

GHANA'S ENERGY CHALLENGE: WHAT IS TO BE DONE?

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A satellite picture of Africa at night, compared to other continents is distressing. Bright lights are few and far between. Africa's energy crisis comes on top of an already weak energy sector on the continent. We are facing a serious wake up call for Africa in general and Ghana in particular. What is needed is a comprehensive rolling Energy Action Plan that is implemented with rigor and precision. Experience from successful energy reforms in other countries confirms that such a plan of action will involve technical, economic, financial, regional, social and political considerations. The implied complexity is not an excuse for slippages and shoddy implementation. It is rather a call to bring the appropriate technical, managerial and political skills to the challenge.

The onset of the energy crisis in Ghana, in 2006, was most immediately sparked off by declining rainfall in an energy sector dominated by hydro power. Load shedding, combined with emergency investments and a greater reliance on regional energy supplies from our neighbors have together ameliorated the situation. Load shedding appears to be, for now, behind us. Citizens' frustrations have been high. Even so, we should not focus on who is to blame for the energy crisis. The more important questions are: What else is to be done? How can we ensure, through an appropriate Action Plan, that energy is harnessed to facilitate growth in Ghana that is shared, accelerated and sustainable? In what follows, we draw upon the experience of developing countries around the world to address three related topics: (1) managing the social and political consequences of energy reforms; (2) balancing adequate energy supplies with fiscal prudence; and (3) ensuring a well-organized and cost-effective implementation of an Action Plan to concrete results.

(1) What are the social and political effects of energy reforms and how can they be attenuated?

The key lesson here is that all successful reforms have paid strong attention to three dimensions: *First* poor households need to be offered a basic supply of electricity at lifeline rates, that is at **affordable prices**. Lifeline rates have been in place for over a decade, even though the benefits of these lower rates are not all accruing to the poorest. Recent analysis shows that about 50% of the implied subsidy accrues to the non-poor. The reform therefore must ensure that lifeline rates are directed to the poor. It also has to be financially sustainable over time, through cross-subsidies financed by charging higher rates for high-end residential users. **Management of lifeline rates, with simple targets that are monitored and regularly published, must be an essential part of the Action Plan.**

The next dimension is **access** to electricity. In Ghana, access rates, at 54% in 2005, are respectable in the context of SSA countries. However, this rate breaks down to an urban rate of 82% and a rural rate of 21%. Other countries such as Sri Lanka, Vietnam and Bangladesh have rapidly expanded rural access, making significant use of non-grid

solutions. On a recent visit to a village in one of the poorest provinces in China, I was struck by how cleverly and systematically the rural Chinese used renewable resources: biomass for heating, solar for cooking, rain water harvesting, etc. Our own renewable resources are an asset to harness. **The Action Plan must include a program to broaden access to rural areas, and to rely on renewable energy sources such as solar (still expensive, but the price is rapidly falling as technology improves), wind (increasingly efficient), biomass (where climate permits), etc**

Finally the third dimension is **political**. Reforms typically involve a combination of higher prices to make possible better access and reliability. The political economy of energy reforms brings into focus the impact on the winners and losers. The winners include those in trade, services, industry, agro-business, mining and households that have been deprived of a reliable source of electricity. The losers tend to be privileged urban based wage and salaried citizens and the middle classes whose access to electricity is less affected by the crisis. Losers are better able to organize protests against price increases. Winners, on the other hand, are too numerous to organize support in favor of assured supplies. Interestingly, the Ghana Industrial Association sees itself as on the gainers' side, and had long called for higher electricity prices to ensure more reliable and plentiful supplies. They also see the new prices as more affordable than the alternative of diesel-run generators. There is also the added risk that other parties will seek to take advantage of the protests from the losers to embarrass the Government. In the political economy area, experience shows that successful implementation should have the following components: openness; good dissemination of information about what is being done to deal with the crisis; and candor about the risks. This allows Governments to carry public opinion with them. **The Action Plan must therefore be based on a commitment to good implementation with maximum information to the public.** There is also the need to **overcome any residual political hesitation and to include in the Action Plan, a pragmatic approach to regional or cross-country contributions to energy supplies.** Ghana's reliance on Cote d'Ivoire is a fine example of this, as is the West Africa Gas Pipeline option that is envisaged to come on stream, even if with some delay.

