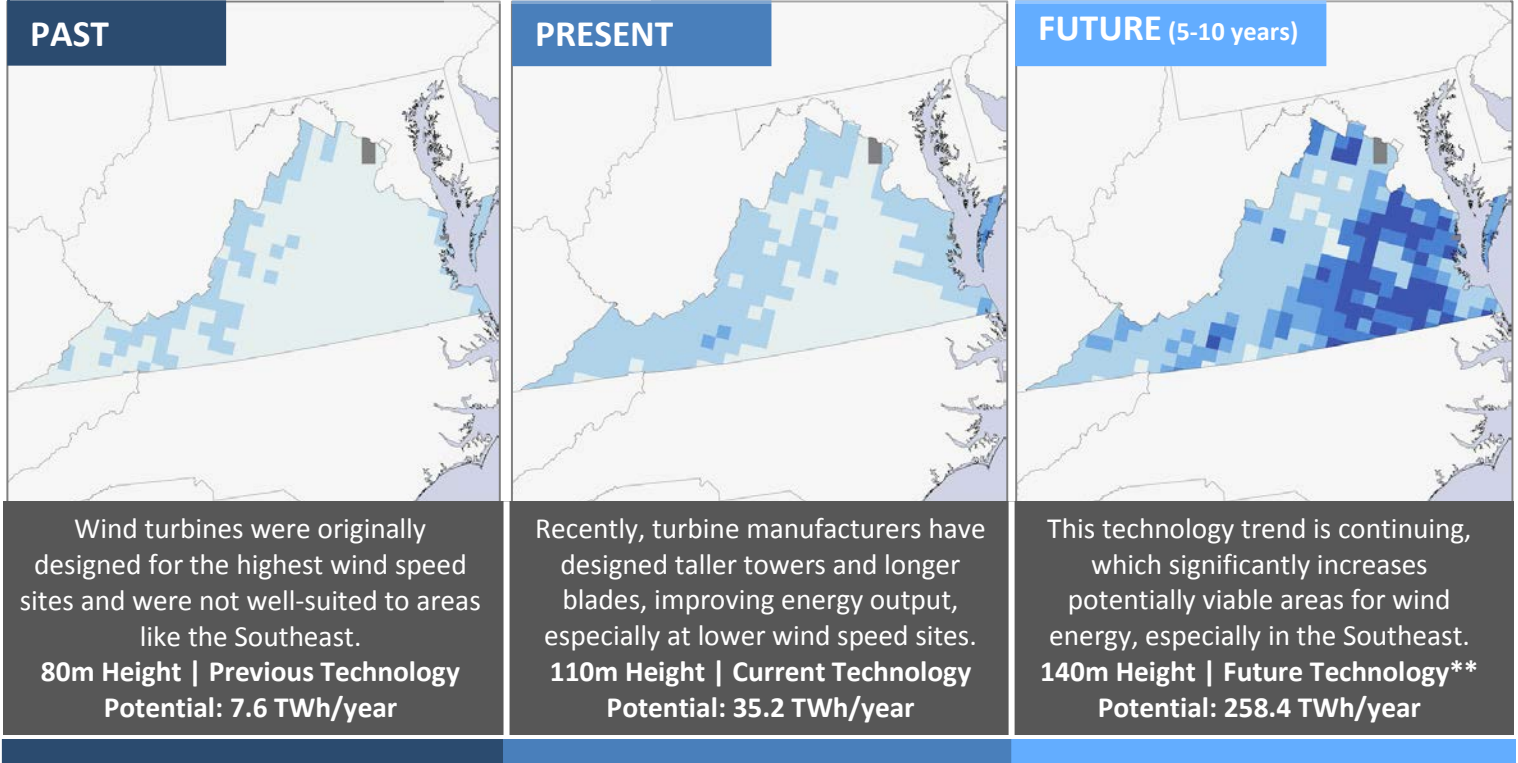


# Virginia Wind Energy Fact Sheet

December 2014

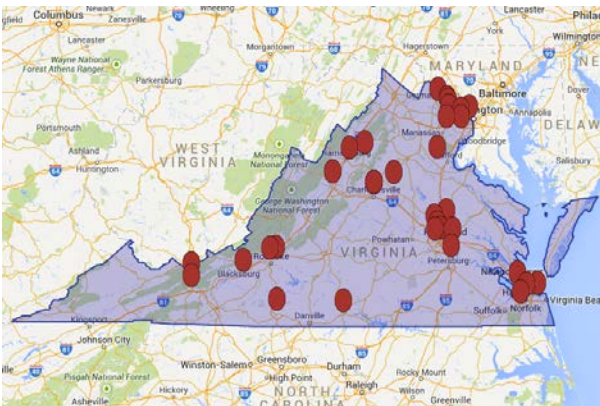
## Resource Potential

Maps below estimate areas where wind energy could be economically viable\* when using available turbine technology. Not all areas shown can be developed.



## Wind Industry Supply Chain

Virginia is already home to 33 companies and 35 facilities that are involved in the full value chain of the wind energy industry, even though no wind farms exist in the state. Some notable examples include companies like GE Energy, Virginia Transformer Corp, and ABB.



Supply chain database under development

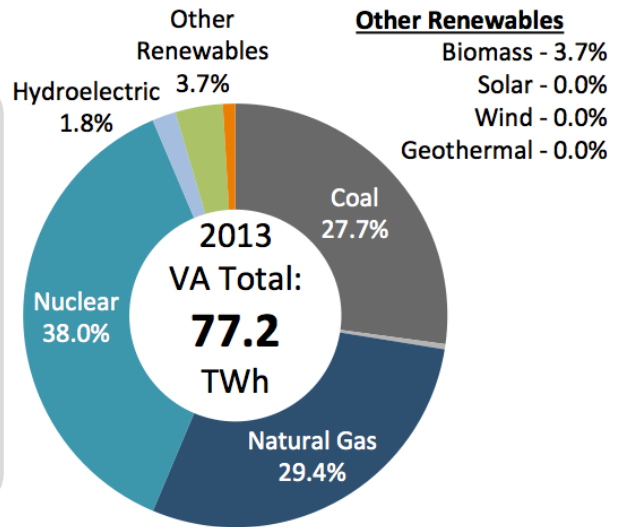
## Virginia Electricity Quick Facts

### Age of Generatorst

- COAL**  
17 plants (3,682 MW) over 45 yrs old
- NATURAL GAS**  
2 plants (353 MW) over 50 yrs old
- NUCLEAR**  
3 plants (2,675 MW) over 35 yrs old

