

Mainstreaming Access to Energy Services: Experiences from Three African Regional Economic Communities

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1. CONTEXT

The Johannesburg Plan of Implementation includes references to an emerging international consensus on the role of energy in sustainable development. This "new consensus" consists of three points.

1) Energy services are an essential input to economic development and social progress, notably to achieving the Millennium Development Goals.

Energy for the Poor (2002), prepared by the U.K. Department for International Development (DFID), clearly exposed the many linkages between energy and the multiple aspects of development. Sustainable, affordable energy services are essential to attain all of the MDGs, but in particular are essential for poverty reduction, improved health, gender equality and sustainable management of natural resources.

2) Under current economic conditions, provision of energy services to poor populations in many developing countries is not attractive to market actors.

Experience in the decades before and after Johannesburg had amply demonstrated the positive and negative aspects of a purely market-based approach to the provision of energy services. On the positive side, in the power sector for instance, privatisation and deregulation had in many cases reduced expenditure of public funds in support of money-losing public utilities. However, on the negative side, these attempts only rarely achieved improvement in the quality or reliability of service in urban areas. In almost no cases had they achieved improvement in the rates of access to electricity in rural and peri-urban areas. Similarly, access to, and sustainability of, provision of domestic fuels and of fuels for transport had not improved under the pure market approach.

3) As a consequence, public authorities must act vigorously to create the conditions that will allow greatly expanded access to energy services.

In the African context, whereas the new consensus had concluded that public intervention in appropriate forms was essential, an inventory of public action showed that energy was rarely mentioned in African national and regional development strategies. As a result, public action in all forms—investment, regulatory action, ODA —was almost absent in the energy sectors in Africa.

Since Johannesburg, international consensus on the importance of access to energy has increased. The recent increase in oil prices has further strengthened awareness of the need for public action to guarantee long-term access to energy services.

2. REGIONAL ECONOMIC COUNCILS DEVELOP ENERGY STRATEGIES WITH UNDP SUPPORT

Consequently, after Johannesburg, a broad movement began, led in part by the Regional Economic Councils (RECs), to integrate energy considerations into national and regional development strategies. UNDP participated in this process through the "Regional Energy for Poverty Programme (REPP)".

This document, focusing on integrating access to modern energy services into regional and national policies and policy tools, is a UNDP contribution to CSD 15¹. It presents the experience of three African

¹ This document is intended to expand and comment on several of the "Policy Options" and "Practical Measures" identified in the contribution from the African Region to the ECOSOC Policy Options paper, 20 December 2006 (E/CN.17/2007/).

Regional Economic Councils—ECOWAS in West Africa; CEMAC in Central Africa; EAC in East Africa. With assistance from UNDP and other partners such as the French Ministry of Foreign Affairs, the European Union Energy Initiative Partnership Dialogue Facility (EUEI PDF), and GTZ, these RECs have moved towards developing and implementing regional strategies to increase access to modern energy services.

3. THE NATIONAL AND REGIONAL LEVELS

Why work on energy at the regional level? What is the relationship between national and regional efforts?

These fundamental questions will come up at every stage of work on regional energy strategies. The African experience shows that equilibrium must be found between two principles, subsidiarity and multilateralism.

The principle of subsidiarity requires that for optimal efficiency and responsiveness to local needs, energy interventions should be carried out by the smallest geographical entity possible. This might be a communal structure, a sub-national regional entity (department, canton, county) or a national structure. Use of regional capacity should be limited to cases where national structures cannot succeed.

On the other hand, several factors may weigh in favour of combining national efforts:

- Achieving scale economies. Rather than building several small national structures, one larger regional structure may provide better quality and lower cost. Nevertheless, it must be kept in mind that proper governance of a multi-national publicly supported facility is a challenge: many past efforts have failed, in part due to poor management and insufficient support from the supporting national administrations.
- Finding critical mass. Many national energy markets in Africa are quite small. Combining small national markets into a regional market may create the "critical mass" capable of attracting international investors.
- Increasing the reliability, and maximising the use, of local energy resources. Physical interconnection of national infrastructure can increase the overall performance of energy systems. Crossborder infrastructure can sometimes prove to be the most cost-effective way to provide energy services.

