

## SOURCES OF ENERGY

### Introduction of Sources of Energy

Energy is the capacity of a body for doing work. Energy stored in a body or system is equivalent to total work done by the body till whole of its energy has been completely exhausted. Most of our energy requirement is fulfilled from the fuels & electricity. Solar energy is also available to us in the form of a variety of fuels that have been stored in the earth's crust. Energy can be converted from one form to another.

#### **SOURCES OF ENERGY:**

We have a wide range of sources of energy such as the sun, the wind, the earth geothermal), flowing water, coal, gasoline, diesel, natural gas, biogas, etc. at our disposal. We utilize this energy to perform a wide range of activities, i.e., industrial, commercial, household etc.

#### **(a) Types of Sources of Energy:**

There are two types of sources of energy:

##### **(i) Renewable sources of energy (or non-conventional sources of energy):**

The sources of energy which are in constant supply to us by nature and are inexhaustible are known as renewable sources of energy.

#### **Example:**

The sun (solar energy), oceans, tidal energy, wind energy, running water energy, wood, geothermal energy etc.

##### **(ii) Non- renewable sources of energy (or conventional sources of energy):**

The sources which can't be used again and again and are exhaustible are known as non-renewable sources of energy.

**Example:** Coal, natural gas, petroleum, fossil fuels etc.

#### **(b) Characteristics of Sources of Energy:**

For a good source of energy, following conditions must be fulfilled by it :

- (i) It should provide large amount of useful energy.
- (ii) It must be easily storable in small space.
- (iii) It must be easily transportable.
- (iv) It must provide the energy in regular manner.
- (v) It should be convenient to use.