

Generating Electricity

Why bother conserving (saving) electricity?

- ✓ Electricity costs money → less electricity = lower bill! \$\$
- ✓ Generating (creating) energy produces pollution → less electricity = less pollution
- ✓ We could have black-outs if we use too much!

What is Energy?

Energy is the ability to do work. Electrical energy can:

- #1. Make light (lightbulb)
- #2. Can make heat (hairdryer)
- #3. Can move things (fan in a hairdryer)
- #4. Make sound (radio, TV)

Really, we're not 'creating energy' but changing one form of energy to another.

A TV: Electrical energy → sound energy + light energy + heat energy

Generators

Generators provide us with electricity. They change 1 kind of energy into electrical energy we can use.

A magnet moving near copper wire creates electrical current in the wire!

The magnet(s) turn on a turbine.

What makes the turbine move?

- Wind
- Falling water
- Steam rising (heat water)