Cuba's energy transition: third solar park “La Sabana” opened

The Corua 5 solar park under construction near Mayarí in the eastern province of Santiago de Cuba (Source: Cubadebate)

In the presence of revolutionary commander Ramiro Valdés and Energy Minister Vicente de La O'Levy, another solar park was connected to the grid on Friday March 21 in the eastern Cuban province of Granma, near the city of Bayamo. “La Sabana” is the third park in the country to be inaugurated as part of the ongoing major project to expand solar energy, with a capacity of 21.8 megawatts. The first two parks were opened in Havana on February 21 and in Cienfuegos on February 28.

Expansion of solar energy is a top priority

The park was accepted after a one-week test phase together with Chinese specialists who had already helped build the 25-hectare facility. As the local newspaper *La Demajagua* reports, a total of 600 workers were needed to mount more than 42,000 panels on 16,380 piles and lay 250 kilometers of cable. Two kilometers of fencing were erected to protect the plant, which is manned around the clock, from theft and vandalism. The electricity is fed into the grid via seven inverters, each with an output of 3.25 megawatts. The costs of the project were estimated at 1.14 billion pesos (about 3.26 million euros according to the informal exchange rate) and 16 million US dollars.

In the face of the severe energy crisis, which led to the fourth nationwide blackout within six months a week ago, the Cuban government declared the construction of the solar parks a top priority. According to a report by the news portal *Cubadebate*, workers and soldiers were withdrawn from the construction of the Presa Levisa dam project for the parks. The teams work seven days a week from sunrise to dusk.

Cuba plans to build 55 parks with a total installed capacity of 1200 megawatts by the end of the year. By 2028, there should be a total of 92 parks with a capacity of 2012 megawatts and

200 megawatts of battery storage. In addition, a further 120 megawatts will come to the country from China in the form of a donation, which is to be used to build 22 smaller parks, each with an output of around five megawatts, in addition to the major project.

The end of the “powership-era”

However, a great deal would be achieved with the expansion targets planned for this year. In addition to the fuel shortage and frequent power plant failures, Cuba's power grid must also cope with the loss of five of the eight floating power plant ships that were contracted between 2019 and 2022 from the Turkish provider Karpowership.

The expensive contracts were set up for 51 months and are slowly coming to an end. The Cuban government has decided that the money would be better invested in the construction of domestic solar parks, which incur hardly any running costs and whose panels are expected to last for more than two decades. However, at least 23 parks need to be built to replace the additional 500 megawatts. Only then will the net gain in power reserves begin.

170 megawatts by the end of March

The government's ambitious targets are to achieve this in the first half of the year. Five solar parks are to be connected to the grid by the end of March, bringing the total number to eight parks with a capacity of 170 megawatts in the coming days. It remains to be seen whether the schedule can still be met. The opening of “La Sabana” was originally planned for March 14, so it has been postponed by a week – a minor delay by Cuban standards. In principle, the expansion is progressing rapidly, as Jorge Piñon, an energy expert from the University of Texas who is familiar with Cuba, also believes. According to the Ministry of Energy, at least two more parks are about to open.

Overall, Cuba plans to increase the share of renewable energies from around four percent at present to at least 30 percent by 2030. This year, the share is expected to double to eight percent. It wouldn’t be Cuba without at least some superlatives: The country aims to be “among the top three countries in the world” in terms of the speed of renewable energy expansion in the next two years, Rosell Guerra Campaña, director of renewable energy at the Ministry of Energy, announced in a special broadcast on the topic.

New power plant block from Russia

However, the energy crisis cannot be solved by expanding solar energy alone. Even with the new storage capacities, power plants are still needed to work around the clock for the base load. Cuba is relying on help from Russia to keep its older oil-fired power plants running. On Wednesday, Russian Ambassador Víktor Koronelli visited the facilities of the Russian oil company Zarubezhneft in Boca de Jaruco. Production there has recently increased. The seven active oil fields were already delivering over 1600 tons of oil per month, state media reported.

According to Koronelli, Russia is contributing to the modernization of three power plant units, each with 100 megawatts, and will finance the construction of a new 200-megawatt block. In

addition, Moscow recently provided a bridging loan of $60 million for fuel purchases and $2 million for spare parts.

Meanwhile, the government in Havana is convinced that the mix of gas, oil and renewable energies will enable the country to achieve energy independence in the medium term. A law on energy transition is expected in December, which should ensure new incentives for investment and greater efficiency in consumption.

Nevertheless, it will take a while before the energy transition brings tangible improvements for the long-suffering population. Whether the ambitious expansion targets can be met depends not least on Cuba's ability to implement the complex projects as planned in a difficult economic environment. (Cubaheute)