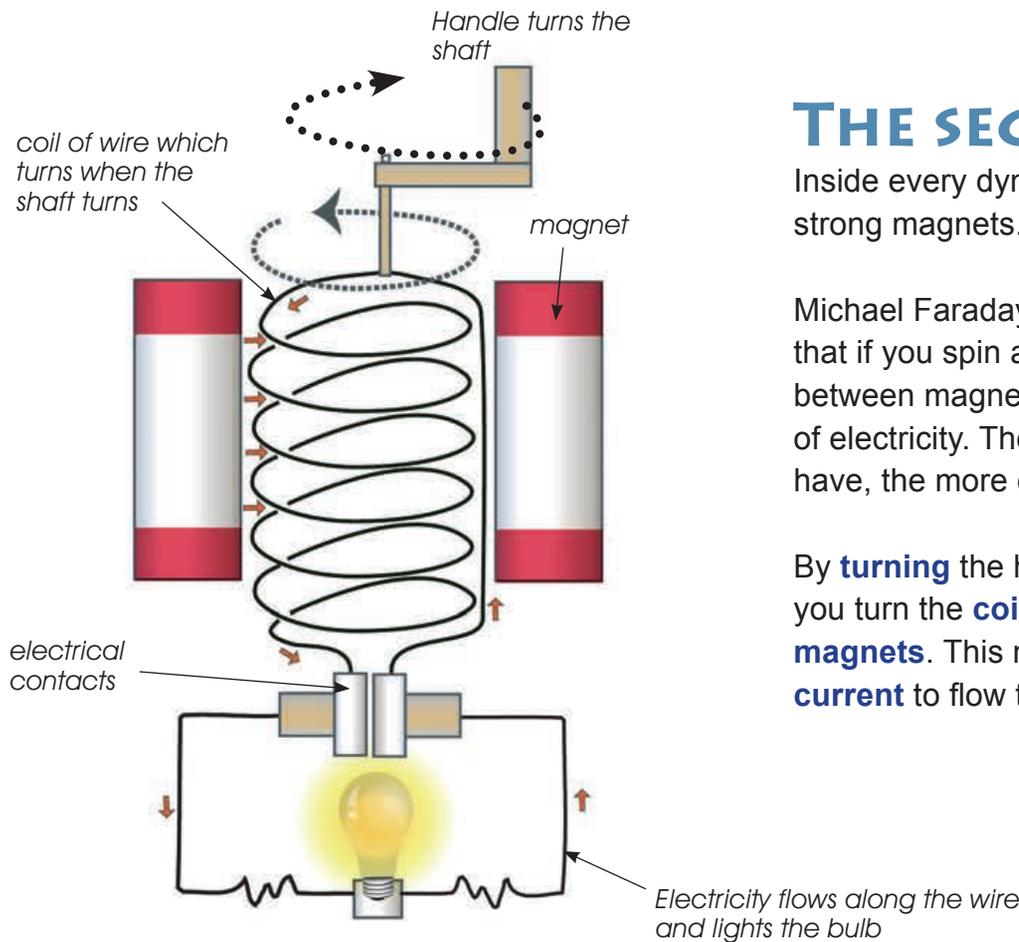




HOW A DYNAMO WORKS - FACT SHEET 11

A DYNAMO is a machine which converts movement into electrical energy.
A GENERATOR is a giant dynamo.

A dynamo needs a source of energy to spin or turn it.



THE SECRET INSIDE

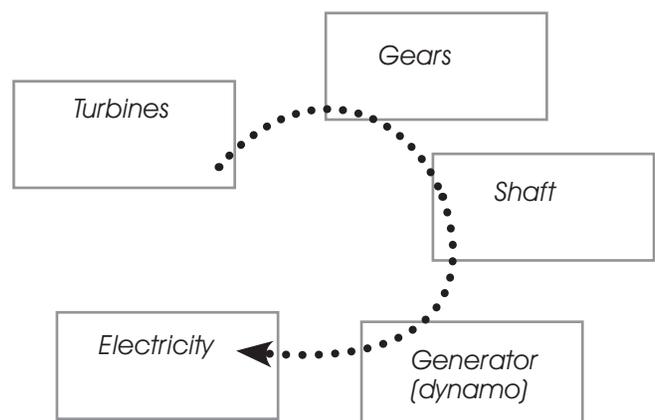
Inside every dynamo is a coil of wire and strong magnets.

Michael Faraday, in 1831, discovered that if you spin a coil of copper wire between magnets you could get a flow of electricity. The more loops of wire you have, the more electricity is generated.

By **turning** the handle on the dynamo, you turn the **coil** between the two **magnets**. This motion causes an **electric current** to flow through the coil of wire.

RENEWABLE ENERGY MACHINES

Renewable energy technology uses **TURBINES** to turn **GEARS** which then turn a **SHAFT** inside a **GENERATOR**. The turning shaft spins a huge coil of wire past giant magnets and generates **ELECTRICITY**.



See over for information on electric motors

HOW AN ELECTRIC MOTOR WORKS - FACT SHEET 1 1

SIDE B

An electric motor is a dynamo in reverse.

FIRST ELECTRIC MOTOR

The first, very simple, electric motor was made by Michael Faraday in 1821. He showed that a single wire, suspended between magnets would revolve when a current was passed through it.

ELECTRIC MOTOR

