

KidWind / Know Energy

III. Construction

How Do You Build A Wind
Farm?

Find an Area That Has Lots of Wind

Look for:

Farmers with new hats

New or old pick-up trucks with bent
doors

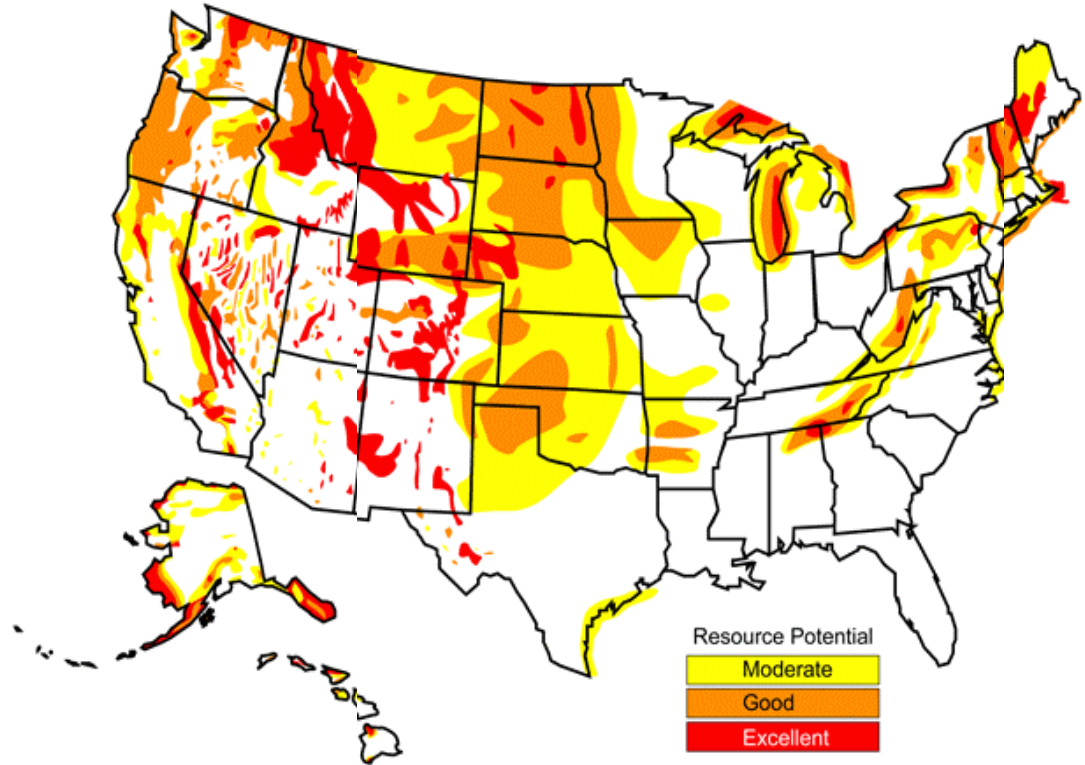
“Flagging”





Wind Potential

Rank	State
1	North Dakota
2	Texas
3	Kansas
4	South Dakota
5	Montana
6	Nebraska
7	Wyoming
8	Oklahoma
9	Minnesota
10	Iowa
11	Colorado
12	New Mexico
13	Idaho
14	Michigan
15	New York
16	Illinois
17	California



World Class Wind Potential

Germany's Potential: 100 GW

North Dakota's Potential: 250 GW

Paperwork

- Line up financing
 - 2-3 million dollars per turbine
 - Transmission line costs
- Environmental impact studies
- Permitting process

Construction

- Build roads to site
- Turbine installation

Turbine Installation

- Construct foundation
- Place towers
- Place blades on hub
- Install nacelle
- Install hub

