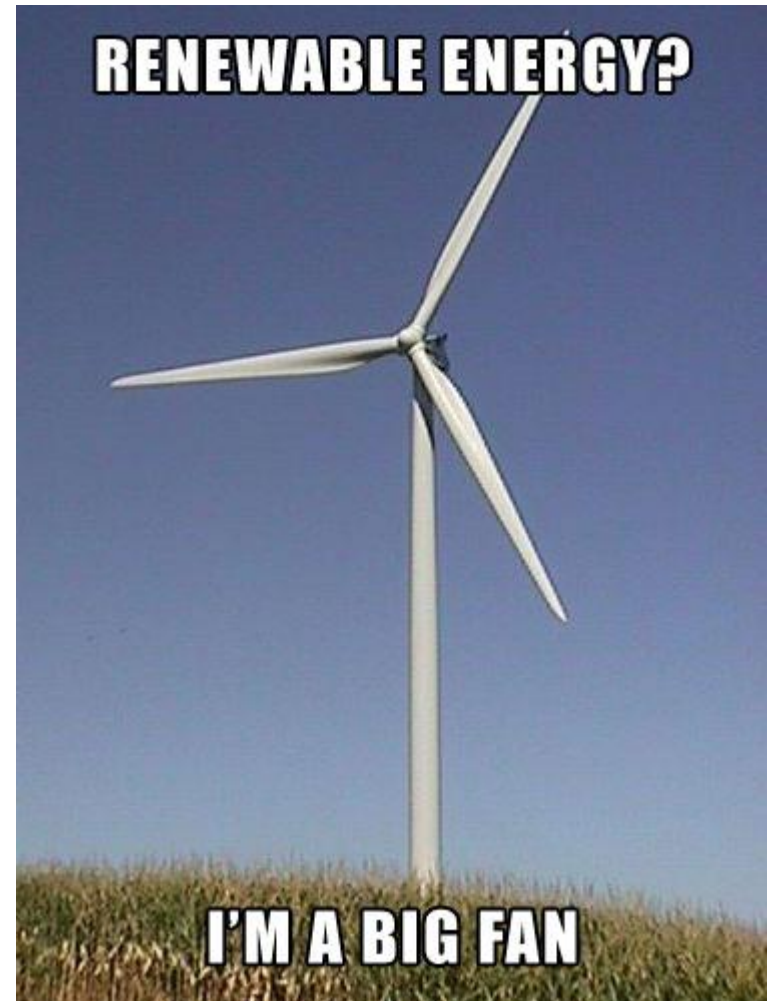
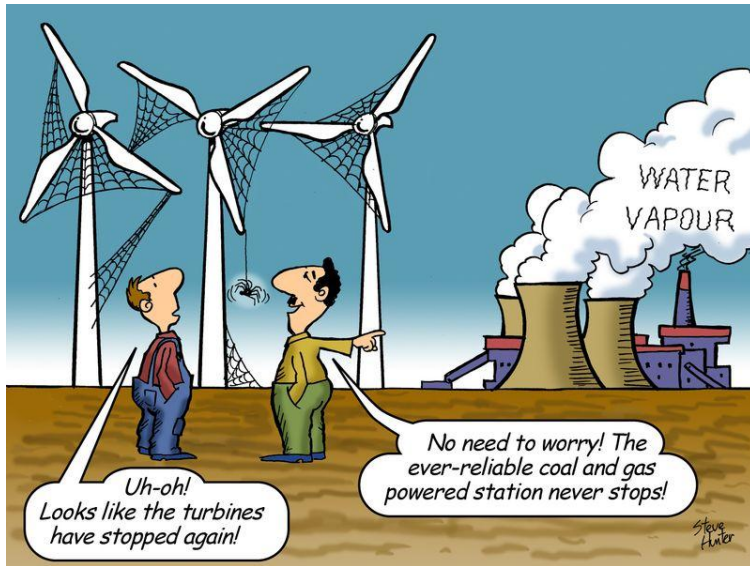


Alternative Energy



Renewable Energy

- Energy resources that can be recycled or replaced by natural processes within 100 years
- Some renewable energy resources include solar, wind, water, and geothermal.



Advantages of Renewable Energy

- it is sustainable and so will never run out.
- produces little or no waste products such as carbon dioxide or other chemical pollutants, so has minimal impact on the environment.



Disadvantages of Renewable Energy

- it is difficult to generate the quantities of electricity that are as large as those produced by traditional fossil fuel generators.
- It is sometimes unreliable. Renewable energy often relies on the weather for its source of power. Hydro generators need rain to fill dams to supply flowing water. Wind turbines need wind to turn the blades, and solar collectors need clear skies and sunshine to collect heat and make electricity.



Solar Energy

- Converting energy from the sun into electricity or heat we can use.
- is a non-polluting, abundant energy source available everywhere but is not reliable (night, clouds) and is expensive.



Wind Energy

- Using wind to turn turbines for work or to create electricity.
- is a non-polluting, abundant energy source that allows for other uses of land (farming) but is not reliable (calm days) and noisy.



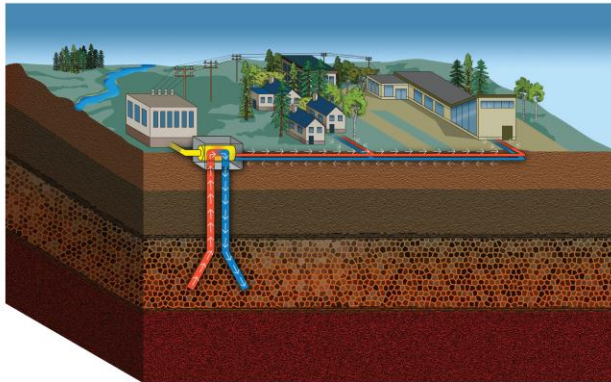
Hydroelectric

- Using moving water to generate electricity or do work usually using a dam.
- A reliable, cheap, clean energy source that allows for storing water but also floods land, can damage fish stocks, and dams are expensive to build.



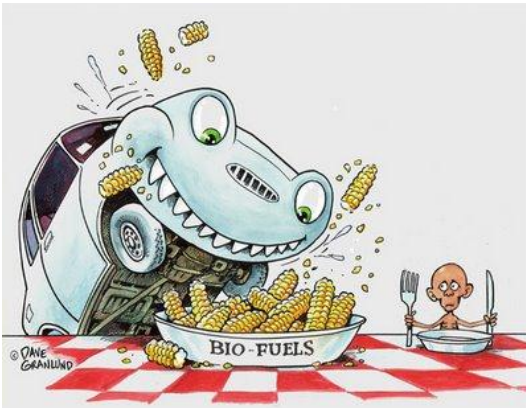
Geothermal Energy

- Using underground heat (usually associated with volcanoes) to generate electricity or as a heat source.
- A reliable source of energy that is limited to a few locations and can be expensive to tap.



Biofuel

- Using biomass (such as plants) to create fuel. Biomass included corn, switch grass, and wood.
- A reliable source of energy that is relatively cheap but requires a lot of land and water and conflicts with the use of biomass as food.



Nuclear Energy

- Generating electricity by splitting the nucleus of an atom to boil water to power a generator.
- An unlimited, reliable source of energy but that creates highly radioactive material that is difficult to store.

