

AFRICAN DEVELOPMENT BANK GROUP



Report for the Gleneagles Dialogue Meeting on Climate Change, Clean Energy and Sustainable Development (Berlin)

Bank's Work in Climate and Energy Investment Frameworks

August 2007

1. Introduction

1.1. The initiatives developed by each MDB within the Clean Energy and Development Investment Framework reflect the specific nature of the climate change challenge in their respective regions of operations and the comparative advantage of each institution in terms of its policy leverage and financing instruments. The section below briefly describes specific initiatives and activities undertaken by the African Development Bank in the broad context of the MDB Clean Energy and Development Investment Framework (the Framework).

1.2. The AfDB presented its initial position towards the Framework process and its strategic directions to its Board, through an informal Board presentation and accompany information paper, in April 2006¹. Both the AfDB Board as well as the Development Committee of the World Bank, endorsed the approach taken, and stressed that, particularly for Africa, increase in energy access should be a major pillar of the Framework.

1.3. As a start, an inventory of ongoing AfDB climate change related activities was made². The main conclusion of this review was that several ongoing initiatives that have a climate change component could be enhanced under the Framework. In the meantime the Bank also participated in a number of high level forums on Climate Change (e.g. G8 meeting in Mexico related to the Framework, the United Nations Climate Conference COP12 in Nairobi in November 2006, the London MDBs meeting on the Framework in March 2006).

1.4. At the moment, AfDB senior management is in the process of clearing the final version of the AfDB report on the Clean Energy and Development Investment Framework for Africa, which is planned to be presented to the AfDB Board in September 2007. The final version of the Framework report presents strategic proposals on the three main climate change and energy challenges: (i) expanding energy access; (ii) GHG mitigation through clean energy and low carbon approaches; and (iii) climate

¹ "Information Note on the Involvement of the African Development Bank in the Clean Energy and Development Investment Framework Process", PSDU, March 2006.

² The AfDB has a modest number of renewable energy and energy efficiency projects in its recent portfolio. In 2005, for instance, the Bank approved one project categorised as renewable energy and one project categorised as energy efficiency for a total of US \$ 380 million.

risk management and adaptation. Following Board approval an action plan for implementation of the Framework will be developed by the Bank.

2. Framework Pillar 1. Energy for development: Expanding Energy Access

2.1. Africa has considerable energy potential but it consumes the least amount of energy per capita in the world, and is a significant net exporter of energy resources. Endemic low per-capita consumption of energy is both a cause and a consequence of Africa's prolonged poor socio-economic performance since the early 1970s, particularly in oil-importing Sub-Sahara African (SSA) countries. In these countries in general, less than 10% of the rural population has access to modern energy services. An estimated 400,000 deaths, yearly – predominantly women and children – are linked to the use of traditional fuels in poorly-ventilated cooking places. There is a steady deterioration in the quality and reliability of electricity supply, due to chronic under-investment in capacity expansion and operations and maintenance.

2.2. Access-for-all to safe, reliable and affordable energy supplies is an imperative, in order to improve the quality of life, strengthen the capacity of African economies to compete more effectively in the global economy, and reduce poverty. However, energy development and access to safe and reliable energy and power supplies for the entire population in Africa, particularly in SSA, are hampered by several major constraints. These include: inadequate attention paid to energy development in national development plans and poverty reduction strategies; lack of energy supplies stockpiling, transportation and distribution infrastructure (including the high capital costs of extending national electric power transmission grids to rural areas and building local distribution networks at the village level); low tax revenues and limited capacity to provide public funding to infrastructure capital investment and consumer subsidies to poor households; limited private domestic savings due to high levels of poverty; tremendous pressures on energy infrastructure due to rapidly rising populations, rural-to-urban migrations and the rising concentration of populations in unplanned peri-urban areas.