Foundation





Place Towers



Place Blades on Hub



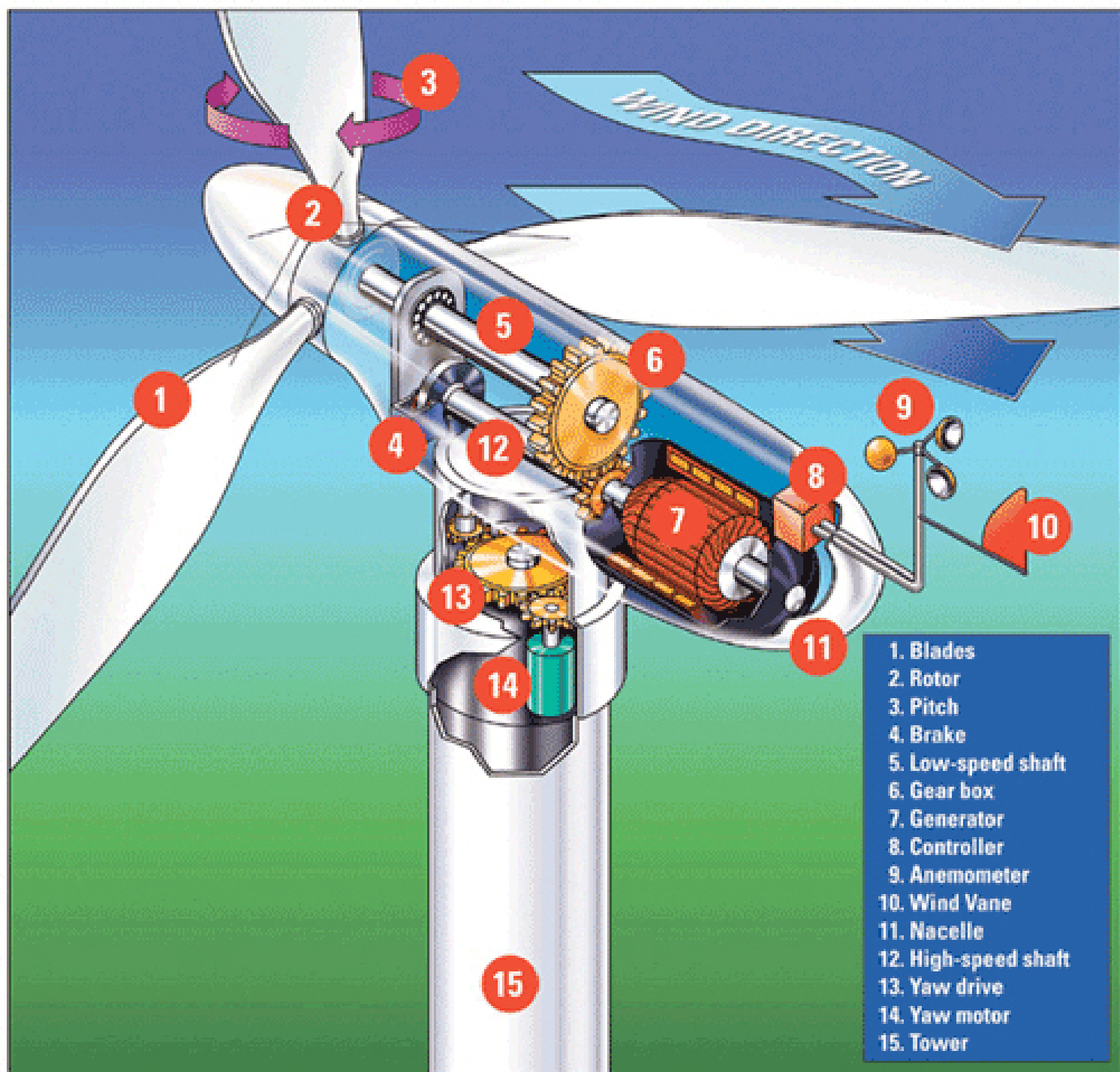


Place nacelle on tower



Wind Turbine Perspective





- 1. Blades
- 2. Rotor
- 3. Pitch
- 4. Brake
- 5. Low-speed shaft
- 6. Gear box
- 7. Generator
- 8. Controller
- 9. Anemometer
- 10. Wind Vane
- 11. Nacelle
- 12. High-speed shaft
- 13. Yaw drive
- 14. Yaw motor
- 15. Tower

Place hub on nacelle



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Connect turbines to electric grid
and pray for wind

The end of part III