

# Energy for Poverty Alleviation in Sahel

## Intelligent Energy Project

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### The African policy initiatives on energy

African states are well-aware that providing sustainable energy services is a necessary step in the direction of poverty reduction and economic development. Energy has become in recent years one of the hottest political issues, and it has been at the centre of political initiative of the region.

In this number of the newsletter of the IE4Sahel project we make an overview of the political and technical initiative in the field of energy that refer specifically for the whole continent (NEPAD) or specifically for the Sahelian States that are covered by this project.

#### 1 The NEPAD energy agenda

The **New Partnership for Africa's Development (NEPAD)** is an initiative adopted by the summit of the Head of State of Organization for the African Union (OAU, now African Union) in 2001. NEPAD objectives are to reduce the poverty, to promote sustainable development, to halt the marginalisation of Africa in the process of globalisation and to accelerate the empowerment of women. NEPAD is an holistic programme that covers many issues, starting from good governance, peace and security, capacity building, financing, infrastructure etc. It is intended to be a process that is driven by the Africans and achieved also with the support of international donors. The NEPAD framework document includes a section on energy with the following objectives:

- *To increase Africans' access to reliable and affordable commercial energy supply from 10 to 35 per cent or more within 20 years; ·*
- *To improve the reliability and lower cost of energy supply to productive activities in order to enable economic growth of 6 per cent per annum; ·*
- *To rationalize the territorial distribution of existing and unevenly allocated energy resources and to strive to develop the abundant solar resources; ·*

- *To reverse environmental degradation that is associated with the use of traditional fuels in rural areas; ·*
- *To exploit and develop the hydropower potential of the river basins of Africa;*
- *To integrate and transmission grids and gas pipelines so as to facilitate cross-border energy flows;*
- *To reform and harmonise petroleum regulations and legislation on the continent.*

One of the actions indicated in the document is to create an **African Forum for Utility Regulation**. Energy related projects in the NEPAD framework are especially related to the modernization of infrastructures.

The **NEPAD Short Term Action Plan for infrastructures - STAP** - was produced in 2002 and it is an operative plan to implement essentially infrastructures and capacity building activities throughout the continent. In the "top twenty" priorities of STAP several activities refers to energy, regarding African Power Pools, the African Energy Commission, Energy Interconnection between countries.



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## 2. The African Energy Commission - AFREC

In 1980 in Lagos (Nigeria) the African Head of State of the OAU adopted a Lagos Plan of Action and recommended the creation of an African Energy Commission. The recommendation was not implemented immediately and was re-affirmed in several meetings and declarations throughout the nineties.

In July 2001, in Algiers, the African Ministers of Energy met and adopted a declaration creating the African Energy Commission, with headquarters in Algiers. The declaration was signed by 37 African states, but only ratified by eleven. It is stated that to enter into force the convention should be ratified by at least 15 African States. In the Sahel region only Mali and Senegal have ratified till now.

The commission, when fully operative, will have between her duties to map out the energy development policies, strategies and plans based on sub-regional, regional and continental development priorities and recommend their implementation and design, create and update an energy continental data base and facilitate rapid dissemination of information and exchange of information among Member States, as well as among the Regional Economic Communities (RECs), moreover it will have various harmonization, advice, capacity building and seek for financing activities. Part of these activities already started with the support of the World Energy Council WEC and the International Energy Agency IEA that made some efforts to create an **African Energy Information System**.

## 3. The Forum of Energy Ministers of Africa - FEMA

On the 3<sup>rd</sup> of August 2005 the Energy Ministers of African States established a **Forum of Energy Ministers of Africa (FEMA)** with headquarters in Kampala, Uganda. The vision of the forum is to:

*“achieve effective African and regional cooperation, social and economic development leading to poverty eradication in Africa through the promotion of environmentally sustainable use and management of energy resources”.*

Key objectives of FEMA are:

- Raising the profile of the energy sector in national and regional planning to reflect its central role in achieving the Millennium Development Goals.

- Developing a coherent energy strategy for Africa, including re-strategizing in order to increase modern energy supply and access.
- Promoting a common approach expressed through specific, national and regional projects of benefit to African countries.

Speaking with a common voice and collectively advocating for the financing of regional projects. Promoting interconnectivity, and developing common technical standards and codes of conduct.

Fema interim Secretariat is hosted by the Ugandan Minister of Energy (and chaired by the Ugandan Minister), it already received support both from ESMAP (Energy Sector management programme of the World Bank) and GTZ (the German Technical Cooperation) and it is designed on the basis of the previous successful experiences of other African Forums, like the African Ministerial Conference on the Environment, (AMCEN) operational since 1985 and the African Ministerial Council on Water (AMCOW) from 2002.

