment Fund (NPIF). Since 1991, the GEF has achieved a strong track record with developing

countries as well as those with economies in transition, providing (as of October 5, 2012) USD 10.9 billion in grants and leveraging USD 53 billion in co-financing for about 3,000 projects in over 165 countries.

The GEF provides financing to projects that are designed to improve the state of the global environment. Projects are related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. GEF funding is implemented through accredited agencies, which have direct access to the available resources. The AfDB became an imple-

menting agency of the GEF in 2004.

The Bank's portfolio is USD 80 million, out of which USD 61 million has been approved since November 2011. Activities are in the agriculture, natural resources, water management and renewable energy sectors. Projects are mainly distributed towards climate change mitigation activities, and a concerted drive is being made to increase the volume of climate change adaptation activities given the demand and increasing sources of funding being made available in this area for Africa.

## Congo Basin Forest Fund (CBFF)

Hosted by the African Development Bank, the multi-donor Congo Basin Forest Fund (CBFF) was launched in June 2008 by the Governments of United Kingdom and Norway, along with the Ministers responsible for forests from the Congo Basin member states of the Central Africa Forest Commission (COMIFAC).

The overall goal of the CBFF is to address the challenges associated with climate change by reducing and eventually reversing the rate of deforestation in the Congo Basin forests. To this end, the CBFF works in close cooperation with the governments of Central African countries, the Economic Community of Central African States (ECCAS), technical part-

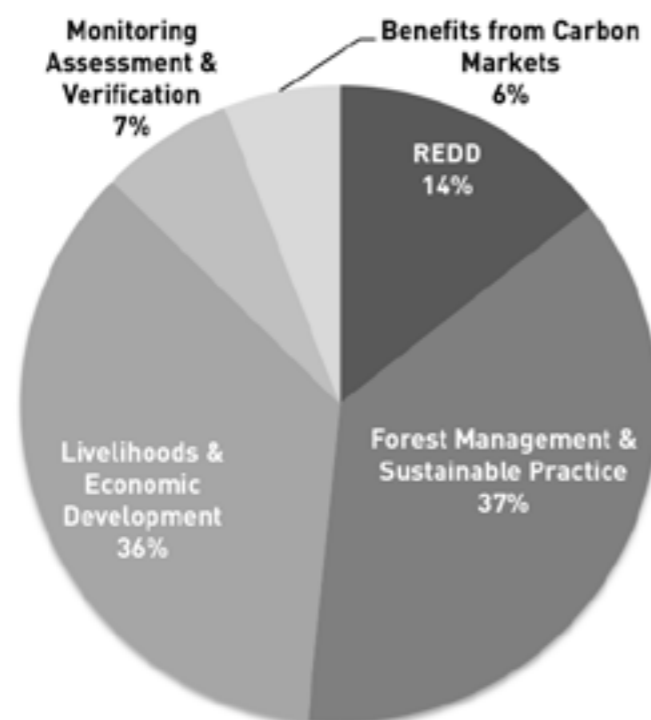
ners of the Congo Basin, development finance institutions, NGOs and the private sector. The Fund provides grants to eligible entities for activities that: (i) slow and eventually reverse the rate of deforestation in the Congo Basin; (ii) provide support mechanisms which conserve the forests; (iii) maintain benefits to local communities; and (iv) mobilize additional financial resources to support required actions. The capacities of national climate centres in the Congo Basin are also being strengthened through this fund to support their projects. Through this Fund, forest communities in the region are able to secure financial benefits through the REDD+ mechanism.

The Congo Basin Forest Fund received an initial capitalization of approximately EUR 118 million from the UK and Norway. The UK has pledged EUR 56.5 million (GBP 50 million) to Fund's activities, while Norway has pledged EUR 60.7 million (NOK 500 million).

So far, the CBFF has launched two calls for proposals, in August 2008 and December 2009; the CBFF now manages a portfolio of 41 operations totalling EUR 84 million. The portfolio includes 27 NGO projects (for a total value of EUR 26 million), 13 governmental projects (for a total value of EUR 52 million); and phase one of a regional MRV project worth EUR 6 million.

