



**High Level Meeting on Africa's Development Needs: State of Implementation  
of Various Commitments, Challenges and the Way Forward"**

22 September 2008

**Summary Report**

**Side Events**

**Title: Africa's Vulnerability : The Energy Crises, Climate change and Environment**

**Date and Venue: 22 September 2008 –New York**

**Organizers: First lead agency: ECA**

**Co-sponsors: UNIDO, UNEP, FAO, UNHCR**

**Chair (s) : Mr Abdoulie Janneh, USG and Executive Secretary, ECA**

**Mr. Kandeh Yumkella,USG, Director-General, UNIDO and Chair ,UN Energy.**

**1. Introduction (Background and Context)**

Despite the profusion of energy resources in the form of renewable energy like hydropower, geothermal, biomass/biofuels, solar as well as fossil fuel (petroleum, gas and coal), Africa has the lowest access to modern energy in the world. The acute energy crisis that severely affects the economies of the region results from a combination of factors such as widespread droughts, progressive degradation of hydropower dams and structural weaknesses of the energy sectors. As a major consequence, in recent years, frequent power cuts and unreliable electricity supply have cost the African economy an estimated 4% loss in annual GDP.

Although Africa contributes very little to global emissions of greenhouse gases (GHG), climate change has the unambiguous negative effects of constraining agricultural production and worsening food insecurity, increasing water stress and, through progressive reduction of water flows and depletion of biomass resources, increasing energy constraints. Fossil fuel emissions being a major cause of climate change, addressing Africa's long-term energy and development

needs should not proceed from the same unsustainable fossil-based energy regimes that powered the economic growth of today's industrialized nations.

Against this background, the meeting shed light on the current acute energy crisis in Africa while offering a discussion on its implications for achieving the Millennium Development Goals. In this context, the meeting drew the attention to the complex nexus of interdependent process that links the energy challenges arising from climate change to those of water and food security. It further highlighted the growing consensus that the long term solution to Africa's energy crisis should follow a more sustainable approach, involving a combination of renewable energy and energy efficiency solutions, based on the region's vast and largely untapped renewable potentials.

## **2. Organization (Chair, Panelists, Presenters and Participants)**

The side event took place in Conference Room 9, from 3:00 to 5:30 pm on 22 September 2008. The event was co-chaired by Mr. Abdoulie Janneh, Executive Secretary of ECA and Mr. Kandeh Yumkella, Director-General of UNIDO and Chair of UN energy. Mr. Janneh, introduced the side-event with opening remarks and a brief presentation of the issues to be discussed by the panelists.

In addition to the introductory and substantive interventions by the two co-chairs, one from Mr. Janneh on "Africa's Current Energy Crisis" and the other from Mr. Yumkella, on "Enhancing Africa's Energy Security through Development and Diversification", presentations were made by Ms. Angela Cropper, UNEP Deputy Executive Director, on "Energy Security and Climate Change"; Ms. Annika Soder, Special Adviser to the Director General, FAO on "The Rise of Biofuels and Resulting Challenges" and Mr. Valentine Ndibalema, Senior Environmentalist and Adviser, UNHCR on "How to Ensure an Environment and Sustainable Energy Production and Consumption in Africa".

The presentations were followed by interactive discussions among the some 60 participants from governments, private sector, NGOs and civil society institutions, High Level policy makers, as well as representatives of United Nations Programmes and Funds.

## **3. Summary Discussions**

Mr. Abdoulie Janneh, USG and Executive Secretary, ECA, led the discussion on the causes and implications of the energy crisis for the achievement of the MDGs and sustainable growth in Africa. His presentation and the related discussions stressed that there are significant links between poverty and lack of energy, just as between climate change, energy and food security. Key features of Africa's vulnerability to both the energy crisis and climate change were highlighted. These include the region's warmer climate; heavy reliance on climate-sensitive sectors such as rain-fed agriculture, fisheries, natural resources and tourism; and weak adaptive capacity to respond adequately to climate change because of poor infrastructure, institutional and financial capacities. Major implications of the energy crisis for achieving the MDGs and sustainable development in Africa were underscored, with emphasis on poverty and hunger reduction, health, education and environmental sustainability. The presenter related the region's

energy crisis to critical structural causes that need to be addressed in tackling the challenge, including insufficient political commitment, under-investment, inadequate planning, managerial and technical capacities, and climate change. He concluded by referring to different initiatives and partnerships aiming at helping solve the energy crisis in Africa, including the Climate Information for Development in Africa (ClimDev-Africa) Programme that ECA is implementing in partnership with the African Union Commission and the African Development Bank, and the African Climate Policy Centre (ACPC) being established by ECA.

Mr. Kandeh Yumkella, USG, Director-General, UNIDO and Chair, UN Energy, focused on the opportunities and challenges for investment in the energy sector for sustainable development in Africa. He proceeded from the view that energy is a major sector in the economy, which presents both opportunities and threats, as the combination of high oil prices, global food crisis and climate change clearly has huge economic impacts on Africa. He underlined that a major factor to take into account is the interconnection among issues of water, energy and climate change. In this regard, Africa's energy crisis should be addressed through both on-grid solutions for scaling up of electricity production and distribution system and off-grid solutions by developing considerable potential of renewable energy resources (solar, wind, biomass) to which communities can contribute themselves. Planning and implementing such solutions would require sound assessments of long-term energy demand, good policy frameworks and energy sector reforms, as well as appropriate technology, innovative financing mechanisms for increased access to funding to match the scale of the necessary investments. Energy waste should be reduced through increased environmental awareness for consumer behavior, appropriate business planning and financial incentives.

