

Solar Photovoltaic Power Plants

In 2015, Nevada had 0.9 GW installed capacity from photovoltaic solar power plants producing 220 MW of electric power.

The solar resource in Nevada is enormous. 1/3 of the land in the state, 100,000 km², could potentially be developed for solar energy and produce 1000 GW of electric power; 3 times the current US electricity consumption.

In 2014, Nevada consumed about 4 GW of electric power mostly generated from natural gas (63%) and coal (20%). It has been estimated that Nevada may require about 11 GW of electricity to power itself entirely from renewables in 2050; that number (not the available resource) determines our level 4.

Level 1

We increase generating capacity by 5% a year from current levels until 2050. In 2050 the power plants would cover about 130 km² of land, a little less than one third of the surface area of Lake Mead

Level 2

We increase generating capacity by 7% a year from current levels until 2050. The power plants would require about 240 km²

of land, an area comparable to one third of the surface area of Lake Mead

Level 3

We increase generating capacity by 10% a year from current levels until 2050. The power plants would require about 640 km² of land, an area comparable to the surface area of Lake Mead.

Level 4

We increase generating capacity by 12% a year from current levels until 2050. This would require about 1200 km² of land for power plants, about 1% of the solar resource of Nevada.



The Copper Mountain Solar 3 project in Boulder City, Nevada (250 MW capacity).

