

## Renewable Portfolio Standards

The success of any renewable portfolio standard hinges on the successful use of wind energy.

While it is *technically* feasible for Oregon to generate half of its current electricity consumption solely from wind power, *realistically* this is unlikely to occur. It would require Oregon to develop over a third (37.04%) of its technically and legally usable wind power potential. With the average wind energy potential of sites in Oregon, this would require using almost 1550.1 square miles (2,007.6 square kilometers) of land. ***This is slightly larger than the entire state of Rhode Island.*** All this just to meet current demand, with absolutely no growth in electricity consumption.

Meeting half of Oregon's current needs with wind power requires an average capacity of 3400 MW (3418.9 MW). Wind turbines vary in output over time in response to changes in the wind, and potential wind sites in Oregon average only a third (34.06%) of their maximum generating potential. That means Oregon would need to build over 10,000 MW (10,038 MW) of wind turbines. ***This is the equivalent of almost one and a half Grand Coulee Dams (7,079 MW capacity), the largest hydroelectric power station in the BPA system and the largest power station in the United States.*** This wind capacity would cost nearly \$22.2 billion to build (\$22,213,985,829).

Achieving the same 3,400 MW of average capacity from natural gas would require building only 3,900 MW (3,929.8 MW) of capacity at a cost of \$4 billion (\$4,020,154,828). It would even cost less to achieve 3,400 MW of average capacity with nuclear energy, which would require 3,800 MW (3798.8 MW) of capacity at a cost of \$21 billion (\$21,007,364,000). Neither of these options would require a Rhode Island's worth of land for wind farms either.

Speaking of comparisons to other states, it's worth noting that Wyoming and Montana average significantly higher percentages of their maximum generating potential relative to Oregon: 40% (40.20%) in Wyoming and 39% (39.04%) in Montana compared to 34% (34.06%) in Oregon. ***This means that the Oregon RPS system and Oregon taxpayers may end up paying for investments and jobs in other states.*** So the argument of creating "green" jobs here in Oregon is most likely not going to occur either, at least not on a large scale as advertised by proponents.