

Antelope Valley Solar Ranch – 1

W Ave D & 170th St W
North Antelope Valley, California 93536

Description

Located in the Antelope Valley area of North Los Angeles County, the 1372 acre, 242 MW AV Solar Ranch One, produces enough electricity to meet the annual energy needs of about 75,000 average homes, displacing approximately 140,000 metric tons of carbon dioxide (CO₂) per year—the equivalent of taking about 30,000 cars off the road.

Sited on previously disturbed agricultural land, the project location was selected based on the quality of the solar resource, proximity to existing electrical transmission lines, compatibility with existing land uses and limited environmental impacts. There are no threatened or endangered species on the site and the project does not use water for electricity generation.

The facility provided economic benefits to businesses in the Antelope Valley including engineering and design firms, construction subcontractors, suppliers, and service providers. More than 400 construction workers were hired for the project providing employment opportunities for qualified local residents. Exelon owns the facility and First Solar built and continues to operate and maintain it.



Innovative Technology

- AV Solar Ranch One employs First Solar's FS Series 3 PV Module and a tracking system on a portion of the facility
 - The technology increases electricity output by tilting the solar panels to track the path of the sun
- The project also features innovative inverters with voltage regulation and monitoring technologies, which provide more stable and continuous power, increasing the project's efficiency and reliability.

Environmental Benefits

- Produces enough power for 75,000 average homes
- Displaces 140,000 tons of CO₂ annually - equivalent to taking 30,000 cars off the road
- Lowest impact of any PV technology
- Electricity generation uses no water