Solar energy is the most abundant energy resource.

**Passive solar** collectors utilize sunlight to warm confined air.

**Active solar** collectors use pumps to move heated water or air.
Solar collector facilities use mirrors to focus sunlight onto a collection tower which heats water to produce steam.

Photovoltaic cells convert the sun’s energy directly into electricity.
Concentrating Solar Resource of the United States

kWh/m²/Day

- > 7.5
- 7.0 to 7.5
- 6.5 to 7.0
- 6.0 to 6.5
- 5.5 to 6.0
- 5.0 to 5.5
- 4.5 to 5.0
- 4.0 to 4.5
- < 4.0

Annual average direct normal solar resource data are shown. The data for Hawaii and the 48 contiguous states are a 10km satellite modeled dataset (SUNY/NREL, 2007) representing data from 1998-2009.

The data for Alaska are a 40 km dataset produced by the Climatological Solar Radiation Model (NREL, 2003).

This map was produced by the National Renewable Energy Laboratory for the U.S. Department of Energy.

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