Ms. Angela Cropper, Deputy Executive Director, UNEP, led the discussion on options for mitigation of climate change and adaptation to climate change impacts within the attainment of energy security, increased energy access and eco-efficiency of the energy sector in Africa. She emphasized that Africa's vulnerability to climate change relates not only to multiple stresses, but also and most importantly to low adaptive capacity. In this regard, industrialized countries, as major contributors to climate change, should be urged to help Africa in its efforts at addressing energy crises associated with the negative impact of climate change on the continent's hydropower generation. This should be done also with a view to responding to the need for technological solutions for coping with future climate change challenges in the region. Major challenges in Africa include shifting away from inefficient biomass use and ensuring access to modern energy technologies and services in rural areas. Accordingly, key options to consider should focus on developing Africa's great renewable energy potential, improving energy efficiency, and devising appropriate financing mechanisms for climate change mitigation and adaptation actions.

Ms. Annika Soder, Special Adviser to the Director General, FAO discussed the opportunities and challenges that biofuel development presents for agriculture in developing countries. Proceeding from the fact that biomass constitutes the main source of energy for nearly 2 billion people, 1.6 of which do not have access to electricity, she underscored the opportunities that biofuel from agricultural and forest resources could offer for rural development in terms of access to affordable modern energy services, employment and additional household income. However, governments should help mitigate the threats that biofuel can pose through appropriate

safeguards that ensure rural people's welfare, rights and choices, as well as an appropriate balance between self-reliant food security on one hand and participation in the cash economy on the other. In addition, full exploitation of the opportunities that biofuels offer for developing countries calls for significant lowering of trade barriers (e.g. subsidies) in developed countries.

Mr. Valentine Ndibalema, Senior Environmentalist and Advisor, UNHCR, focused on domestic energy issues, with emphasis on environmental and sustainable energy production and consumption in Africa. He pointed out that population growth, increased consumption, poverty and unequal allocation of resources are major drivers for unsustainable energy use and environmental degradation in Africa. Efforts at improving energy availability, affordability and efficiency should be selective in adopting different strategies for different contexts and pay particular attention to engaging local communities, defining clear stakeholder roles and responsibilities, and building adequate human and institutional capacities. This point was illustrated by examples of concrete grassroots-level energy conservation/saving programmes and projects.

#### **4. Conclusions, Recommendations and Follow-up Actions**

Salient conclusions and recommendations of the side event were as follows.

Meaningful and sustainable solutions to Africa's energy crisis should rest on sound assessment of long-term energy demand, good policy frameworks and significant power sector reforms. They also call for innovative financing mechanisms to ensure adequate access to funding that is commensurate with the scale of the region's energy challenges.

Africa's energy crisis should be tackled with both on-grid and off-grid solutions. While the former require sizeable investments and a regional approach, the latter calls for developing the region's considerable renewable energy potential with direct participation of local communities. In this regard, Africa should take advantage of the opportunities that biofuel development offers, with governments facilitating public-private partnerships and enacting safeguards to mitigate possible threats of biofuel production for food security and the quality of the environment. Just as important, lowering trade barriers in developed country markets is a prerequisite for developing countries to benefit from biofuels.

Energy programmes and projects should mainstream environment and energy, engage local communities and relevant stakeholders, develop human and institutional capacities, and promote ownership with clear roles and responsibilities, with a view to ensuring sustainable domestic energy production and consumption in Africa.

Addressing the climate change challenges in the energy sector in Africa calls for appropriate technological solutions, improving energy efficiency, shifting from inefficient biomass use and improving access to modern energy technology and services in rural areas.

The discussion concluded by welcoming ECA's announcement of the following two major initiatives aimed at assisting African countries address the challenges of energy availability and access within the context of climate change:

- A comprehensive medium-term Climate Information for Development Africa (ClimDev-Africa) Programme that ECA is developing in partnership with the African Union Commission and the African Development Bank and the Global Climate Observing System (GCOS), with a view to assist African Countries in identifying priorities and responses for managing climate risks and guiding the related investment process in climate-sensitive sectors such as energy, water resources and agriculture; and
- The establishment of an ECA-based African Climate Policy Centre (ACPC) to help African countries mainstream climate change concerns into their development priorities and policy frameworks, mainly through relevant policy analysis, advocacy, capacity building, education programmes, technical assistance, knowledge sharing and peer learning.

## **Annexes**

**Annex 1: Programme**

**Annex 2: ECA's Executive Secretary Opening remarks and presentation**

**Annex 3: ECA Energy Crisis and Climate Change PPT**

**Annex 4: FAO The Rise of Biofuels and Resulting Challenges PPT**

**Annex 5: UNHCR How to Ensure an Environment and Sustainable Energy Production and Consumption in Africa" PPT**