POWER AFRICA DATA-DRIVEN ELECTRIFICATION PLANNING PROGRAM

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In October 2020, Power Africa awarded the International Energy Agency (IEA) a **$1.5 million**, two-year Public International Organization grant to implement **Power Africa's Data-Driven Electrification Planning Program**.

CONTEXT

Universal energy access is one of the driving forces in alleviating poverty and ensuring sustainable and inclusive economic growth. The IEA *World Energy Outlook*, however, shows that close to 600 million people remain without access to electricity in sub-Saharan Africa. This number rose in 2020 due to the effect of the COVID-19 pandemic, reversing progressed observed in recent years, and a delayed recovery would see individuals without access to electricity increase to 630 million by 2030.

The energy access sector is undergoing deep transformations that can help bridge the gap, but there is a pressing need to provide governments with more actionable and pointed tools for integrated electricity planning. Such resources are necessary to make the most of centralized and decentralized solutions, leveraging off-grid private sector-led initiatives such as mini-grid deployment and solar home systems distribution. These off-grid solutions provide access to electricity and advance efforts to reach universal energy access by 2030 and the Sustainable Development Goals. Power Africa is drawing on the IEA's expertise to support governments as they develop improved programs and policies that aim to accelerate electricity access. The grant envisages an approach that:

- Standardizes data collection for energy access
- Leverages state-of the art modelling capabilities to evaluate least-cost alternatives among centralized and decentralized energy solutions

GRANT ACTIVITIES

ACTIVITY I

Improving electricity access data in sub-Saharan Africa

The IEA will aim to refine and improve electricity access data collection and usage from central grids and government-led access programs. This will improve the understanding of electricity access tracking and analysis by providing more robust, standardized and comprehensive data sets. It is also expected to drive more informed, focused and impactful policies and programs. IEA will undertake this work in up to six countries in sub-Saharan Africa.

ACTIVITY II

Enhancing geospatial analysis for defining pathways to universal electricity access by distribution mode and fuel

The IEA will aim to improve geospatial tools and data for integrated electrification planning, encompassing residential and productive demand for energy and utilize these tools to contribute to improved electricity planning capacities at the government level and more impactful policies to deliver the best route for universal access. IEA will undertake this work in up to three countries in sub-Saharan Africa.

POWER AFRICA: *Power Africa is a U.S. Government-led partnership that brings together the collective resources of over 170 public and private sector partners to double access to electricity in sub-Saharan Africa. Power Africa's goal is to add more than 30,000 MW of new electricity generation capacity and connect 60 million new homes and businesses to power by 2030.*

IEA: *The IEA is at the heart of global dialogue on energy, providing authoritative analysis, data, policy recommendations, and real-world solutions to help countries bring about a secure and sustainable energy future for all. Taking an all-fuels, all-technologies approach, the IEA advocates policies that enhance the reliability, affordability and sustainability of energy. The IEA is supporting clean energy transitions all over the world in order to help achieve global sustainability goals.*