Economic development in Sub-Saharan Africa is inextricably tied to the growth of its power sector. There are still 600 million people in the continent without access to electricity and therefore unable to contribute to or benefit from the expected gains of the next decade. Meanwhile, the billions of dollars of investment needed to reach these customers will provide an added boon to local economies and the modern infrastructure they provide will help the economies diversify. While the majority of the expected $141bn in investment over the next ten years will come from large-scale generation, there will also be leapfrogging opportunities with micro grids, modern transmission and distribution grids, advanced metering, and additional smart grid infrastructure. If successful Africa’s power sector investment plans will be a direct source of economic development and an enabler of future growth.

Yet, while projections remain strong, a number of challenges could thwart these ambitious plans. Most notably, the utilities that will largely be responsible for carrying out power sector investment are almost universally in financial ruin, dependent on multilateral aid and high-interest debt to carry out their investments. While foreign assistance may help cover the upfront costs of generation, most utilities are currently not in a position to maintain these investments and sustain growth. One of the keys to financial sustainability is efficient and modern metering – the cash register of the power sector. Many African utilities are under-metered and suffer high T&D and collection loss rates. Investment in prepaid – and especially AMI – meters will be critical to sustaining revenues. Smart grid infrastructure will be critical to sustaining Sub-Saharan Africa’s rapid growth.

Key questions answered in this study:

- How large will the power sector market be across Sub-Saharan Africa?
- What factors will drive investment in power generation, T&D, and metering?
- Which African countries are implementing prepaid and advanced metering projects?
- What major international and local vendors are best positioned to supply the region?
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