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ENERGY POVERTY AND THE G8: THE ROLE OF THE IEA



International Energy Agency



Energy poverty and the G8: the Role of the IEA

Energy poverty has long been a topic of interest to the IEA, as illustrated by its inclusion in the energy policy reviews of South Africa, Angola and Chile and in the *World Energy Outlook* (see, for example, analysis of energy access from *WEO-2008* in the box below). A workshop on “Sustainable Rural Energisation in Major Emerging Economies”, held at the IEA in May 2008, provided a platform for high level representatives from eleven developing economies to share, with one another and with IEA experts, their policies for rural energisation. Lessons learned from the policy successes and failures discussed in these publications and the workshop provide a firm basis for recommendations to governments on how to work to alleviate energy poverty. Recognizing this, several African countries have already called upon the IEA for technical expertise in the formulation of energy policies and strategies. As the global leader on formulating energy policies to arrest climate change and ensure energy security, the IEA is eager to share its expertise with interested governments in Africa and elsewhere as they develop strategies to respond to the needs of their energy-deprived citizens.

Unfortunately, although the importance of energy has been repeatedly stressed in the context of poverty alleviation, there has been a failure to agree to any international targets, strategies, programs or action towards reducing energy poverty globally. Not one of the Millennium Development Goals specifically refers to energy.

Why should the G8 care about energy poverty in Africa?

- Citizens and opinion leaders in G8 countries understand that only a concerted international effort can succeed in responding successfully to the current global economic crisis. – “we are all in this together”.
- Energy is a key driver of economic development. Better access to energy could help alleviate poverty more broadly and transform African countries from aid recipients to trading partners.
- Poverty in Africa, including energy poverty, leads to migration (mainly to EU countries) which can cause social problems in both source and recipient countries and has proven to be destabilising to some economies.
- Expanding and diversifying sources of energy from Africa would enhance G8 energy security. Alleviating energy poverty will help create a more attractive environment for the investment needed to achieve this.
- Development assistance to Africa can take place with little regard for good governance or capacity building. Without G8 involvement to alleviate energy poverty, African development could become skewed in negative, potentially de-stabilizing directions.

The G8 is considering a project that would focus on priorities for the development of energy corridors in Africa. This is an important topic but it is difficult to determine a precise role for the G8 in implementing the results of such a study. Fostering enhanced regional cooperation on energy might be one way to help. The IEA therefore proposes to undertake a project that would focus on creating a common framework for energy policy development in Africa through capacity building.

Energy access in resource-rich sub-Saharan Africa countries: evidence from WEO-2008

Energy poverty in oil- and gas-rich sub-Saharan African countries is as dire as in other African countries without these resource endowments. A number of sub-Saharan African countries hold large oil and gas resources, which are expected to underpin strong growth in their production and exports in the coming two decades or so. Despite the vast hydrocarbon wealth of these countries, most of their citizens remain poor. As a result, household use of modern energy services is very limited. Two-thirds of households do not have access to electricity and three-quarters do not have access to clean fuels for cooking, relying instead on fuelwood and charcoal. In the Reference Scenario of the *World Energy Outlook 2008*, the number of electricity-deprived people is projected to increase over the projection period, as the population grows. And more than half of the total population of these countries still relies on fuelwood and charcoal for cooking in 2030. Tackling energy poverty is well within these countries' means, but major institutional reforms are needed. We estimate the capital cost of providing minimal energy services (electricity and liquefied petroleum gas stoves and cylinders) to these households from now to 2030 to be about \$18 billion. This is equivalent to only 0.4% of cumulative government revenues from oil and gas (see Table below). Thus, only a small proportion of the available revenues, after debt servicing, need to be dedicated to energy-poverty alleviation, rather than dissipated in subsidies, military spending or corruption. An improvement in the efficiency and transparency of revenue allocation and the accountability of governments in the use of public funds would improve the likelihood that oil and gas revenues are actually used to alleviate poverty.