### CBFF Projects by Thematic Areas

The distribution of CBFF operations by thematic areas is presented in the pie chart below:



## African Water Facility (AWF)

The AWF is an initiative of the African Ministers' Council on Water (AMCOW) hosted by the African Development Bank (AfDB). It was established in 2004 as a Special Fund to help African countries achieve the objectives of the Africa Water Vision 2025.

The AWF offers grants from EUR 0.05 to 5 million to support projects aligned with its mission and strategy to a wide range of institutions and organizations operating in Africa.

Its three strategic priority activities are (1) preparing investment projects to mobilise investment funds for projects supported by AWF; (2) enhancing water governance to create an environment conducive for effective and sustainable investments; (3) promoting water knowledge for the preparation of viable projects and informed governance leading to effective and sustainable investments.

Since 2006, AWF has funded 73 national and regional projects in 50 countries. It has mobilized more than

EUR 420 million as a result of its project preparation activities, which constitute 70 percent of its portfolio. On average, each EUR 1 contributed by the AWF has attracted EUR 20 in additional follow-up investment.

The AWF is entirely funded by Algeria, Australia, Austria, the Bill and Melinda Gates Foundation, Burkina Faso, Canada, Denmark, the European Commission, France, Norway, Senegal, Spain, Sweden, the United Kingdom, and the African Development Bank.

## RWSSI (Rural Water Supply and Sanitation Initiative)

In rural Africa, where more than 60% of the population lives, large areas are recurrently affected by climate-related phenomena such as extreme droughts in the horn of Africa, increasing water scarcity in the Sahel, and flooding in Mozambique and Kenya. To respond to these challenges, and to support the achievement of the Africa Water Vision 2025 and the Millennium Development Goals, the Rural Water Supply and Sanitation Initiative (RWSSI) was conceived by the African Development Bank in 2003 to focus attention on the rural subsector. RWSSI has the overall goal of achieving 80% access to basic water supply and sanitation services by 2015 and providing universal access by 2025.

African Governments and international development partners adopted RWSSI as the common framework for resources mobilization and investment for rural water and sanitation delivery in Africa. It was also agreed to establish the RWSSI Trust Fund (RWSSI-TF) to raise additional resources to be managed by the AfDB for the financing of RWSSI activities. By the end of June 2012, the African Development Bank had invested about USD 1.4 billion in financing 32 rural water supply and sanitation programmes in 24 countries and leveraged some USD 4.0 billion from other sources including donors, African governments and beneficiary communities. The Bank's portfolio consisted of 28 active RWSSI projects and

programs.

The RWSSI Strategic Business Plan for 2012–2015 (SBP) has been developed based on findings from an internal review of the RWSSI in 2010 and an independent external review launched in 2011. The strategic thrust of the SBP address four key areas including governance, demand-driven financing, communication and climate change. The total resources required to fund the SBP is about USD 8.1 billion, of which the Bank will contribute about USD 1.6 billion and USD 0.4 billion will be raised under the RWSSI-TF. The total additional population served will be about 115 million people.

## Sustainable Energy Fund for Africa (SEFA)

The African Development Bank hosts the Sustainable Energy Fund for Africa (SEFA). SEFA opened for business at the beginning of 2012 with a Danish Government commitment of DKK 300 million (approximately USD 55 million). SEFA was designed with the objective of increasing the production of and access to sustainable and reliable energy services, primarily in rural and peri-urban areas, as a means of stimulating growth and job creation in Africa. SEFA operates through two components.

Component one is a grant window to support project preparation activities, with a view to making “meso-scale” sustainable energy-related project ideas bankable and eligible for co-financing by the AfDB and other institutions. As such, it targets projects with total investment in the range of USD 30-75 million (corresponding to the lower tier of the Bank’s private sector investment range). Implementation under compo-

nent one is under way and four projects presented by private promoters are currently under consideration for pre-investment funding covering hybrid hydro-solar power, waste-to-energy, solar power, and bio-fuel initiatives.