2.3. With respect to ongoing activities in this area the AfDB initiated a joint retreat with the Africa Energy Unit of the World Bank for increased collaboration on accelerating energy access in Africa. An Africa Energy Action Plan is being detailed by the World Bank, including donor mobilisation. This action plan includes the following components: (i) electrification programmes with better integration of mini-grid and off-grid electricity options to complement grid-based approaches; (ii) enhancing generation capacity (including via regional projects) to power grids; (iii) provision of energy services for key public facilities such as schools and clinics; (iv) promotion of stand-alone lighting packages for households remote from electricity service; and (v) push for cleaner cooking, heating and lighting fuels developed. These activities are linked to the September 2006 Rural Electrification workshop and Infrastructure Consortium for Africa workshop on Energy and Development as organized by the AfDB in Tunis.

2.4. As part of its activities to increase energy access the Board of Directors of the AfDB approved investments in the Uganda Bujagali hydro project (250 MW) and Sahainivoty Hydroelectric Power in Madagascar (15 MW), while a number of other projects are in advance stages of preparation involving large scale hydro, natural gas fired power plants, rural electrification (Tanzania and other countries) and transmission lines.

3. Framework Pillar 2. Low Carbon Development: GHG mitigation, Cleaner Energy Technologies and increased use of Renewable Energy / Energy Efficiency (RE/EE);

3.1. Expanding energy access is a priority for Africa. However, the right balance must be struck between this goal and following a low-carbon path, limiting GHG emissions per unit of GDP. As one of the regions most vulnerable to global warming, Africa has a vested interest in rendering effective support for global mitigation efforts. As a demonstration of the utmost importance that Africa attaches to preventing excessive global warming, African countries may need to provide contributions of their own (albeit voluntary and non-binding ones) to global emissions reduction. More effective use of flexible mechanisms under the Kyoto Protocol negotiated under the United Nations Framework Convention on Climate Change (UNFCCC), in particular, the Clean Development Mechanism (CDM), provides a limited but crucial avenue for Africa to mobilise badly needed financing to buy down the initial cost of low-emission energy generating capacity. Africa is endowed with enormous renewable energy potential that remains largely untapped. African economies can progressively switch to cleaner sources of energy and cleaner development practices, if resources are correctly priced taking into account their replacement value and pollution clean-up costs.

3.2. African private enterprises, civil society, NGOs, and research institutions also should invest greater effort in understanding the new opportunities and challenges of the transition to clean development. Possible innovations include installing and using clean and more efficient stoves; switching to solar power; setting up viable decentralised community-level energy and power utilities to harness local resources such as wind energy, micro and small-scale hydro-power, biogas from communal waste, and sustainably managed community forests; popularizing energy-saving (or passive) housing architecture; licensing energy-efficient appliances; favouring energy-saving bulbs; and undertaking waste recycling. Communities should be provided adequate incentives to preserve local forest and wetland ecosystems, thereby avoiding deforestation and wetland destruction.

3.3. AfDB's activities in low carbon development and GHG mitigation include the following:

- a) Ongoing implementation of the FINESSE program supported by the Netherlands Government and involving support of (a) capacity building at both AfDB and regional member countries level (b) mainstreaming renewable energy and energy efficiency in AfDB operations including identification and preparation of RE/EE projects and project components; and (c) the development of a new AfDB Renewable Energy and Energy Efficiency Strategy linked to the Energy Sector Policy that is currently in the process of updating;
- b) More specifically, in the Public Sector of the AfDB, the FINESSE program assisted the operational divisions in project preparation/development for Lesotho (rural electrification by means of different sources of renewable energy), Madagascar (rural water supply using solar water pumps), Ghana (energy sector review) and Uganda (solar PV for schools and boarding facilities), as well as on the development of the energy component of the Community Agricultural Infrastructure Improvement Program in Uganda (solar PV, hydropower and grid extension), the Bank's initiative on bio-ethanol in Mozambique (including co-funding a recent bio fuels workshop in Maputo) and the AfDB Country Strategy Paper revision in Madagascar.
- c) As follow-up on the private sector initiated wind resource assessment, the FINESSE program co-financed and organised a Wind Energy Investors' Conference in Tunis in October 2004. In addition to this workshop, the Private Sector department, through FINESSE program support and its Danish Renewable Energy Technical Assistance developed a project pipeline of 921

MW wind energy projects, 283 MW of small hydropower, 410 MW of co-generation, 480 MW geothermal and over 150,000 m³/year of bio diesel projects.

