Assumptions for Land-Use Graph

1. InfoGraphic intends to show how much land would be needed to produce, on an annual basis, the amount of solar or wind energy necessary to equal the actual annual U.S. nuclear energy output.

2. Capacity factor for wind = 30 percent.*

3. Capacity factor for solar = 19 percent.*

4. 2007 U.S. nuclear energy output = 806 billion kilowatt-hours.*

5. 1,000 megawatts of electrical capacity require 50,000 acres of wind turbines.**

6. 1,000 megawatts of electrical capacity require 11,000 acres of photovoltaic solar cells.***

Source material for Land-Use Graph:
* Global Energy Decisions; U.S. Department of Energy, Energy Information Administration

**American Wind Energy Association, “Frequently Asked Questions”

*** Department of Energy, Office of Utility Technologies, Energy Efficiency and Renewable Energy & Electric Power Research Institute; “Renewable Energy Technology Characterizations,” 1997

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