Africa's Emerging Energy Landscape: Trends and Opportunities for U.S. Engagement
By Richard Downie

Sub-Saharan Africa has entered a dynamic period of natural resource exploration, development and production. Globally significant discoveries of natural gas off the coasts of Mozambique and Tanzania have geopolitical implications for world energy markets and have the potential to transform economic growth at home. Oil finds off the Gulf of Guinea and in East Africa could pave the way for the entrance of new producers, including Sierra Leone, Liberia, and Kenya. Even countries like Somalia, until recently considered out-of-bounds due to conflict and political instability, have become viable hunting grounds for exploration companies. Meanwhile, established producers like Nigeria, Angola, and Gabon have the potential to revitalize production by harnessing new technologies to drill through offshore pre-salt deposits, a technique which has led to big discoveries in geologically-similar areas of Brazil.

The CSIS Africa Program, with support from the Chevron Corporation, is exploring the policy implications of Africa's fast-evolving energy landscape

- for African governments, as they make important policy decisions on how to structure their emerging oil and gas industries and manage their new-found wealth;
- for African citizens, as they wait expectantly for natural resource revenues to alleviate poverty and provide them with better access to power; and
- for the United States, as it eyes new business opportunities in the energy sector and seeks to promote good governance and economic development in Africa.

CSIS hosted a public event at the U.S. Congress on May 14 to highlight Africa's energy trends and discuss what the United States can do to ensure that the opportunities are fully exploited. **Senator Christopher Coons**, chairman of the Senate Foreign Relations Committee's subcommittee on Africa, framed the discussion in development terms. Natural resource wealth, he argued, provides an opportunity for African countries to tackle one of the biggest barriers to sustainable economic growth: the lack of access to reliable power supplies. He described energy poverty as a cross-cutting challenge that impacts education and health outcomes and stymies entrepreneurship and investment. Without electricity, young people across Africa are unable to study after nightfall, families are forced to use unsafe cooking equipment that causes respiratory diseases, and clinics cannot provide cold storage for lifesaving vaccines and anti-retroviral drugs.

Ambassador Carlos Pascual, special envoy and coordinator for international energy affairs at the U.S. Department of State, gave a stark illustration of the scale of the problem. He said the total power generation capacity of Sub-Saharan Africa—excluding South Africa—was only 40 gigawatts, roughly the same capacity as New York State. The new energy producers of Africa have a big opportunity to help address this situation by investing some of their expected revenue windfall into power generation, transmission, and distribution projects. But they need external partners in order to do so. According to the International Energy Agency, the price tag to meet the Africa's energy needs is $48 billion a year, every year, until 2030. This colossal sum is too vast to be filled by traditional development assistance; most of the funding will have to come from private investors.

Ambassador Pascual said the right policy framework must be put in place to encourage private investment in the power sector. The objective, he said, is to create viable business deals that deliver low-cost electricity to consumers while allowing utility companies to recoup their costs. Nigeria is currently trying to do just that, with U.S. assistance. One of the key elements is to create a bulk purchaser for electricity so that investors in independent power projects have a mechanism to sell to the grid. Another prerequisite for investors is adequate insurance and financing instruments, which the Overseas Private Investment Corporation (OPIC) is able to provide. Africa has a lot of potential for renewable energy projects but although the cost of alternative sources like wind and solar power is declining, they remain far more expensive for African consumers than fossil fuels like coal.

For countries endowed with natural resources, the sudden arrival of a big, new revenue stream from oil and gas can have destabilizing consequences unless it is managed effectively. **Phillip Van Niekerk,** an oil industry expert and managing director of Calabar Consulting, said the risk factors included territorial disputes over hydrocarbon blocs, economic distortions caused by the inflationary impact of oil exports, and corruption. The onus, he said, lies with African governments to negotiate contracts with oil and gas companies that enable them to extract maximum value from their resources; and to put in place policies that promote accountable, transparent management of their natural resource wealth. Most importantly, Africa's energy producing economies have to move from merely supplying raw materials to the rest of the world toward finding ways of adding value to the resources they extract. Only then will they have a chance to deliver broad-based, sustainable growth to their citizens.

One of the countries grappling with these challenges is Ghana, which recently became an oil producer and currently pumps 110,000 barrels per day, with output set to more than double in the coming years. Ghana's ambassador to the United States, **Daniel Ohene Agyekum,** said that as a "new kid on the block," his country had been around the world to learn from the experiences of established producers, including the United States. The key takeaways, he said, were that the right legal framework must be in place to govern the energy sector and that civil society must be involved in monitoring governments' stewardship of oil revenues.

The U.S. government and American companies have a role to play in advising African governments on the management of their natural resources. They can offer technical support, share technology, and relate their experiences of what works, and what doesn't. The U.S. can also exercise moral leadership. Mr. Van Niekerk highlighted the United States' role in promoting good governance of the energy sector by setting basic rules for corporate conduct through legislation like the Foreign and Corrupt Practices Act and by supporting international efforts like the Extractive Industries Transparency Initiative.

The U.S. public and private sectors can also help African governments tackle energy poverty by investing in, and partnering on, power infrastructure projects. Senator Coons said that in order to fully exploit these opportunities, the various arms of the U.S. government—including the Department of State, the U.S. Agency for International Development, the U.S. Department of Commerce, OPIC, the U.S. Trade and Development Agency, and the Export-Import Bank—must do a better job of coordinating their activities and marshaling their resources more effectively.

You can find full event audio and video on the CSIS website.

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