Regional electric power pools

The South African Power Pool (SAPP) and the West African Power Pool (WAPP) under development both allow optimal use of complementary power generation facilities, using cheap hydro power when it is available and sharing thermal generation when necessary. Furthermore, regional power pools increase the reliability of service, allowing neighbouring systems to provide backup facilities in case of outage of one power plant.

Lesson: Regional infrastructure can optimise energy systems, improving reliability as well as favouring the use of renewable resources.

4. INTEGRATING ENERGY ACCESS INTO DEVELOPMENT STRATEGIES

While the overall objective on integrating energy into development strategies can be stated in a few words, achieving this integration is in fact a formidable challenge, involving several complex tasks. This section discusses the process followed by ECOWAS, CEMAC and EAC².

4.1) Raising awareness and developing a political decision-making process

The first element of the "new consensus"—energy is necessary for development—is broadly understood. On the other hand, understanding the limits of a pure market approach and measuring the necessity for public intervention requires intensive discussion to arrive at a political consensus that takes into account local economic, social and environmental considerations.

In the African context, the contribution of the RECs was fundamental. Africa is divided into a large number of small countries, including almost 30 of the Least Developed Countries with populations of less than 20 million. In these small, poor countries, it is difficult for national administrations to undertake the complex task of defining a political approach to energy access. Thus support from the RECs played an essential role in awareness raising.

Regional organisations lead political engagement

In East Africa, the political commitment from EAC Council of Ministers and Heads of State has had a galvanizing effect on the regional institutional response in the design and finalization of the regional strategy.

In West Africa, the regional institutional and political context was both a strong point and a complicating factor. The fact that two regional organisations—UEMOA and ECOWAS3—exist in the same subregion, makes coordination more demanding. The danger of duplicating work within the two organisations was on everybody's mind, and slowed progress in the initial steps. The signing of a convention in August 2005 to establish a joint programme in the energy sector, including the creation of a joint steering committee on the respective roles in the field of energy, was an important step that clarified the institutional context and accelerated the process that led to the common White Paper.

Once the issue of task sharing between the two regional organisations was clarified, the two organisations became a powerful catalyst in the political decision-making process .that led to the adoption of the regional White Paper on access to energy. Each organisation brought credibility to the energy access process through previous work on energy: UEMOA has worked on the issues of domestic fuels and desertification; ECOWAS has worked on a regional power pool and regional gas transport infrastructure. The result was a regional policy, adopted at the Head of State level by the 15 member states of ECOWAS.

Lessons: RECs can play an important role in catalysing decision making at the regional level. Furthermore, political policies established at the regional level can be drivers for national policy making.

² Regional processes must take into account regional realities. The paths followed in North Africa and in Southern Africa were considerably different from the process described in this paper.

³ UEMOA (l'Union Economique et Monétaire Ouest-Africaine) includes 8 of the 15 ECOWAS member states.

4.2) Putting into place adequate multi-sectoral, inter-ministerial mechanisms

The "energy access" institutional process requires active participation of a wide range of actors involved in both the "supply" side and the "demand" side. Past failures in energy programmes (and unfortunately they have been numerous) were in part due to exclusively supply-side driven processes. For instance, electricity infrastructure was put into place, with inadequate consideration given to the nature and priority of needs, the solvency of users, or the financial, technical and institutional aspects of service delivery mechanisms.

The success of the post-Johannesburg processes in West Africa resides precisely in a demand-oriented approach that takes as the starting point national development objectives and constantly refers to the development impact of energy services.

