Average Daily Solar Radiation Per Month

ANNUAL

North-South Axis Tracking Concentrator Tilted at Latitude

Collector Orientation

One-axis tracking parabolic trough with a horizontal north-south axis and tilted from the horizontal at an angle equal to the site's latitude

This map shows the general trends in the amount of solar radiation received in the United States and its territories. It is a spatial interpolation of solar radiation values derived from the 1981-1990 National Solar Radiation Data Base (NSRDB). The dots on the map represent the 239 sites of the NSRDB.

Maps of average values are produced by averaging at 30 years of data for each site. Maps of maximum and minimum values are composites of specific months and years for which each site achieved its maximum or minimum amounts of solar radiation.

Though useful for identifying general trends, this map should be used with caution for site-specific resource evaluations because variations in solar radiation not reflected in the maps can exist, introducing uncertainty into resource estimates.

Maps are not drawn to scale.

National Renewable Energy Laboratory
Resource Assessment Program

kWh/m²/day

- 10 to 14
- 8 to 10
- 7 to 8
- 6 to 7
- 5 to 6
- 4 to 5
- 3 to 4
- 2 to 3
- 0 to 2
- none

Obtained and made public by the Natural Resources Defense Council, March/April 2002

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3/14/02
Average Daily Solar Radiation Per Month

ANNUAL

Flat Plate Tilted South at Latitude ±15 Degrees

Collector Orientation

- The sun collector facing south at 15° latitude is the angle of the tilt for which use is recommended.

kWh/m²/day

| 10 to 14 |
| 8 to 10 |
| 7 to 8 |
| 6 to 7 |
| 5 to 6 |
| 4 to 5 |
| 3 to 4 |
| 2 to 3 |
| 0 to 2 |
| none |

National Renewable Energy Laboratory
Resources Assessment Program

18317

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Obtained and made public by the Natural Resources Defense Council, March/April 2002
1996 Price of Electricity in the U.S.

U.S. Average = 6.86 cents/kWh

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report"
Geothermal Energy Potential

Resource Potential

- Good - Excellent
- Fair - Moderate

Obtained and made public by the Natural Resources Defense Council, March/April 2002
Overview of State Restructuring Actions

Source: EERE/EIA State-by-State Utility Restructuring Database, 1/99

- Legislation Enacted
- Comprehensive Regulatory Order Issued
- Legislation/Orders Pending
- Commission or Legislative Investigation Ongoing
- No Significant Activity
Average Daily Solar Radiation Per Month

ANNUAL

Flat Plate Tilted South at Latitude ±15 Degrees

Collector Orientation

- Large size collectors pointed south at an angle equal to the angle of the latitude ±15 degrees. To achieve performance in the winter, this configuration is recommended.

National Renewable Energy Laboratory

Resources Assessment Program

kWh/m²/day

10 to 11
8 to 10
7 to 8
6 to 7
5 to 6
4 to 5
3 to 4
2 to 3
0 to 2
none

Obtained and made public by the Natural Resources Defense Council, March/April 2002

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Obtained and made public by the Natural Resources Defense Council, March/April 2002
Average Daily Solar Radiation Per Month

ANNUAL

Collector Orientation

The sun tracking parabolic trough or a heliostat reflector is tilted at a latitude equal to the horizon at an angle equal to the latitude plus 25 degrees. The whole effect is equal to the horizon at an angle equal to the latitude plus 25 degrees.

kWh/m²/day

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<tr>
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<th>10 to 14</th>
<th>8 to 10</th>
<th>7 to 9</th>
<th>6 to 7</th>
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National Renewable Energy Laboratory
Resource Assessment Program

Obtained and made public by the Natural Resources Defense Council, March/April 2002
Membrane Fuel Cell Installation
Residence

Obtained and made public by the Natural Resources Defense Council, March/April 2002