† 50MW and larger

### State Rankings



## Wind Energy Deployment in the U.S.

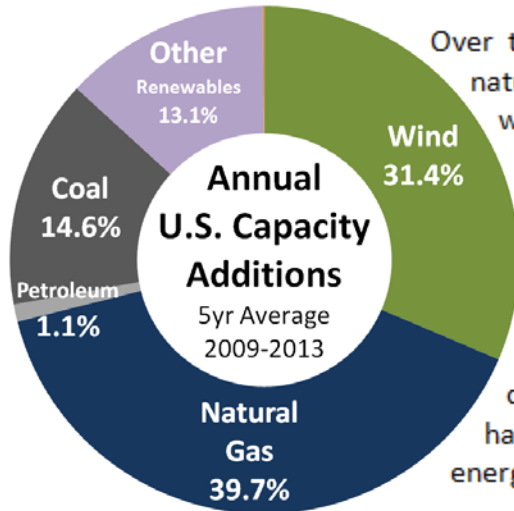
Top 10 Wind States*		
By % of Electricity		
1	Iowa	27.4%
2	South Dakota	26.0%
3	Kansas	19.4%
4	Idaho	16.2%
5	Minnesota	15.7%
6	North Dakota	15.6%
7	Oklahoma	14.8%
8	Colorado	13.8%
9	Oregon	12.4%
10	Wyoming	8.4%
By MW Installed		
1	Texas	12,354
2	California	5,829
3	Iowa	5,177
4	Illinois	3,568
5	Oregon	3,153
6	Oklahoma	3,134
7	Minnesota	2,987
8	Kansas	2,967
9	Washington	2,808
10	Colorado	2,332

**61,110**  
Megawatts installed

**71%**  
of congressional districts w/ turbines and/or manufacturing

**4.1%**  
of U.S. electricity from wind

\* as of the end of 2013



Over the last 5 years, only natural gas has rivaled wind power in electric generating capacity additions. In some regions like the Plains, Midwest, and Northwest, over 60% of new capacity additions have been from wind energy.

