

# Egypt: Benban, a model of clean energy production in Africa

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In the land of gold, near Aswan, the jewel of the Nile, lies one of the largest solar parks in the world: Benban. This is no coincidence: located between latitudes 22 and 31.5 north, Egypt has among the highest solar energy potential of any country worldwide.

The Benban park extends over an area of 37 square kilometres near the “desert road” between Aswan and Cairo.

Launched in 2018 with the commissioning of the first photovoltaic plant, this mega-project has been integrated into the strategy developed by the Egyptian New and Renewable Energy Authority. The aim is to contribute to increasing the share of renewable energy in its electricity mix to 42% by 2035. The park alone reduces carbon emissions by two million tonnes per year.



“The first time I came here,

there was nothing but sand,” recalls Mostafa Abdelfatah, the project manager. “But the sunshine immediately struck me as a great opportunity to produce clean energy. Benban

is now one of the largest solar parks in the world, with millions of photovoltaic panels, providing electricity to more than one million homes,” he said.

The African Development Bank supported the solar park with \$55 million. The park includes 34 solar power plants, each with a capacity of 50 megawatts. At full capacity, it will produce 3.8 terawatt hours of electricity annually.

The project created at least 20,000 jobs during the construction period, with an additional 6,000 permanent positions by the companies operating the park.

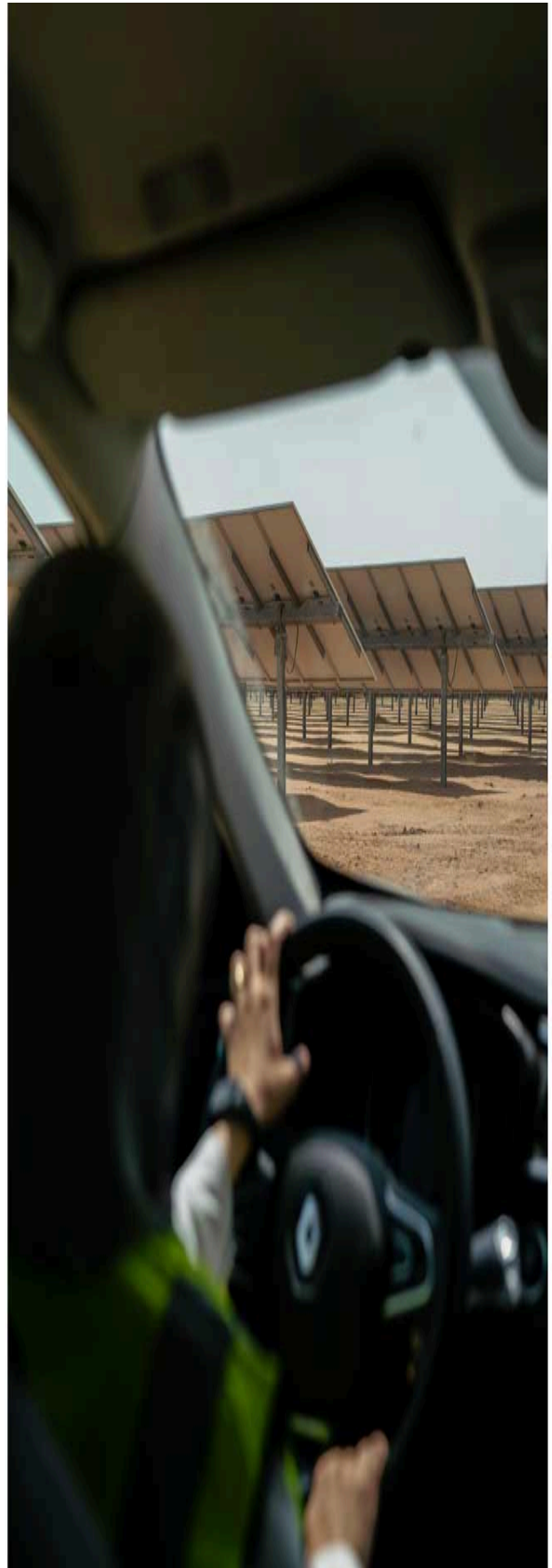
Engineer Hadeer Khalifa, the site performance and monitoring analyst, has braved the very high local temperatures, sometimes up to 50° Celsius, by working on the site since its start-up in 2018. She monitors the performance of the photovoltaic panels.

“My colleagues had warned me



that I would have to work under a blazing sun, in conditions that were difficult to bear,” she recalls. “I told them I wanted to give it a try. I can say that I have grown a lot in this job, and they are very proud of that,” she says with a smile.

Khalifa added: “I’ve learned a lot in the last four years and gained a lot of experience from the engineers at the site and the different companies I’ve worked with. And when you feel valued, when management appreciates your work, it’s heart-warming.”



In Benban, the Egyptian New and Renewable Energy Authority has granted 39 companies

specialising in energy production a 25-year right to operate the property and its facilities.

There are also plans by the local authorities of Aswan to transform the Benban Industrial High School into a solar energy school that will provide training on the various aspects of solar energy and electromechanical engineering.

The Benban solar park could become a model of clean energy production in Africa as the continent strives to achieve the UN strategy in the framework of the Sustainable Development Goals.