

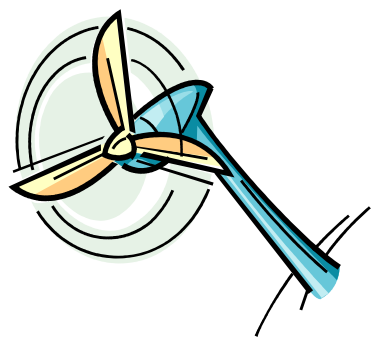


# WIND POWER

Renewable  
energy



# Wind turbines and how they work



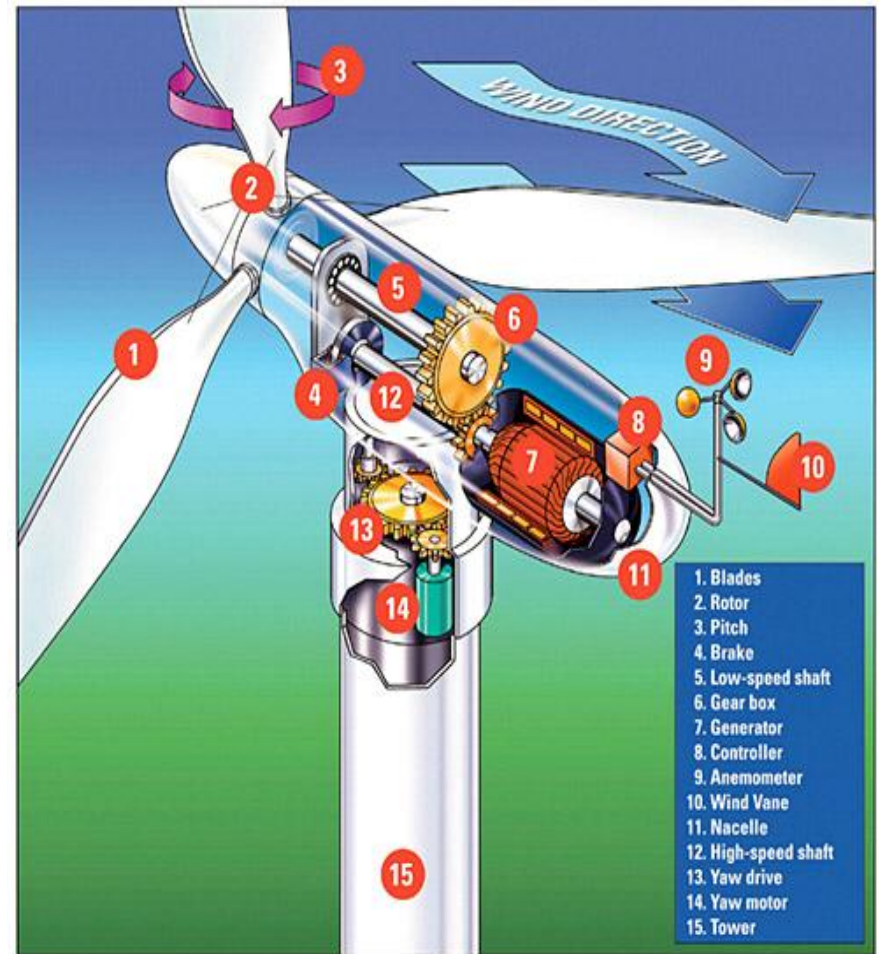
# Wind power

- Wind was one of the first sources of energy used by people to power machines
- There are two different types of energy
  - Non-renewable energy such as fossil fuels, coal, oil and natural gas
  - Renewable energy such as wind, solar, hydro and geothermal



# Parts of a wind turbine

- 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



# New style

- There are many styles of wind turbines - not like they used to be.
- Many people are amazed with what designs people come up with.



# Where can a wind turbine go?

- Wind turbines can be on shore and off shore, but the sea water can affect the material on the turbine so they have to go and paint them.
- What a hard job that must be!



# Blades

- One turbine blade is usually three or four hundred thousand dollars. So if you want to build a wind turbine you'd better save up.
- When building, the crane has to do one section at a time very carefully or you might get hurt. And they need really big trucks just to carry one blade - wow they must be big!



# Energy

- A wind turbine can make enough energy to power up 850 houses and the good thing about renewable energy is it doesn't pollute

