THE SECOND OBAMA ADMINISTRATION SHOULD CLOSE AFRICA'S ENERGY POVERTY GAP

Todd Moss, Vice President and Senior Fellow, Center for Global Development
Stephanie Majerowicz, Researcher, Center for Global Development

It's 2013 and nearly 7 out of every 10 Africans have no access to modern electricity; 8 out of 10 lack access to clean cooking stoves. Energy poverty—defined as the inability to cook with modern cooking fuels and a lack of minimum lighting for productive activities at sunset—affects the health, education and economic opportunity of almost 600 million Africans.

And yet, universal access to electricity is entirely achievable. According to the International Energy Agency (IEA), reaching universal energy access by 2030 would require $48 billion a year in global investment (about 3 percent of global energy investment), yet only $9 billion is being invested per year in closing the energy gap (2011).

Moreover, since the bulk of the world's energy poor live in countries with very low carbon emissions (Ethiopian per capita carbon emissions are less than 1 percent of the American level), environmental concerns are no excuse for preventing expansion in energy access. In fact, the International Energy Agency predicts that achieving universal energy access through a mixture of renewable and fossil fuel sources would increase global carbon emissions by less than 1 percent by 2030 (2011). With continued energy poverty in the forecast, a U.S. policy framework to promote a reduction in the African energy gap could achieve a substantive legacy for the Obama administration, while at the same time boost business and broader development targets in the region.

Why is It Important to Bridge Africa's Energy Gap?

Energy poverty severely impacts health and education prospects. Today, energy poverty leads to more premature deaths than either malaria or tuberculosis. The World Health Organization estimates that almost 4,000 people per day die prematurely each year from household air pollution from biomass cooking. If nothing is done to address energy poverty, by 2030 this number is expected to climb to 1.5 million per year—more deaths than will be caused by HIV/AIDS and malaria combined (IEA, 2011). Energy poverty also affects the provision of health services (vaccines are hard to refrigerate without electricity) and hinders education prospects (it is hard to read in the

dark without electricity and girls often get pulled out of school to collect firewood).

Access to affordable electricity is also a major—and in many countries the very top—constraint to economic growth. Business survey data consistently point to the cost and reliability of electricity as among the most important barriers to business expansion in Africa (Ramachandran et al., 2009). For instance, Ghana's Valco aluminum smelter is today running at just 20 percent capacity due to a shortage of low-cost power. In Nigeria, 97 percent of large firms rely on (costly, inefficient and polluting) diesel generators to provide nearly two-thirds of their power, while almost half of all firms operating in sub-Saharan Africa own or share a generator. The economic returns to modern electricity could be huge for these economies. It is no coincidence that investment in the power sector is a priority for almost every African government.

What Needs to Happen to Put Energy on the Agenda in 2013?

What will be President Barack Obama's legacy in Africa? President Bill Clinton championed the African Growth and Opportunity Act (AGOA), still the core of U.S.-Africa trade relations. President George W. Bush built the President's Emergency Plan for AIDS Relief, the President's Malaria Initiative and the Millennium Challenge Corporation—all still with us today. What kind of legacy can the Obama administration leave that addresses the pressing challenges constraining African growth, takes advantage of U.S. comparative advantage, and is compatible with a tight fiscal climate? The next big White House effort in Africa should be to promote access to electricity, and here's how:

Leverage private investment by rationalizing U.S. government tools

The U.S. government has a variety of low-cost tools to leverage private investment in electricity projects. Yes, there is need for soft money to nudge projects along, encourage early-stage technologies and reach some remote areas. But the bulk of the financing for new power generation and transmission will come from private sources, multilateral development banks or government agencies like the Overseas Private Investment Corporation (OPIC), which actually contributes money into the U.S. Treasury every year. Power is also an area in which American companies can make a major contribution while expanding their own market reach. However, U.S. government instruments to promote private investment are spread across the bureaucracy, and the current interagency setup is far too fragmented and confused to be deployed efficiently. At a minimum, the White House could play a convening role and force the various agencies to align around some common objectives. A central role should go to OPIC, which could more effectively lead this effort if it is allowed to keep more of its profits to bolster staff and is given modest additional authorities (such as equity capability and multi-year authorization). To make the effort a true legacy sustainable beyond one term, the White House could even consolidate parts of various agencies and programs that promote private investment abroad under one roof, for example, by creating a U.S. Development Bank built around OPIC.

Deploy soft money efficiently

USAID, the Millennium Challenge Corporation, the Department of Energy, and the Trade and Development Agency are all involved in energy projects in developing countries. They provide useful tools at various stages of the project process and could be especially critical to reaching remote areas or making some new technologies feasible to deploy in the short term. Given the fiscal environment, these concessional dollars will be a premium, so they will need to be used in an integrated and sensible manner. Hoping the normal interagency process can achieve this goal is unrealistic.

Engage proactively with the Greens

A sizeable part of the energy poverty gap can be closed via renewables and new off-grid technologies. OPIC is financing a lot of these investments already, but could do more with additional flexibility. But it is also true that most of Africa's cities and industrial zones will invariably require additional traditional, on-grid power run by fossil fuels. Powerful political constituencies concerned with climate change or local environmental impact may see such an effort as a threat. Pressure from these groups has already forced OPIC to adopt a greenhouse gas emissions policy that effectively prevents it from participating in almost all fossil fuel projects, even in countries that are extremely poor and cur-

rently have nearly zero emissions. Some compromise with environmental interest groups will have to be found that can both meet global emissions goals and allow poor people to turn on a light. One option may be to keep a ban on coal, but exempt the poorest countries from the carbon cap for power projects fired by natural gas, which typically produces about half the emissions of coal.

As the Obama team contemplates its Africa policy priorities for the second term, a clear and public commitment to close the energy poverty gap in Africa could be a win-win-win for Africa, the United States and the globe.

References

International Energy Agency. (2011). Energy for all: Financing access for the poor. Paris: International Energy Agency. Retrieved, December 6, 2012, from http://www.iea.org/publications/freepublications/publication/weo2011_energy_for_all.pdf

Ramachandran, V., Gelb, A., & Shah, M. (2009). *Africa's private sector: What's wrong with the business environment and what to do about it?* Washington, DC: Center for Global Development.