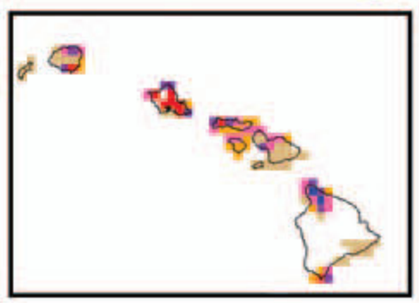
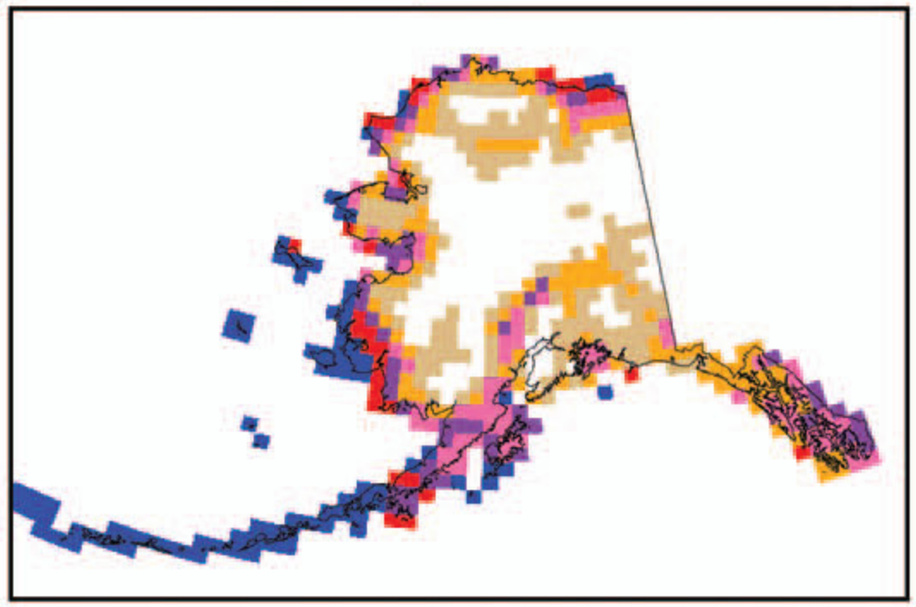
United States - Wind Resource Map

Yearly Electricity Production Estimated per m^2 of Rotor Swept Area for a Small Wind Turbine





Source: "Wind Energy Resource Atlas of the United States", 1987

Small Wind Turbine Productivity Estimates*

Wind Power Class	Productivity per m^2 of swept area** (kWh/year)	Wind Power Density at 33 ft (10 m) (W/m^2)	Wind Speed at 33 ft (10 m) (mph)	Wind Speed at 33 ft (10 m) (m/s)
1	< 350	<100	< 9.8	< 4.4
2	350 - 500	100 - 150	9.8 - 11.5	4.4 - 5.1
3	500 - 610	150 - 200	11.5 - 12.5	5.1 - 5.6
4	610 - 690	200 - 250	12.5 - 13.4	5.6 - 6.0
5	690 - 770	250 - 300	13.4 - 14.3	6.0 - 6.4
6	770 - 880	300 - 400	14.3 - 15.7	6.4 - 7.0
7	880 -1170	400 -1000	15.7 - 21.1	7.0 - 9.4

* Estimates are based on different models and sizes of wind turbines assuming a tower height of 80 ft (24 m).

** For systems of different sizes, multiply the estimated productivity by the total swept area of the turbine.

U.S. Department of Energy
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03-APR-2001 1.1.8