



**NORTH AMERICAN DEVELOPMENT BANK  
FACT SHEET  
HERMOSILLO, SONORA**

**Project:** Orejana Solar Park

**Sponsor:** Zuma Energía S.A. de C.V.

**Location:** The project is located in the municipality of Hermosillo, Sonora, approximately 246 km (153 miles) southwest of the U.S.-Mexico border.

**Background:** Since 1994, Mexico has undertaken efforts to increase the use of non-fossil fuel technologies in power generation. In 2014, the legal framework that governs Mexico's National Power System (SEN) underwent a major reform aimed at facilitating investments to consolidate diversification efforts, improve infrastructure and meet the growing demand for electricity. In 2015, Mexico enacted the Energy Transition Law to regulate the sustainable use of energy and obligations regarding clean energy and the reduction of pollution from the power industry, while preserving the competitiveness of the productive sectors. The law specifies, among other provisions, that the Mexican Ministry of Energy (SENER), in coordination with the Mexican Electricity Commission (CFE) and the Mexican Energy Regulatory Commission (CRE), must increase the use of clean technologies in power generation to at least 35% by 2024.

As reported in the 2016-2030 National Power System Development Program (PRODESEN), in 2015, Sonora had 2,710 megawatts (MW) of installed capacity and 13,569 gigawatt-hours (GWh) in energy generation. The main source of electricity generated is combined-cycle plants with 79.3%, followed by thermoelectric plants with 18.9%.

On May 13, 2016, the Mexican National Center of Energy Control (CENACE) published the guidelines for the auction of long-term renewable energy contracts. With CFE as the off-taker, contracts for the purchase of capacity and renewable energy will be for 15 years and contracts for clean energy certificates will be for 20 years. In September 2016, CENACE selected 23 bidders to build 2,871 MW of new renewable capacity worth US\$4.0 billion. This project is one of those selected in the auction.

**Description:** The proposed project consists of designing, constructing and operating a solar park with a maximum capacity of 125 megawatts of alternating current (MWac) on approximately 1,235.5 acres. The project will account for nearly 2.16% of electricity generation in Sonora.

The project components include the installation of approximately 487,440 solar modules mounted on single-axis tracker arrays and construction of a substation. The energy generated by the project will be collected through

underground lines and delivered through a 230-kV switchyard to an existing CFE transmission line located 0.5 km (0.3 miles) from the project site.

**Certification Date:** July 7, 2017

**NADB Funding:** Loan Program:  
Market-rate loan: Up to US\$50 million

A loan agreement for US\$26.75 million was contracted on September 18, 2017, with the project company, Fistera Energy Orejana, S.R.L. de C.V.

**Benefits:** The project is expected to produce an average of 353.5 gigawatt-hours (GWh) a year of zero-carbon electricity during 20 years of operation.

Consequently, demand for traditional fossil-fuel based energy generation will be reduced, resulting in less greenhouse gas emissions, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of an estimated 163,808 metric tons/year of carbon dioxide (CO<sub>2</sub>), 0.707 metric tons/year of sulfur dioxide (SO<sub>2</sub>) and 571 metric tons/year of nitrogen oxides, as well as other pollutants.

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