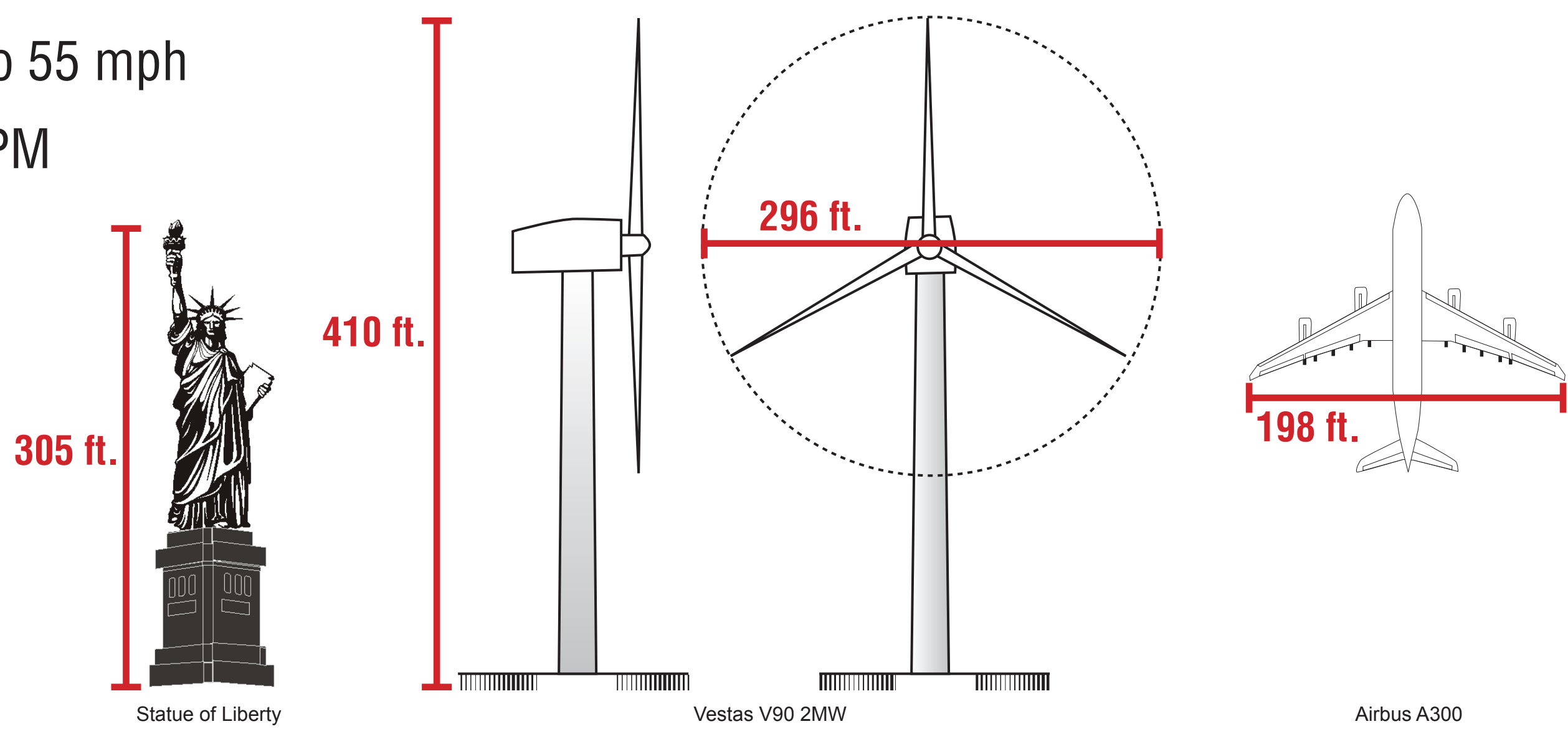


Smart Systems Turn Wind Into Electrical Power

General vital statistics

- Capacity: generates 2 MW to 3 MW, enough to power 600 to 900 homes each
- Tower height: up to 328 ft/100 meters to the hub, or about 32 stories
- Base diameter: 13-14 feet/4 meters
- Blade length: 183 feet/56 meters, or about 18 stories
- Operations range: winds 7 to 55 mph
- Rotational speed: 6 to 20 RPM
- Life span: designed to serve 20+ years
- Cost: \$3 million to \$5 million each



Modern wind energy brings multiple benefits

- Taller wind turbine towers reach better, more stable wind resources, making systems more efficient
- Larger turbines capture more energy with less land disturbance
- Provides a lot of energy for little land area – only about ¼ acre of “permanent” disturbance per tower, so compatible land uses can continue
- Generates no emissions: for example, an average 2 MW turbine avoids approximately 3,600 tons of CO2 per year
- Operates 65% - 90% of the time
- “Pays back” the energy required for its manufacture and construction in just 3-8 months – one of the shortest of any generation technology
- Requires no ongoing water supply or fuel supply for electricity generation

Turbine sites selected after careful, complex analysis

Engineers and scientists must study and balance many factors to determine the best places for wind turbines, including:

- Overall wind resource quality
- Strength, timing, consistency, direction of wind resource
- Economic viability and distance to markets
- Geographic features and terrain
- Physical constructability
- Location of environmental and cultural resources
- Ability to mitigate potential impacts
- Access to transmission
- Air density and elevation – higher elevation means lower air density, which reduces power production