

# Solar power generation deep in the mountains

Where is a high-altitude solar power plant located?

This high-altitude solar power plant sits in a stunning location, floating on a lake in between the Swiss Alps. This reservoir doubles as a floating solar power plant, smack back in the middle of the Swiss Alps.

Should solar panels be installed on snow-covered mountains?

The placement of solar panels on snow-covered mountains can boost the production of electricity when it is most needed -- in the cold, dark winter. Solar-power systems have long been hampered by a seasonal problem: the panels produce more energy in summer than in winter, at least in the mid-latitudes, where much of the planet's population lives.

Do alpine solar plants produce more electricity?

“One of the qualities of alpine solar plants is that, especially in winter, they produce up to three times more electricity than a comparable facility in the midlands,” says Jeanette Schranz, communications lead for renewables at Swiss energy producer Axpo.

Where can solar energy be produced?

Solar power can also be efficiently produced in mountains and other cold regions - contrary to popular belief. The Himalayas and Tropical Andes are particularly promising locations for the development of solar energy, where installations could produce approximately 20 percent more energy than they could at sea level.

How many solar panels does the alpine solar Dam produce a year?

The dam's almost 5,000 solar panels produce 3.3 million kilowatt hours of energy per year, enough to supply around 700 houses. Installation of the panels was completed last year and production at the site has already begun. The reflection from the snow helps solar power production at the AlpinSolar dam. REUTERS/Arnd Wiegmann

How does snow affect solar power production?

The reflection from the snow helps solar power production at the AlpinSolar dam. REUTERS/Arnd Wiegmann Schranz says Switzerland's mountains are less affected by fog in colder months, meaning the panels see more sun than they would at lower altitudes.

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Figure 2 shows the solar irradiation map that provides an annual average sum of concentrating solar power. These maps provide a visual presentation of the solar resources and are often ...

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