From an institutional standpoint, this demand driven-process is considerably more complex than, for instance, planning for water supply or education. For the latter, the responsible administrations can go about their planning in a relatively autonomous manner, fixing priorities based on technical and political criteria limited to their sector of responsibility. In contrast, the multi-sectoral, multi-actor approach used in the "energy access" process requires coordination among multiple administrations:

- Actors in energy service delivery. This usually includes an Energy Department, perhaps an agency responsible for rural energy or rural electrification, a national electricity operator, but also a forestry service responsible for wood fuel supply, and a customs administration with an important role in the import of fuels and energy transformation equipment. Furthermore, in many countries, the decentralisation process is conferring an increasingly important role to local governments in energy service delivery.
- Energy-using sectors. In most cases, administrations responsible for water, health, education and agriculture/rural development are major stakeholders in the multi-sectoral process.
- Finance, planning, banking and fiscal administrations. The discussion between energy users and energy producers is an empty exercise if the administrations capable of setting priorities for national investment programmes are absent. Without them, the multi-sectoral process stays at a "shopping list" approach, with everyone putting on the table wish lists. The presence of national planning authorities is essential to go beyond this approach, making the hard decisions on priorities while taking into account national investment needs outside of energy.

Beyond the institutional complexity of a process involving multiple actors, building sufficient capacity, notably for new actors such as local public authorities, is often an additional challenge.

In Africa, the impetus for launching this multi-sectoral process often came from the RECs. Whereas purely national processes had difficulty in advancing, the regional organisations catalysed progress, through supra-national processes that established targets for access to energy and lent support to national processes to plan for reaching these targets.

The West African Regional Multi-Sectoral Committee

The first meeting of the ECOWAS-UEMOA multi-sectoral committee (Bamako, November 2005) was a turning point in the West African energy access process. Almost a hundred representatives from the 15 countries, representing all of the important stakeholder administrations in particular energy and planning ministries, met to discuss the energy situation in the region and approved a draft document, a forerunner of the regional White Paper.

The White Paper on Energy Access calls on ECOWAS member states to create national multi-sectoral committees to advance the energy access agenda. After approval of the White Paper at Head of State level, the work of the regional multi-sectoral committee has focused on developing the capacity of national multi-sectoral committees. At a training workshop in Dakar (March 2006), members of the committee discussed work methods for engaging the multi-sectoral consultative process in the specific context of their countries.

Lessons: Regional action can stimulate engagement of national multi-sectoral processes, including capacity building. The regional contribution is particularly important to help national administrations initiate country-level processes and develop national capacity.

4.3) Prioritising and quantifying energy services

The multi-sectoral energy access process posits that energy services must respond to needs. Thus prioritising and quantifying energy service needs constitutes an essential step of the process.

The first step is to get a broad overall picture of what kind of energy services would be necessary to achieve global, national or regional development objectives. Estimates can be calculated from standard ratios applied to national sectoral goals for water, health, education, etc.

Beyond the broad view, more detailed data are necessary at future stages of the process. Two information tools have been developed at national and regional levels:

- Manual or computer-based Geographic Information Systems (GIS) allow the introduction of special planning: juxtaposing, on a map, the specific types of energy needs and the available resources. The GIS facilitates the compilation and juxtaposition of detailed data on the localisation of energy-using infrastructure: schools, water wells, health care facilities, markets, and agricultural transformation and craft activities. National multi-sectoral committees can function as data collection instruments, centralising data from sectoral administrations, and, in some cases, as a forum for planning, allowing the confrontation between sectoral views and national plans.
- National and regional tools—based on macro-level indicators for energy services— facilitate evaluation of progress towards meeting energy access objectives (see box on the SIE).

The SIE in Western Africa

The UEMOA, with technical support from the IEPF (Institut de l'énergie des pays francophones, one of the institutions of the French-speaking countries) and from ECONOTEC, have built energy information systems (SIE, Système d'information énergétique) in Bénin, Niger, Sénégal, and Togo. New systems are at different stages of planning in Burkina Faso, Cameroon, Côte d'Ivoire, Guinée Bissau, Mali, and Togo. These tools allow both evaluation of progress in extending access to energy and prospective studies to facilitate planning for infrastructure.

Lessons: Regional organisations can play an important role in building information tools for energy access: scale economies in the construction of the technical instruments; capacity building and training; and exchange of experience between national teams. Furthermore, the intervention of regional organisations provides the political impetus, linking national projects to a broader regional political agenda.