The Forum of Energy Ministers shall meet every two years, while the steering committee has an annual meeting schedule.

In order to achieve its objectives and the Millennium Development goals, the FEMA proposed to fulfill the following energy targets:

- Doubling the consumption of modern fuels with respect to current usage;
- 50% of inhabitants in rural areas should use modern fuels for cooking;
- 75% of the poor in urban and peri urban areas should have access to modern energy services;
- 75% of schools clinics and community centers should have access to electricity as this would enhance their *competitiveness*;
- Mechanical power should be available to rural areas.

Financing needs to achieve these goals are huge, for the electricity sector only it is estimated an annual requirement of 4 USD billions for operation and infrastructure plus an additional 4,8 USD billions to provide electricity to 150 additional millions of people in Sub Saharian Africa.

The FEMA is expected to complement and collaborate with AFREC once this will be fully operative.

More specifically for the Sahel region, the most important policy steps in the field of energy have been carried out in the framework of two organi-

zations that comprehend the majority of the States of the region under study. The UEMOA (Union Économique et Monétaire Ouest Africaine)<sup>1</sup> and the ECOWAS (Economic Community of West African States)<sup>2</sup>. Here it follows a brief list of the principal regional energy policies and initiatives in ECOWAS/UEMOA member states

#### **4. The Common Energy Policy - La Politique Energetique Commune (PEC)**

In 2001 the states of UEMOA adopted an ENERGY Common Policy with the objectives of:

- To put in place an integrated energy planning system;
- To promote renewable energies and
- To accelerate the interconnection of energy systems in collaboration with the ECOWAS.

#### **5. The WEST AFRICAN Power Pool**

The institution of a West African Power Pool - WAPP was decided by ECOWAS members in 1999 with the objective of multiply by four the interconnection capacity between member states for the period 2005-2020. The WAPP project is focused to extend for more than 5600 km the interconnection lines between Nigeria, Benin, Togo, Ghana, Ivory Cost, Niger, Burkina Faso and Mali with investment to be realised for about 11,8 billions of dollars in 19 years. The objective is to reach, for the ecowas region, a capacity of 17000MW of installed capacity in order to satisfy the planned demand for the year 2023.

#### **6. The ECOWAS energy protocol**

The ECOWAS ENERGY PROTOCOL is a legal text formalising the juridical framework of enterprises in the energy sector, and has been designed as a guarantee for the foreign direct investments in the energy sector. The adoption and ratification of this convention is an eligibility criteria to have access to the World Bank Facility for the WAPP.

#### **7 Interstate natural resources management OMVS, ABN, OMVG**

There already exist sub regional institutions created in order to manage water and energy resources. The *Organisation pour la Mise en Valeur du fleuve Sénégal* OMVS, manage the Manantali dam and shares resources between Mali, Sénégal and Mauritanie. The *Organisation pour la mise en valeur du fleuve Gambie* OMVG and the *Autorite du Bassin Du Niger* ABN also are other examples of interstate cooperation in the field of natural resources.

#### **8. The ECOWAS / UEMOA initiative and the White Book for a Regional Policy**

The most ambitious regional project in the field of energy is summarised in the "White Book for a Regional Policy". Following the engagements taken by NEPAD and later by the Summit of African Energy Ministers at FEMA in 2005, the 29th Conference of the Head of State of ECOWAS/UEMOA in Niamey on the 12th of January 2006 with the decision A/DEC.24/01/06 adopted an ECOWAS/UEMOA regional policy on access to energy services for populations on rural and peri-urban areas for poverty reduction in line with achieving the MDGs in Member States. The policy objectives and the accompanying white book guidelines are very ambitious and call for:

##### **- One global objective:**

*Increase Access to modern energy services of rural and periurban populations, to provide by 2015, access to modern energy services to **at least half** the populations living in rural and periurban areas. This entails multiplying by four the number of people with access to modern energy services in comparison to 2005. This also entails supplying 36 million more households and 49 000 more localities with Access to Energy Services.*

##### **- Three Specific Objectives:**

*1. To strengthen regional integration by pooling knowledge of good practices, exchanging experiences, adopting a regional information system and developing*

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<sup>1</sup> UEMOA Member States are: Bénin, Burkina Faso, Côte d'Ivoire, Guinée Bissau, Mali, Niger, Sénégal, Togo

<sup>2</sup> ECOWAS Member States are: Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo

cross-border co-operation, with a view to fostering development and building capacities.

2. To help harmonise political and institutional frameworks (i.e. PRSPs, MDG monitoring framework, etc.), in taking into account essential role energy services play in boosting human development and achieving the MDGs.

