

Renewable energy, critical to meeting Africa's energy needs by 2040

Africa, filled with many developing nations, provides the ideal opportunity for the application of renewable energy solutions and technologies. About 635 million Africans still live without electricity and demand for energy is rising rapidly. Given the lack of power supply, especially in the rural regions of the continent, the growth and demand for applications of small-scale solar, wind and geothermal technologies providing power to people and business, is rapidly expanding. The use of renewable technologies is especially useful in the further and outlying areas as it is easier to install a more cost-effective solution in order to be less reliant on transporting electricity from power plants via transmission lines, which becomes very expensive. Renewable energy has the potential to substantially assist many African countries and their people to have access to energy, essential for the reduction of poverty and to ensure economic growth.

The African Development Bank (AfDB) is stepping up the pace by focusing on five priorities that are crucial for accelerating Africa's economic transformation. The Bank calls them the "[High 5s](#)": Light up and power Africa, Feed Africa, Industrialise Africa, Integrate Africa, and Improve the quality of life for the people of Africa. The AfDB President, Akinwumi Adesina, describes energy as "the lifeblood of any society and the passport to economic transformation". As such, energy is at the top of the bank's "High 5" priorities and its new Energy Strategy aims to increase energy production and access, improve affordability, reliability and energy efficiency.

According to the International Energy Agency (IEA), the global energy demand will be 30 per cent higher with renewable energy facilitating almost half of sub-Saharan Africa's power generation growth by 2040. Africa's demand for electricity is expected to increase by more than two-thirds between 2016 and 2040. Herein lies the business opportunity for the private sector participation. Added to this, renewable energy reduces carbon emissions, has the potential to supply cheaper electricity, and is becoming more affordable while coal and nuclear are likely to be more expensive. The IEA states that solar PV is expected to lead capacity additions as it has become the cheapest source of electricity generation.

Research by McKinsey indicated that Africa's potential energy generation capacity is up to 1.2 terawatts excluding solar, and more than 10 terawatts including solar. Africa has solar in abundance and can provide almost 10 terawatts of new energy. By 2040, it has been estimated that more than 25% of Africa's total energy will originate from geothermal, hydro, solar and wind, indicating a more than four-fold increase from only 5% in 2013.

The opportunity for private sector involvement and access to renewable energy projects in Africa will be a focused feature of the 10th **African Energy Indaba (AEI)** which is set take place on **20-21st February 2018** at the Sandton Convention Centre in Johannesburg, South Africa and is set to unpack these critical issues pertinent to African renewable energy implementation.

Ends.