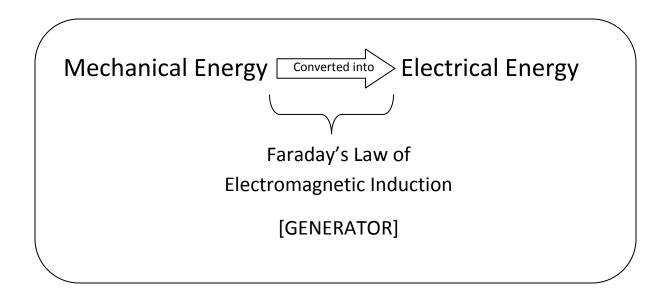
Generators – Simplified

Generator consists of two things:

>> Strong Permanent Magnet & Conducting Coil



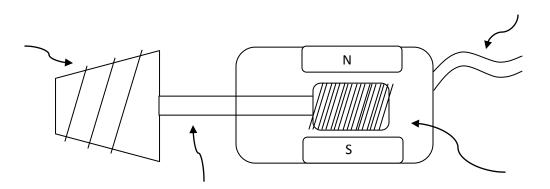
A generator is the "opposite" of an electric motor

Electric Motor: uses electricity to spin the coiled wire (motor).

Generator: uses mechanical energy to spin the coil to produce electricity.

The Process:

A generator consists of two parts >> a **turbine** and the **generator** (magnet/coil)



Almost all electricity production comes down to this simple problem: *how do we get the turbine to spin?*

Methods: super heated steam, waterfalls, wind, etc.

Energy Transfer:

Potential Energy \rightarrow Kinetic Energy \rightarrow Electrical Energy

Getting the Electricity:

Once the electricity is produced it is transmitted to your home over high voltage lines (transmission), it is then transformed to a lower voltage (transformers) and into your house.