Table 15.6 • Cumulative cost of providing universal access to modern energy in assessed sub-Saharan African countries, 2006-2030

	Investment requirements for universal electricity access (\$ billion)	Investment requirements for stoves and cylinders (\$ billion)	Costs of universal access to electricity and clean cooking stoves and cylinders as a share of government take (%)
Angola	1.36	0.22	0.1
Cameroon	1.26	0.20	13.0
Chad	1.14	0.17	2.0
Côte d'Ivoire	1.06	0.23	18.0
Congo	0.27	0.04	0.4
Equatorial Guinea	0.03	0.01	0.1
Gabon	0.08	0.01	0.1
Mozambique	1.70	0.23	5.6
Nigeria	6.09	1.32	0.3
Sudan	2.35	0.49	1.5
Total	15.35	2.91	0.4

Capacity building in energy policy formulation in Africa

There is an urgent need to develop capacity for formulating and implementing energy policies at the national, regional and local level in Africa. There is also a need to monitor and evaluate policies after they are in place. This is a long-term, iterative process that should involve learning from feedback. South Africa embarked on such a process in 1998 with the publication of its White Paper on energy. Its experience over the past decade could be used to provide a model for formulating energy policies in other African countries. Capacity building in this area will also contribute to improvements in governance more generally, which is the real key to development of energy resources and the alleviation of poverty in Africa.

Capacity building → better governance → more investment → better access to energy → economic growth → poverty alleviation

South Africa and Angola have recently indicated their interest in working with the IEA in the formulation of energy policy and strategies. The IEA has substantial expertise to offer them and other African countries on policy formulation, including on energy efficiency, technology diffusion, regulatory frameworks and energy pricing. The IEA could also play a role in Africa with the coordination and harmonisation of energy policies related to climate change and energy security with those aimed at improving energy access.

Energy ministries in most African countries have very little capacity to formulate policies, and those with the least capacity often face additional barriers. For example, conflicting agendas in different government institutions can prevent the development of cohesive frameworks and there is a tendency to focus on hierarchical systems of management. There are also very few national or regional institutions within Africa to which energy ministries can turn for objective advice. The principal institute focusing on energy issues in Africa is AFREC, established in 2001 with its Secretariat in Algeria. This organisation is looking for technical support from international organisations. The IEA interacts with AFREC on statistics and data, but, unlike our engagement with Asian and Latin American energy organisations, we are not engaged on other energy issues.

The IEA could carry out a project to support capacity building for formulating energy policies in Africa. First, a workshop would be held with the key stakeholders, primarily focused on government officials, but potentially including representatives from universities, research institutes and NGOs in African countries. For example, this could be done, partnering with those in South Africa or other countries in the region who have considerable interest in this subject, as well as capacity to collaborate with the IEA. The workshop would also invite government officials from ministries other than energy to ensure that the formulation of energy policies took other important national interests into account. The workshop would, inter alia, be designed to help participants to integrate local, national and regional dimensions of energy policy. Another key objective of the workshop would be to ensure that energy policies address inadequate access to energy (energy poverty), in both rural and urban areas. The participants would be tasked with determining a strategy (or strategies) for policy formulation and implementation, drawing on both IEA and African expertise, as well as on broader experience from other developing countries outside the region.

Immediately following the workshop, the IEA would assemble the information into a publication. This might take the form of a manual, similar to the IEA's Energy Statistics manual, outlining critical steps for developing a successful national energy policy. The intention would be to provide African policy makers a general framework for policy formulation. The IEA would also use the results of the workshop to identify further ways of assisting capacity building in Africa, for example through additional workshops or training and capacity building exercises run by the IEA.

Finally, depending on the availability of funding, the IEA could work with participants in the workshop to find opportunities for cooperation on monitoring and evaluating energy policies as they are formulated. This process could be similar to that followed in the preparation of the IEA's in-depth country reviews.