## Technology Trends Since 2000

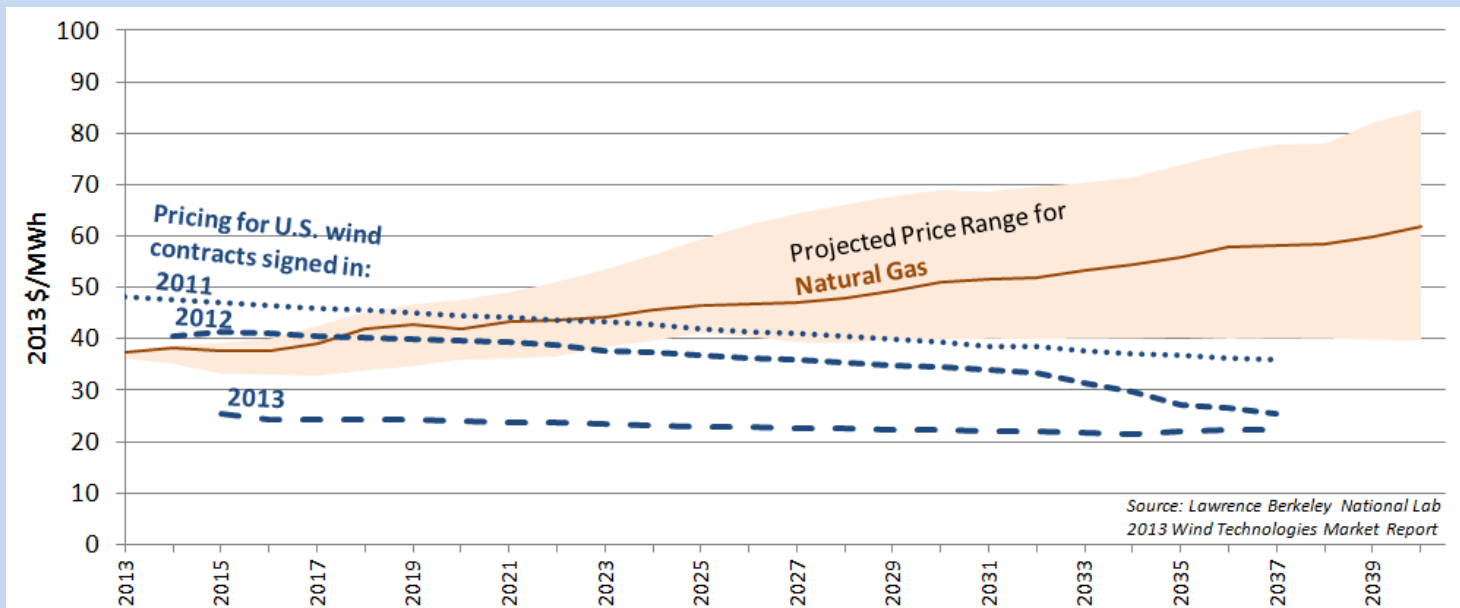
**+38%**  
Tower Height

**+83%**  
Rotor Diameter

**+111%**  
Nameplate Capacity

## Wind Energy's Cost

Recent **wind prices** are **competitive** with expected future cost of burning fuel in **natural gas** plants



Source: Lawrence Berkeley National Lab 2013 Wind Technologies Market Report

With no fuel cost and zero emissions, wind power provides **clean energy** with long-term, **stable pricing** and serves as a **financial hedge** against fossil fuel price volatility and potential future carbon pricing or regulations.