- d) The private sector department is also collaborating with UNEP on two important projects (a) development of Cogeneration in 7 countries (Ethiopia, Kenya, Malawi, Sudan, Swaziland, Tanzania, Uganda,) (b) development of the small medium size hydropower in 8 countries (Kenya, Tanzania, Uganda, Zambia, Mozambique, Malawi, Rwanda, Burundi). The objectives of this collaboration are to reduce the transaction costs, remove the barriers and increase investment in climate change mitigation.
- e) The AfDB is also engaged in a number of other initiatives e.g. (a) discussions are ongoing with the German Government for a Bio- fuel Support Facility to accelerate the uptake of bio-fuel projects in Africa and collaboration with UNIDO on their bio fuels initiative; (b) continue partnering with the UN agencies within the “Nairobi Framework” on climate change for Africa, to set up a mechanism to support AfDB member countries access to the Clean Development Mechanism and (c) detailing the AfDB role in the implementation of the Bio-Gas Initiative in Africa, which was launched in Nairobi recently.

4. Framework Pillar 3: Climate Risk Management and Adaptation

4.1. The consensus among experts is that Africa is one of the most vulnerable continents to climate variability and change because of multiple stresses and low adaptive capacity. Countries’ situations are exacerbated by anterior development challenges, particularly the high incidence of poverty, poor governance and weak institutions, limited access to capital, infrastructure and technologies, environmental degradation, and complex disasters and conflicts. Most countries are not effectively facing up to current climate variability and extreme weather events, such as floods, cyclones and tornadoes, periodic droughts, and water scarcity, let alone being ready to face up to greater variability due to changing climate in the years ahead.

4.2. Particular areas of present and increasing vulnerability are water resources, agriculture, health, ecosystems and biodiversity including forestry and coastal zones, safety of human settlements, and sources of tension and conflict over dwindling and highly variable shared resources. Changing rainfall patterns could further adversely affect agriculture, reduce food and water security, render hydro-power unreliable, and diminish economic growth prospects. Rising temperature will increase the geographical spread of communicable tropical diseases such as malaria. Altogether, climate change will make it harder to attain and sustain the internationally agreed millennium development goals (MDGs). Adaptation is the only rational response available to deal with the climate changes expected to occur over the following decades. In general, efforts to build capacity for adaptation to climate change in Africa should include raising awareness, strengthening climate early-warning systems, improving management of natural resources and developing robust insurance systems.

4.3. With respect to climate adaptation and climate risk management the AfDB has started working in 2006-2007 on a number of policy, programs and project areas:

- a) With respect to policies, the AfDB is currently working on the preparation of a concept note that is expected to lead to a new Policy on climate risk management and adaptation, This Policy will guide AfDB’s future work to “climate proof” its portfolio of operations (including infrastructure, rural, natural resources and human development investments) and support its Regional Member Countries’ early efforts to increase their resilience to increasing climate variability and future climate change impacts.

- b) The AfDB is also active in the associated capacity building for adaptation at both Bank and country level as well as development of new tools and approaches for “climate proofing” and climate resilience development such as climate screening tools, climate assessments, and country and sector climate vulnerability profiles; all tools and approaches that will be used in the ensuing adaptation programmes.
- c) With respect to projects, the Bank has recently obtained approval by the Global Environment Facility (GEF) for project preparation of a climate adaptation proposal. The project (Malawi Climate Adaptation for Rural Livelihoods and Agriculture (CARLA)) is linked to an agriculture and water irrigation project approved by AfDB in 2006 and is one of the first projects to be presented to GEF under the Least Developed Countries Fund (LDCF) adaptation window. A number of additional adaptation projects for GEF financing are expected to be prepared in 2007-2008.
- d) Finally, the AfDB is also engaged in a number of activities relating to climate information for development and disaster risk reduction and management with various African institutions and bilaterals. In this context the Bank is part of the joint AU/ ECA/ AfDB secretariat for Clim-Dev Africa (Climate for Development in Africa program) and is already contributing, both financially and technically on a number of activities under this program.