

World Energy Outlook 2008

Energy and Development Workshop in Maputo, Mozambique – 12 May 2008

The International Energy Agency and the Norwegian Ministry of Foreign Affairs co-hosted a high-level workshop to support analysis of energy development and revenue management in resource-rich Sub-Saharan African countries for the *World Energy Outlook 2008*.

The event was opened by H.E. Namburete, Mozambique's Minister of Energy, H.E. Gaustadsæther, the Norwegian Ambassador to Mozambique, and Ambassador Walther from the Norwegian Ministry of Foreign Affairs. The workshop attracted over 30 high-level attendees, including senior energy representatives from Mozambique, Mauritania, Republic of Congo and Tanzania and experts from Norway, the Netherlands and the United States. High-level representatives of international organisations, including the United Nations Development Programme, the International Energy Forum and the OECD also attended, as well as senior executives from revenue management and extractive industry coalitions. The meeting was informal and participants were asked to express their personal views.

Minister Namburete emphasised that energy is a critical agenda item for regional and international cooperation in Africa. He indicated that poor planning in the past has created major challenges for resource-rich countries. There is a need to improve the investment climate, to expand the technology base and to educate and train the local population. Limited refinery capacity is a major constraint to energy security in Africa. Minister Namburete said that the IEA's and Norwegian Ministry of Foreign Affairs' efforts to understand the current energy context provide a real opportunity for co-operation regarding revenue management and energy access. Ambassador Walther emphasised that energy is a key dimension in Norway's assistance to, and co-operation with, developing countries. He said that the *World Energy Outlook 2008* will give a useful boost to international awareness of energy challenges facing resource-rich countries in Sub-Saharan Africa.

The overall approach being proposed for *WEO-2008* was set out in a presentation by Neil Hirst and throughout the day participants provided very constructive insights on how best to make the *WEO* analysis relevant and impactful. The following are a few of the key messages from the day:

Session 1: *Energy access needs in oil and gas-producing Sub-Saharan African countries*

Energy is central to achieving all of the Millennium Development Goals. Currently in Africa, energy consumption is concentrated along the coast with low coverage of the interior. The assumption is that expanding energy access can trigger economic development but there is an energy financing gap of about 50% of actual needs. The UNDP showed that investments for minimal energy access, while substantial (about \$100 per person per year), are not very high compared with overall investment in the energy sector in sub-Saharan Africa. What is needed is appropriate policies given the institutional and technological capacity in these countries. Major investments are needed particularly in off-grid decentralized energy. The *WEO-2008* should give examples of successful cases of rural electrification (e.g. Tunisia). The *WEO-2008* should also address the issue of high oil prices which will force some consumers to switch away from LPG and other clean cooking fuels back to fuelwood and charcoal. Better financial instruments would help low-income countries manage high oil prices. The linkages between energy resource abundance and energy access appear at first to be

rather tenuous given distributional and infrastructural bottlenecks in all African countries. Resource-rich countries have an added option for expanding energy, in particular through the reduction of gas flaring and the use of gas and oil for LPG and gas-to-liquids production. CDM is one incentive in place for reducing flaring [there is one such registered project in Nigeria]. Resource abundant countries must choose between domestic use of resources or export. Another link is that resource-rich countries have a large source of income that, if managed well, could improve energy access. What is needed is a business plan for governments to maximize benefits for development. The overall consensus in the workshop was that the link should not be the main message of the *WEO-2008*.

Session 2: *Oil and gas supply in resource - rich countries, expected revenues and domestic consumption*

WEO-2008 should provide information on future supply of oil, gas and coal production and insights as to Africa's share in global supply. Energy consumption is extremely low: in Mauritania, for example, households consume only 12 kg of LPG per year on average [to meet cooking needs a typical household requires about 12 kg per month]. Energy demand growth in Sub-Saharan African countries is far lower than in southeast Asia. There is a high use of charcoal for cooking in Africa. The average government take from oil and gas production is on average about 65%, which provides significant funds at \$130/bbl. Subsidies are a central element to expanding access but there is a lack of transparency associated with their allocation. *WEO-2008* could provide best practice examples of targeted subsidy schemes (ex: pre-paid cards in South Africa and LPG penetration in Kenya). Despite high oil prices, costs of exploring and producing oil and gas are rising and there is a lack of qualified African engineers and technicians.

Session 3: *Revenue management – what works and what does not work?*

Most revenue management initiatives are concerned with the generation of revenue and not the use of revenue. There is a need for transparency and accountability all along the supply chain and on the spending side. A lot of revenue leakage occurs during the building of infrastructure. In the Netherlands, gas resources were treated as an asset and an investment fund was created to expand infrastructure to benefit future generations. Sovereign wealth funds, such as in Norway, may not make sense for low-income developing countries. What is perhaps more needed is experience on how to manage fluctuating income with price volatility. There was a discussion of resource use and revenue management in Chad, Mauritania and Congo-Brazzaville – with very different government responses. The conclusion was that, without government will, energy poverty reduction will never happen. Public dialogue and local management of resources with inclusion of civil society is crucial. Investing in education provides long-term benefits, particularly in improving the long-term investment climate. The *WEO-2008* could present some revenue management strategies. The *WEO-2008* should also highlight the IEA's support for initiatives which work to increase accountability in revenue and in data collection.

Session 4: *Overcoming structural and financial barriers and managing revenues to expand energy access*

Revenue optimisation needs to be integrated with the downstream sector, e.g. use of gas for fertilizers or for gas-to-liquids production. The *WEO-2008* could provide information on best

practices on managing revenues for infrastructural development. There is a strong temptation for cash-flush governments to use the revenues for subsidising energy consumption. Significant opportunities are lost due to inefficiencies and delayed action. Due to the use of diesel generators instead of grid-based power, consumers often pay up to 5 times as much per kWh for generator-based power. Government should have a plan to diversify resources. The IEA could consider a new Implementing Agreement focused on overcoming barriers to expanding access to energy in developing countries. Capacity building is not just the training of people, but involves reform of institutions and legal and judicial systems. The *WEO-2008* should present options because governments need adequate and full information to make rational decisions about what to do with their financial and physical resources.

Closing remarks were provided by Kamel Bennaceur from the IEA Secretariat, thanking Minister Namburete, the Norwegian government and the participants for a very successful brainstorming meeting. *WEO-2008* will be published in November 2008. The findings will be presented in Africa. The *World Energy Outlook* team will make use of the ideas expressed in the workshop and will seek advice from the participants throughout the development of the work.