4.4) Integrating energy access into development strategies

The "new consensus" concludes that public intervention is necessary to facilitate the provision of essential energy services, particularly for the poor, since macro policy frameworks, such as Poverty Reduction Strategies (PRSs), play an important role in determining national policy, fiscal and institutional responses. Development strategy documents—such as national sectoral planning documents, PRSs, National Sustainable Development Strategies, and ODA documents with major donors such as the CSP/NIP (Country Strategy Paper and National Indicative Programme) used by the European Union, — constitute the framework for public development efforts. In particular, these documents orient the use of ODA resources: the weakness (or even absence) of recognition of the role of energy has greatly limited the use of ODA funding for energy projects. Consequently, integrating access to energy into these national strategies is a priority.

Two entry-points must be considered:

- drafting of a specific energy chapter in these documents;
- integration of an energy paragraph into the sectoral chapters of energy-using activities.

The first, immediately visible consequence of integrating energy into these documents is the allocation of ODA resources to energy programmes or to energy activities within sectoral programmes. Beyond ODA, these documents constitute the "lighthouse" that allows coordination and coherence of different energy interventions in a country or region.

Integrating energy access into national strategies: Mali, Rwanda, Senegal Mali. High-level political commitment from the President of Mali greatly facilitated action to allocate public resources to meeting energy service needs. Previous experience gained through a Multi-functional Platform programme had raised awareness of the benefits to the poor of energy for agricultural processing, water pumping, etc. As a result, US\$ 4 million of HIPC funding was allocated to village-level energy access programmes.

Rwanda. The Economic Development and Poverty Reduction Strategy (Rwanda's second PRSP) is currently being developed to guide the implementation of VISION 2020, the national framework for development. UNDP and UNEP supported Rwanda in carrying out a costing exercise to estimate the investment in energy infrastructure necessary to achieve a level of energy access in Rwanda corresponding to the EAC regional targets.

Senegal. By integrating MDG benchmarks in its PRSP, Senegal created the opportunity to reassess the contribution of energy to MDGs. Ongoing discussion to develop a regional policy (ECOWAS) further motivated Senegal to align its national efforts to the forthcoming regional policy for energy access. A broad multi-sectoral process—part of the PRSP revision dialogue—led to a common perspective on the level of energy access needed to achieve the MDGs.

Lessons: The integration of energy into national development plans can be facilitated by the existence of a regional policy on access to energy. Developing MDG-based PRSs at national and regional level creates the impetus and political space for re-introducing energy access for poverty reduction and for examining how energy access consideration can help achieve the MDGs.

5. CONCLUSION: INVESTING IN ENERGY FOR DEVELOPMENT

The work accomplished by the three African RECs in developing a political consensus on access to energy has laid the foundations for national and regional energy infrastructure investments and expansion of energy service delivery for the poor.

Many projects and programmes are already underway, often predating the regional energy access strategies. They include:

- regional power pools such as the West Arican Power Pool (WAPP), with projects on cross-boarder power transmission lines and on regulation of power pools;
- national rural electrification programmes, for instance in Senegal, Mali, Kenya and Uganda; and
- national and regional programmes on the sustainable production and use of domestic fuels. National examples include Burkina Faso, Mali, Senegal, Uganda, Zambia; a regional example is PREDAS (Regional Programme for the Promotion of Household and Alternative Energies in the Sahel) in West Africa.

The challenge now before the three regions is to translate national and regional political consensus into investment programmes. Some of the most urgent tasks are to:

- translate overall regional and national macro planning targets into detailed regional/national investment programmes;
- strengthen sharing of best practice, notably in the areas of energy contribution to revenue generating activities and in the use of local energy resources; and
- replicate successful energy service delivery models, taking into account the multiple organisational, financial, social and technical aspects of access to energy.

For further information, please contact:

Laurent Coche Coordinator Regional Energy for Poverty Reduction Programme United Nations Development Programme BP 154, Dakar, Senegal Tel: + 221- 867.27.91 Fax: + 221- 867.22.55 laurent.coche@undp.org