Component two will take the form of an equity investment facility aimed at promoting sustainable energy initiatives in the investment range of USD 10 to 30 million through seed and growth capital as well as managerial know-how. This is a segment that is largely neglected by the financial sector at the moment, falling between the large-scale investments catered for by component one and the small and micro-enterprise and community level projects being looked after by numerous existing development cooperation initiatives. The facility will be managed by an external fund manager and will have both a grant facility for project-preparation activities and a fund for (co-)invest-

ment in eligible projects.

The Bank and Denmark envision SEFA as one of the primary multi-donor platforms for operationalizing the Sustainable Energy for All (SE4All) initiative in Africa and dialogue is on-going with potentially new donors to expand both the funding envelope and the scope of the facility. The precise modalities of this new platform are currently under development and should be ready in the first quarter of 2013.

AfDB has committed to invest USD 20 billion and to mobilize USD 80 billion in additional resources by 2030 as its contribution to the Sustainable Energy for All Initiative (SE4ALL). Investments will connect countries, harness the vast renewables potential, and provide energy access to vulnerable households across Africa.

## Adaptation Fund

In September of 2011, the Adaptation Fund Board accredited the African Development Bank as its ninth Multilateral Implementing Entity (MIE). Since then, the Bank has identified potential projects for implementation in Cameroun and Kenya, and will commence operations once enough funds are made available for MIEs

# Looking Ahead

Over time, the need to integrate climate change policies into national sustainable development strategies has become more evident as these policies can only be effective when embedded within broader strategies designed to make national development paths more sustainable. The general agreement is that policies pursuing climate change and sustainable development can be mutually reinforcing.

Realising the desired development results of such improved national sustainable strategies and plans that have had climate change mainstreamed in them comes with huge financial implications. To this end, the AfDB has scaled-up efforts to optimally apply its privileged position as a convener and voice of Africa to influence policy directions and decisions on pertinent issues, such as those of climate finance. For example, as part of the effort among Multilateral Development Banks (MDBs) and Development Finance Institutions (DFIs) on tracking climate change financing, AfDB is leading the development of the joint MDB Adaptation Tracking methodology. Furthermore, the Bank is in the process of setting up a Green Facility for Africa.

The Green Facility for Africa is being set up at the request of the African Heads of State and will be designed as a flexible platform that will address the climate financing gaps as well as provide the requisite support for climate change interventions in Africa. The platform will bring together a number of existing and new finance instruments to enhance Africa's access to resources flows for climate change operations while taking into consideration the wider sustainable development agenda. In the long run, it is expected that the instrument will be scaled up to become one of the main conduits to channel financial resources at scale to Africa, including from the Green Climate Fund (GCF) which was launched at the 17th Conference of parties to the United Nations Framework Convention on Climate Change (UNFCCC COP17). The Green Facility for Africa will complement and not compete with existing financial instruments.

The GCF has the goal of achieving a balanced allocation between adaptation and mitigation, with a significant share of new multilateral funds for adaptation expected to flow through it. Africa is expecting to have an enhanced access to the resources of the GCF to address the enormous challenges it is facing with respect to climate change. The AfDB is particularly happy to see that the Green Facility for Africa will provide support to developing countries in their bid to adapt to the adverse impacts of climate change as well as limit or reduce their greenhouse gas emissions as they develop. Indeed the Bank played a significant role in supporting the design of the Green Climate Fund, having seconded a staff member to the Technical Support Unit of the Transitional Committee. Going forward, and based on lessons learned from similar existing global funds, AfDB will work to enhance Africa's access to the GCF through its own portfolio, and in particular by strengthening country systems to ensure a sustained yearly increase in the number of African countries that have the capacity to directly access the fund.

In all of its endeavours, the AfDB strives to foster beneficial partnerships and welcomes the joint effort of local and global development partners and institutions. With your support, we will continue to discharge our responsibilities in an effective and efficient manner, ultimately contributing to Africa's sustained economic growth—one that is resilient, thriving and green.



