



Side Event Draft Concept Note

Title: “AFRICA’S VULNERABILITY: THE ENERGY CRISIS, CLIMATE CHANGE AND ENVIRONMENT”

Sponsor/Co-Sponsor: Lead: ECA, Co-Sponsors: UNIDO, UNEP, FAO, UNHCR

Date: 22 September 2008

Time: 3:00-5:00pm

Venue: Conference Room 9

Potential Moderator/Chair, Panelists/Resource persons [this information can be provided as it becomes available]

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Context

Despite the abundance of energy resources in the form of renewable energy like hydropower, geo-thermal, biomass, solar and fossil fuel (petroleum, gas and coal), Africa has the lowest access to modern energy. Africa’s current acute energy crisis, a result of widespread droughts that have disabled hydropower generation schemes, comes on top of the structural weakness of the African energy sectors. The crisis deprives the African economy of up to 4 % of annual GDP growth through power cuts and unreliable electricity supply to be addressed while long-term solutions are elaborated.

It is underscored that the African region offers a vast and diverse energy potential which is largely unexploited, with great potential for electricity generation, interconnection and trade, large potential for energy efficiency improvements along the whole energy chain and, given that Africa has the lower CO2 emissions in the world, a large potential market for carbon credits. Opportunities for technology leapfrogging are considerable and investment opportunities seen to be significant.

One of the main causes of Climate change is the fossil fuel emissions, and stabilizing carbon dioxide is an ecological imperative. The insurance industry, which takes over \$US 2 trillion in annual premiums, and is bigger than the oil industry, is now a major player in addressing climate change since they have to pay billions out of insurance as cities flood and cyclones rage (Vandana Shiva, End of Cheap Oil, The global energy crisis and climate change, July 2006).

The Energy Minister of Uganda, in November 2007, stated that industrialized countries should provide mitigation measures to Africa's energy crisis because they are the major contributors to climate change, which has affected the continent's hydropower generation. Recently, hydropower generation in the Sub-Saharan part of the region went down by nearly 50 %. In Ghana, power supply from Akasombo Dam went down by 30 %; Kidatu and Mtera in Tanzania were closed, yet they could have generated about 280 MW. As if the drought was not bad enough, the sub-region is also hit by floods. These will further compound poverty as industries are severely affected by low power supply. Revenue collection is also bound to suffer.

We, therefore, should be convinced that grave difficulties are inevitable, caused not so much by peak oil prices alone as by climate change. Though oil depletion may not be an insurmountable problem, greenhouse gases (GHG) will be. Climate change, more than oil shortage, will jeopardize human survival, though the two issues are clearly linked. The reckless use of petroleum has increased carbon dioxide levels, which with other greenhouse gases in the air are changing weather around the world. We have still had to quit burning oil, even if there were no shortage of it, the sooner, the better.

Main issues and challenges

Access of African population to modern energy is of paramount importance to the development of the continent, and must be given priority attention by governments and other stakeholders. Access to modern energy services and resources fail to meet the needs of most Africans and, more particularly, the urban and rural poor. Much greater access to energy services and resources, including peri-urban and rural electricity as well as cleaner cooking fuels, is essential to achieving sustainable development.

Specific constraints and challenges to address in this regard include:

- Low energy production due largely to untapped energy resource potential;
- Uneven regional distribution of energy resources;
- Weak share of renewable energy in the energy mix;
- Underdeveloped transport and infrastructure capacities;
- Low private sector participation and investment in the energy sector;
- Inadequate policy, regulatory and institutional framework;
- Making the bio-energy sector sustainable that not threat human health and the environment;

- Strengthening climate-related policy research and enhancing policy coherence and integration of climate change mitigation and adaptation concerns into development priorities and frameworks;
- Ensuring that industrial development and energy consumption and production do not pose threats to environmental sustainability and social equity, mainly through improving the eco-efficiency of the energy sector; and
- Combining more efficient use of energy, greater reliance on advanced energy technologies and cleaner fossil fuel technologies, and the sustainable use of traditional energy resources, to meet the growing need for energy services in the longer term.

Possible Questions to guide an interactive discussion

1. Africa's current energy crisis: What causes and implications for the achievement of the MDGs and the sustainable growth in the region?
2. Energy security and climate change: What options for mitigation of climate change and adaptation to climate change impacts within the context of attainment of energy security in Africa?
3. Enhancing Africa's energy security through development and diversification of energy sources: What are the opportunities and challenges?
4. What could be the ways and means to improve the eco-efficiency of the energy sector?
5. How to ensure an environmental and sustainable energy production and consumption?
6. Investing in energy sector for sustainable development in Africa: What are the options and key recommendations for mobilizing investments that are commensurate with the scale of the challenges?

Expected Results

[To be finalized]