

Latin America's largest solar park turns Mexican desert green

July 13 2018, by Yussel Gonzalez



The Villanueva photovoltaic (PV) power plant is the biggest solar project in the world outside China and India

Driving through the endless dunes and cacti of the Chihuahuan desert in northern Mexico, a shimmering blue field suddenly appears on the

horizon—not a mirage, but the largest solar park in Latin America.

This silent stretch of sand in the state of Coahuila is the spot the Italian energy giant Enel picked to build the Villanueva power plant: 2.3 million solar panels that sprawl across a sun-soaked area the size of 2,200 football fields.

When the plant reaches full capacity later this year, it will supply enough electricity to power 1.3 million homes.

It is the biggest solar project in the world outside China and India.

The panels are designed to turn in tandem with the sun, like a field of metallic sunflowers.

They are part of Mexico's push to generate 35 percent of its electricity from clean sources by 2024.

Mexico won plaudits from environmentalists in 2015 when it became the first emerging country to announce its emissions reduction targets for the United Nations climate accord, ambitiously vowing to halve them by 2050.

A key part of that push is a sweeping energy reform undertaken in 2013.

One of outgoing President Enrique Pena Nieto's signature initiatives, it was initially criticized by president-elect Andres Manuel Lopez Obrador, who will take office on December 1.

But the anti-establishment leftist has warmed to the overhaul, and analysts now say it is likely here to stay.

The reform made global headlines for reopening Mexico's oil sector to

foreign companies after 76 years of state monopoly.

A lesser-known—but perhaps ultimately more important—aspect was to allow private companies to generate and supply electricity.

Under the new law, Mexico is now holding clean-energy auctions in which private companies bid to produce and sell electricity on an open market.

"We're very happy with the business environment and opportunities that exist in Mexico," said Enel's global director for [renewable energy](#), Antonio Cammisecra.

"Since the reform, we see better market conditions and potential for a company like ours."



When the plant reaches full capacity, it will supply enough electricity to power 1.3 million homes

Cutting costs

Projects like this are also benefitting from a sharp drop in prices for solar technology in recent years.

"Photovoltaic solar energy is the fastest-growing energy in the world. And that is driving technology innovators," said Arturo Garcia, an energy specialist at the international consulting firm Deloitte.

The [energy reform](#) and price plunge are together reshaping the solar market in Mexico.

"Before the reform, it was an environmental issue," said Victor Ramirez, executive director of the National Solar Energy Association.

"Today, it's not just about the environment, it's about economics. If solar sources are cheaper, investment is going to gravitate there."

The new opportunities are attracting international interest.

Besides the \$650-million Villanueva project, Enel has another solar park and is building two wind farms.

Last May it pledged an additional \$97 million in investment to expand its projects in Mexico.

Spain's Iberdrola is building two solar parks, Dutch firm Alten is

building another, and British-backed Atlas Renewable Energy recently acquired yet another.

"Mexico has world-class solar resources," said Camilo Serrano, Atlas's general manager for Mexico.

"The potential is absolutely proven, and investors' appetite is obvious in the auctions."

Electric interest

The auctions have so far raised an estimated \$8.6 billion in investment.

Mexican Energy Minister Pedro Joaquin Coldwell recently said they would lead to the construction of 40 solar parks and 25 wind projects.

Mexico, which had nine solar parks in 2015, aims to have 68 by 2021, he added.

Three auctions have been held so far. The production price offered by electricity suppliers has dropped from \$50 per megawatt-hour to \$20.

Thanks to the program, Mexico is now on the top 10 list of countries with the most clean [energy](#) investment, according to the government—which predicts the price plunge will continue at the next auction, slated for November.

© 2018 AFP

Citation: Latin America's largest solar park turns Mexican desert green (2018, July 13) retrieved 1 February 2023 from <https://phys.org/news/2018-07-latin-america-largest-solar-mexican.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.