3. To develop, on the basis of national political frameworks, coherent energy policies based on reducing poverty in rural and peri-urban areas and achieving the MDGs.

The energy programmes will focus in particular on:

- Stimulating productive activities, especially those related to processing and added value to agricultural produce,
- Modernising basic social services (healthcare, education, water, etc.) and improving living conditions,
- Improving the situation of women, who are disproportionately affected by all aspects of poverty, most particularly health problems (arising from the difficulty of chores such as wood-gathering and water-drawing, etc.).

#### - Three targets

1. 100% of the total populations or 325 million people, will have access to a modern cooking fuel;

2. At least 60% of people living in rural areas will have access to productive energy services in villages, in particular motive power to boost the productivity of economic activities;

3. 66% of the population, or 214 million people, will have access to an individual electricity supply, or:

(a) 100% of urban and peri-urban areas;

(b) 36% of rural populations;

(c) Moreover, 60% of the rural population will live in localities with

- i. modernised basic social services – healthcare, drinking water, communication, lighting, etc.
- ii. access to lighting, audiovisual and telecommunications service, etc. and (
- iii. the coverage of isolated populations with decentralised approaches.

The document states also that the actions should conform to several guiding principles and between them we may mention: subsidiarity, participatory approach, cohesion, consultation and co-operation, multisectorial approach, technological neutrality, public-private partnerships, sustainable deve-

lopment, gender equity, security of supply, optimisation and raising of current financial resources.

The White Book not only affirms the link between the provision of energy services and the achieving of the Millennium Development Goals but also makes an action plan, a cost estimation of the action that have to be taken in order to reach its ambitious objectives.

The implementation of the regional UEMOA/ECOWAS energy policy is led by a steering committee comprising:

- The ECOWAS/UEMOA Technical Secretariat
- The ECOWAS/UEMOA Energy Committee
- The regional multi-sectorial committee
- Representatives of civil society
- Donors.

The political level coordination is to be held by an annual **Regional Forum of Access to Energy in ECOWAS Countries** attended at ministerial level. A high profile annual meeting is considered of an extreme importance for the visibility of the sector, experience sharing and political guidance.

The implementation work has to be done by a dedicated permanent **Regional Agency for Access to Energy Services** with operational autonomy. This Agency, whose legal status has to be negotiated between member states, would be after a first initial period, financially autonomous through a levy on the additional investments that it would be able to mobilize and its functions would be revised on a 5 to 5 year basis.

Finally the total **costs and the investments** estimated by the UEMOA/ECOWAS white book are the following:

- 17.5 billions of dollars over ten years for investment in equipment, studies and accompanying measures.
- 34.6 billions of dollars over ten years for energy costs
- the total cost is estimated to be 5.2 USD billions each year, that is about 4,6% of regional GDP and 16 USD per year per inhabitant.

these costs appear very high, but it has to be reminded that the above figures include the whole cost of the investment, studies and consumption of energy in the entire region.

## 9. The ECOWAS/UEMOA Regional Action Plan

The **ECOWAS/UEMOA Regional Action Plan** is the action plan designed to start this process and mobilize further investments, its cost is estimated to be of 248 USD millions over ten years, subdivided in the following action lines:

- capacity building for private and public actors - 83.1 USD millions - including 34.8 USD millions for feasibility studies
- support to fund mobilization - 121.2 USD millions - including 90 USD millions for 200 demonstration projects.
- promotion and dissemination of experiences - 15.6 USD millions
- promotion of local production of energy service equipment - 12 USD millions
- preparatory activities and operation of the energy - 16.8 USD millions. The regional agency for the promotion of energy access is estimated to have an annual cost of 1 USD million.

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- NEPAD <http://www.nepad.org/>
- GTZ: <http://www.gtz.de>

## Project Schedule

The project is scheduled to be developed until mid-2007, with the realisation of two main Workshops, from where the project team already ask for interested parties to mark in your agenda.

1<sup>st</sup> Workshop - October 2006 – Niger

2<sup>nd</sup> Workshop - March 2007 - Niger

Besides these two Workshops the project is also committed to involved institutions to build a permanent network between the professionals

Istituto Superior Tecnico RGESD - IST Portugal	ESD - Energy for Sustainable Development Ltd UK	CRES - Center for Renewable Energy Sources. Greece	ARC - AGHRYMET Center Niger
Long experienced research team in the field of energy planning and renewable energy systems.	Consultant firm with experience in energy policy and regulation.	The Greek national centre for Renewable Energy Sources, Rational Use of Energy and Energy Saving.	Specialised institution committed with the food security and to help the management of natural resources in the CILSS region..

## The Project Team

### How to contact the Project Team

to have up to date information on the project visit our website - <http://ie4sahel.energyprojects.net>

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