<table>
<thead>
<tr>
<th>State</th>
<th>Solar/Wind</th>
<th>County</th>
<th>Project Title</th>
<th>Capacity (MWH)</th>
<th>Homes</th>
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<td>1,500</td>
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</tbody>
</table>

The global market for copper is growing because of the increased installations of wind energy facilities. Over the past four years, wind energy has made up 35 percent of U.S. generating capacity additions. A 1.5-MW wind turbine relies on approximately 4,000 pounds of copper – making up the generator rotor and stator, and connecting cables. Depending on the design of a wind farm, the system can contain anywhere from 4 to 15 million pounds of copper.

Copper in Solar PVs
Copper intensities in photovoltaic (PV) solar farms are nearly the same as those in wind energy facilities. A well-designed PV plant uses approximately 9,000 pounds of copper per megawatt of peak capacity, a figure that does not appear to vary significantly over installations ranging from residential rooftops units to multi-megawatt utility farms. Copper is a key component of PV systems, increasing the efficiency and reliability of photovoltaic cells and modules.

Copper in Sustainable Energy
The rise of wind and solar power generation in the United States

Copper. Essential to Sustainable Energy.

The Copper Development Association is the information, education, market and technical development arm of the copper, brass and bronze industries in the USA. For more information about copper in sustainable energy contact Zolaikha Strong, Director, Sustainable Energy at zstrong@cuda.org or visit www.copper.org.

---

Copper Development Association Inc. Copper-Milwaukee
Copper Development Association, Inc.
2920 Colonnade Drive, Suite 101
P.O. Box 104
New York, NY 10156
A Snapshot of the Top U.S. Solar & Wind Installations

(as of January 2015)

**The Top 5 States Using Solar Energy**
1. California
2. Arizona
3. North Carolina
4. Massachusetts
5. New Jersey

**The Top 5 States Using Wind Energy**
1. Texas
2. California
3. Iowa
4. Oklahoma
5. Illinois

---

**Notes:**
- The largest installations (max. 4) in each state with a minimum capacity of 225 MWH.
- The largest installations in each state with a minimum capacity of 10 MWH. For states with projects over 100 MWH, all installations were included.
- The Top 5 States Using Solar Energy:
  1. California
  2. Arizona
  3. North Carolina
  4. Massachusetts
  5. New Jersey

- The Top 5 States Using Wind Energy:
  1. Texas
  2. California
  3. Iowa
  4. Oklahoma
  5. Illinois

---

**Capacity:**
99 < 100 - 299 300 - 499 500 >

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**State** | **Solar/Wind** | **County** | **Project Title** | **Capacity** (MWH) | **Homes**
--- | --- | --- | --- | --- | ---
AZ | Solar | Maricopa | 290 - 559 | 12,300 - 24,600 | 1 - 225
| Solar | Maricopa | Alamosa San Luis Valley Solar Ranch 25 99,000
| Solar | Maricopa | San Luis Obsipo Topaz Solar Farm 25 99,000
| Solar | Maricopa | Riverside Desert Sunlight 550 90,200
| Solar | Maricopa | San Luis Obsipo California Valley Solar Ranch 25 99,000
| Solar | Maricopa | Riverside Genesis Solar Energy Center 25 99,000
| Solar | Maricopa | San Bernardino Mojave Solar 280 45,920
| Solar | Maricopa | Imperial Centinela Solar Energy 170 27,880
| Solar | Maricopa | Maricopa Arlington Valley Solar Project 250 41,000
| Solar | Maricopa | Imperial Mount Signal Solar Farm 200 32,800
| Solar | Maricopa | Maricopa Mesquite Solar 150 24,600
| Solar | Maricopa | Imperial Solar Gen 2 150 24,600
| Solar | Maricopa | Kern Solar Star 579 90,000
| Solar | Maricopa | Kern AR Solar Installation | Wind Installation

**Key:**
- **Solar:** installations using solar energy
- **Wind:** installations using wind energy

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**Average U.S. homes supplied with wind energy =** (capacity in MW) x 250 homes

**Average U.S. homes supplied with solar energy =** (capacity in MW) x 164 homes

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**Sources:** seia.org; awea.org; windpowerengineering.com