(2) How can future investments in energy be financed while ensuring an affordable impact on the budget?

For cash-strapped energy utilities to be able to finance future investments and maintain current plant and equipment, prices must cover (long run) costs including the life line tariff subsidy. There is no escape from this principle. Pricing below this level simply means future load shedding or worse. Where there are budgetary implications of social or political imperatives (protection of poor people, strategic industries), these must be explicitly paid for from revenues or through cross subsidies. However, limits must always be built in, since what is spent on energy subsidies is not available for roads, schools or health care. . In all countries that have succeeded in allaying energy crises, this principle has been adhered to. Examples include Chile, Argentina, and in SSA, Uganda most recently. In Ghana, the supply of power to VALCO at preferential rates has both costs

and benefits that need to be revised, and the analysis publicly shared and debated. **The Action Plan must therefore include measures to ensure the financial viability of energy utilities, and a thorough analysis of cross-subsidies, budgetary transfers, and the full rationale for long term subsidies to any activities such as VALCO.**

Equally important, not all energy investments need to be financed by Government. Successful energy reforms have been accompanied by country-specific attempts at exploring and implementing Public Private Partnerships (PPPs) in energy investments. Global experience indicates that, at best, the private sector is unlikely to finance more than about a third of new investments. But to get this possible one-third requires hard work by Government in determining the rules of the game for the private sector, and ensuring that implementation is predictable and credible. Countries that have used this approach with some success include Chile, China, Egypt, India, Malaysia, Morocco, Thailand, Tunisia, and Vietnam. Despite efforts made by the Government, Ghana appears to be lagging behind other SSA countries in its success in wooing private participation in energy investments. Of four signed private power agreements, only one is active. Apparently there is a pipeline of interested operators awaiting agreements with the Government. A serious business-like approach to getting private investments into generation, and later into transmission and distribution, is still wanting. Whether PPPs are done through regulation or individual contracts is very much a country decision. What is also clear is that unless there is international benchmarking (using Latin American and Asian countries) of risk sharing and predictability about key decisions such as tariffs, the private sector will not invest, or will do so with terms that compensate for the risks. Appropriate and predictable risk sharing between the public and private sectors is the key issue to be managed here. **The Action Plan must break from the past and usher in a business-oriented approach to PPPs, using international benchmarking and clarity and predictability of the rules of the game to get the best terms possible for Ghana. Recent inconsistent actions related to the tariff decisions of the PURC have to be offset by credible future commitments in order to attract the private sector into energy investments.**

(3) How do we implement the Action Plan to lead to concrete and sustainable results?

Energy is an essential component of a successful strategy of accelerated, shared and sustainable growth. It is, one might say, too important to be left just to the Energy Ministry. It also requires a laser beam-like focus by Government. It requires a business-like approach. At the same time, its key social and political as well as economic and technical aspects must be well balanced. This will ensure better service quality for growth industries and for consumers as well as improved access for the poor and for rural Ghanaians. And it will also ensure improvements in the impact of the energy sector on the Government's budget. It also requires that time lines be monitored and managed efficiently. **Energy reform is a process, not an event. This effort must be led by one of our most effective managers, with private and public sector experience, chairing a multi-stakeholder Energy Commission, which will develop a Rolling Energy Action Plan. This will need full Presidential support and Cabinet-level implementation**

commitment. It will also require that the Energy Commission issue an Energy Scorecard twice a year to the public, comparing results with planned outcomes.

Conclusion

Ghana's laudable aim to be a MIC by 2015 requires a growth rate of at least 8-10% per annum over the next 8 years. The implications of this for energy demand management, supply planning and implementation, and institutional building are enormous. In addition to the questions addressed here, energy conservation, renewable energy and energy sustainability will need to be taken up by the Commission.

The idea of a nuclear energy option has also been raised in Ghana, and is under study. This is a laudable longer term goal. As with other options, the technical, economic, financial, social and political dimensions will need careful analysis before a decision and timeline are arrived at. While we should study this option, we should be putting our more pressing energy sector house in order before we can earnestly and meaningfully focus on a nuclear option.

As we contemplate our current energy challenge: will we grab the bull by the horns this time, or look back in anger when the next crisis hits?