Zambia increased renewable energy penetration

Zambia increased renewable energy penetration

LUSAKA, March 15, 2024 -- A new National Energy Advancement and Transformation Program (NEAT), a multiphase program supported by the World Bank, will help Zambia step up the financial sustainability, reliability, and resilience of its electricity sector by 2033.

The $700 million NEAT program will help Zambia"s national power utility, ZESCO, return to sustainability, attract new private sector investment at scale to enable new growth, and deliver more inclusive development across the national territory. In doing so, it will also help to enhance the energy sector"s climate resilience through diversification of the energy mix.

The first phase of the program, which runs from 2024 to 2026, will provide a $100 million grant to improve ZESCO"s financial performance and operational reliability, and strengthen electrification financing mechanisms supporting the Rural Electrification Authority (REA). It will also improve Zambia"s procurement process for non-hydropower renewable energy projects.

"This International Development Association* (IDA) grant represents an important step towards supporting Zambia to secure a sustainable and resilient energy future for its people. We are hopeful that by addressing the immediate financial challenges and laying the groundwork for a diversified energy portfolio, we are setting the stage for long-term economic growth," said Achim Fock, World Bank Country Manager for Zambia.

The NEAT program will facilitate the implementation of the government"s recently launched Integrated Resource Plan and is underpinned by ZESCO"s and REA"s own multi-year strategic plans.

"The deliberate focus on increasing renewable energy capacity by a substantial 1,458 megawatts demonstrates the World Bank"s commitment to supporting Zambia to diversify its energy sources and enhance climate resilience," said Yadviga Semikolenova, World Bank Practice Manager for Energy in Eastern and Southern Africa.

The NEAT program demonstrates the World Bank"s commitment to supporting Zambia"s energy policies contained in the 8th National Development Plan (8NDP), Vision 2030, and National Energy Policy (NEP). The program also aligns with the World Bank"s goals of ending extreme poverty and boosting prosperity on a livable planet by enabling access to reliable and sustainable energy sources.

Renewables are an increasingly important source of energy as countries seek to reduce their CO2 emissions and dependence on imported fossil fuels. Renewables are mainly used to generate electricity, though renewable technologies can also be used for heating in homes and buildings. Renewable biofuels are also an

emerging technology solution to decarbonise parts of the transport sector.

Note thatmodern renewablesexcludes traditional uses of biomass, such as burning collected wood, agricultural byproducts or dung for cooking or heating. This has serious negative consequences on health and the environment, including contributing to millions of deaths annually from air pollution, and is targeted for phase-out in international development and climate goals and in the IEA"s Net Zero scenario.

Biofuels, mostly made from plants, and waste products, such as household trash and industrial wastes, can be burned to generate electricity or heat. This can have environmental and climate advantages compared to burning fossil fuels, though the impact varies widely depending on the fuel source and how it is used. Traditional uses of biomass for heating and cooking, which remain a major source of energy in many developing countries, are targeted for phase-out in international climate goals and IEA scenarios.

Biofuels are used in all parts of the energy system: as replacement for oil-based fuels in transportation, to generate electricity, for heating buildings, or to provide heat for industrial processes.

Renewables such as solar panels, wind turbines and hydroelectric dams generate electricity without burning fuels that emit greenhouse gases and other pollutants. As the costs of solar panels and wind turbines have fallen dramatically in recent years, renewables now represent the cheapest source of new electricity generation in many parts of the world.