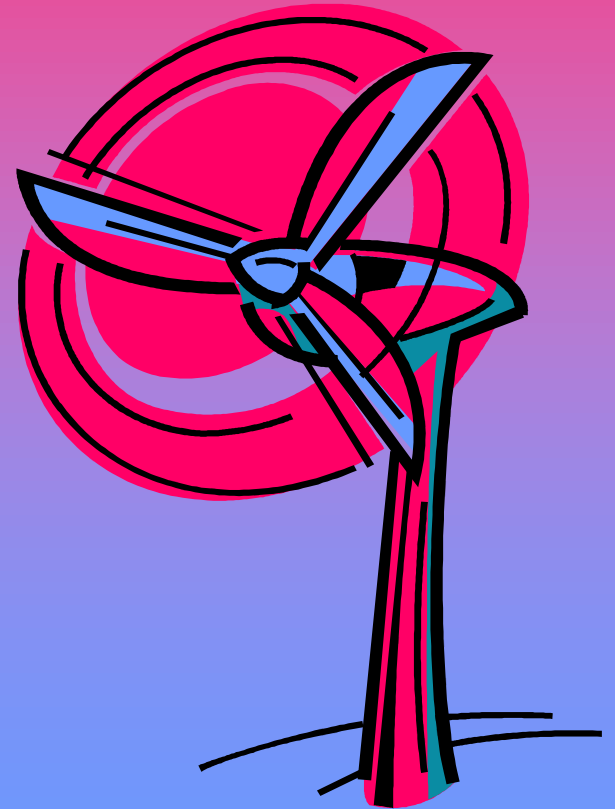


# *Wind Power*

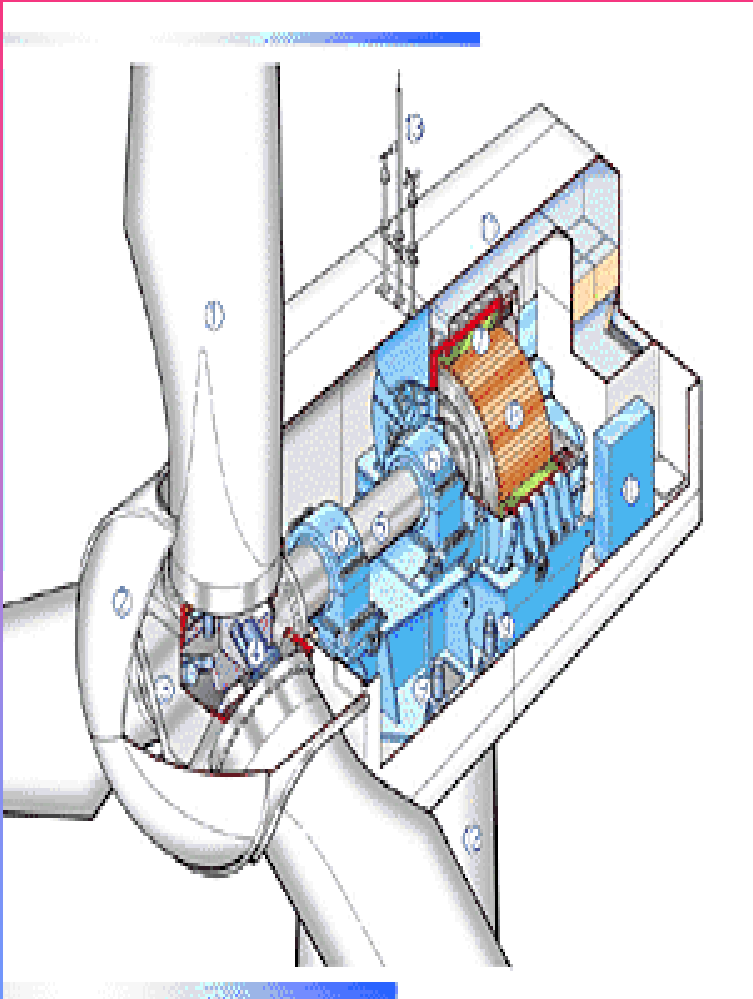


# What is Wind Power ??

Wind power is a type of renewable energy. It is used as a form of energy such as electricity using wind turbines.



# Parts of a wind turbine



1. Blade
2. Front capsule
3. Rotor head
4. Pitch motor
5. Main shaft
6. Main bearing
7. Generator stator
8. Generator gear
9. Yawing gear
10. Control panel
11. Nacelle
12. Tower
13. Anemometer

# What is the difference between three-bladed and two-bladed turbines?

- In general the following is true:
  - A three-bladed wind turbine can be more efficient than a two-bladed wind turbine. This difference is minimal where the cost of the three-bladed turbine is higher.
  - Three-bladed wind turbines may also need a stronger wind to start turning.
  - Two bladed wind turbines simplify rotor assembly on the ground, unlike three-bladed rotors



# How do turbines make electricity ??

**Instead of using electricity to make wind, turbines use the wind to make electricity.**

**Almost all wind turbines producing electricity consist of rotor blades which rotate around a horizontal hub. Most wind turbines face into the wind, the wind turns the blades around and this spins the shaft, which connects to a generator which makes electricity. A generator is a machine that produces electrical energy from mechanical energy, as opposed to an electric motor which does the opposite !!**

# WIND POWER

