Burkina faso solar thermal energy

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The Yeleen program is developing photovoltaic production and facilitating the integration of this energy into the grid through additional storage facilities. Four photovoltaic power plants must be constructed to achieve this goal--42 MWp near Ouagadougou, 6 MWp in Dori, 2 MWp in Diapaga and 1 MWp in Gaoua.

The Yeleen program is also helping to reinforce and expand the distribution grid to improve people"s access to electricity. It is also developing decentralized electricity production from solar energy through mini-grids and individual solutions.

The installation of the energy storage system in Ouagadougou, the main node of the national grid, is a first for West Africa. With a capacity of 8 MW/8 MWh, this system improves the quality of the electricity delivered to the grid. Moreover, it represents the first stage in the construction of a grid capable of accommodating more intermittent solar energy production. At the same time, the reinforcement of the distribution grid is supplying electricity to 15,000 new customers.

In a momentous ceremony, the Minister of State, Minister of Defense and Veterans, Brigadier General Kassoum COULIBALY, officially inaugurated the Zano photovoltaic solar power plant in the Boulgou province, Center-East region. Boasting a peak solar capacity of 24 Megawatts, this state-of-the-art facility is set to inject 38 GWh of clean electricity annually into the interconnected network of the Burkinab? National Electricity Company (SONABEL).

Spanning 54 hectares, the Zano photovoltaic solar power plant encompasses a field adorned with 43,960 monocrystalline panels, 1,570 strings, 88 inverters, 3 transformer stations, and 785 tracking system tables. With these components, the plant will contribute significantly to Burkina Faso’s goal of achieving 15% renewable energy in the national energy mix by 2025.

SONABEL’s Secretary General, Ouokana Ganou, highlighted the importance of Zano’s electricity output in advancing the nation towards its renewable energy targets. He commended the project’s success and the use of panels that track the sun’s movement for enhanced efficiency.

Representing the Prime Minister, Minister of State Kassoum COULIBALY emphasized Zano’s role in strengthening national production and increasing the share of solar energy in Burkina Faso’s energy mix. He expressed gratitude to the local communities for their contribution to the project and urged its continued consideration for their benefit.

The Zano Power Plant stands as a testament to successful collaboration, as it was built under a Public-Private Partnership (PPP) between the Burkinabe State, represented by SONABEL, and the QAIR ENERGY/QUADRAN BURKINA FASO Group. Marc GALINIER, the company’s Sub-Saharan

Africa director, expressed appreciation for the partners and the people of Zano, recognizing Burkina Faso’s significant stride in the realm of renewable energy.

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.