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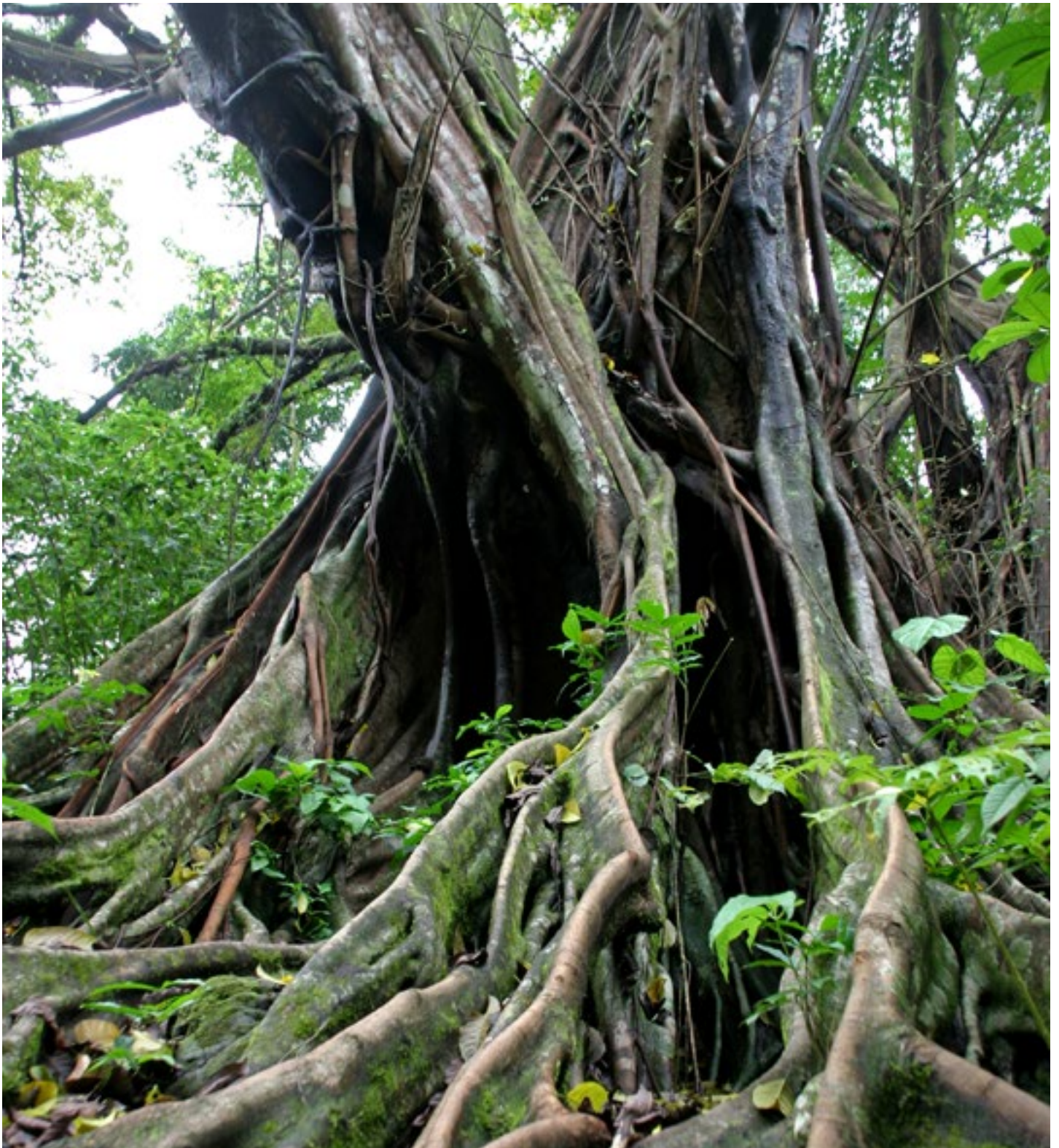
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## The African Development Bank Group

The African Development Bank is a multilateral development finance institution owned by 54 African and 24 non-African countries. Its mission is to help reduce poverty, improve living conditions for Africans and mobilize resources for the continent's economic and social development. The Bank assists African countries individually and collectively to achieve sustainable economic development and social progress.



Website: [www.afdb.org](http://www.afdb.org)  
Contact: [CCCCsecretariat@afdb.org](mailto:CCCCsecretariat@afdb.org)