



Renewable & Appropriate Energy Laboratory

RAEL



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



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BUILDING A BETTER FUTURE



Inclusive Development for the Just Transition in Africa

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134 POWER PROJECTS
DOUBLE ACCESS TO ELECTRICITY BY 2030



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@ COP 26 with the Nigerian Ministers of State and Power, Power Africa Coordinator, & UN Special Representative for Sustainable Energy for All



SUSTAINABLE ENERGY

An action agenda for Africa's electricity sector

Modernization and expansion require heightened efforts

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To meet the needs of a growing population in a manner that is socially equitable, economically viable, and environmentally sustainable, Africa's electricity sector will require a major transformation (1). It has already undergone some important changes over the past decade. Efforts to expand access to electricity have proceeded at a slightly faster pace

than anticipated 10 years ago. In parallel, the deployment of renewable energy technologies has progressed apace, despite new discoveries of natural gas across the continent and favored by the volatility of oil prices. Nonetheless, the expansion and modernization of Africa's electricity sector need heightened efforts, as evidenced by current electrification rates, generation-capacity levels, and security-of-supply indicators. We identify a suite of actions that, if implemented, would put Africa's electricity sector on track to sharply increase electrification rates across the continent while securing long-term ac-

cess to affordable cleaner energy, and reducing greenhouse-gas emissions and emissions of local-air pollutants (see the figure) (2).

SUPPLY-SIDE INCENTIVES, DEMAND-SIDE SUBSIDIES

Despite progress with rural electrification, at least 250 million people in Africa cannot afford electricity, a gap that the COVID-19 global health pandemic has widened by about 80 million people who have fallen into extreme poverty (3). A combination of supply-side incentives and demand-side subsidies can go a long way toward expanding

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