SOURCES OF ENERGY
Energy and Need of Energy,
Qualities of a Good Sources of Energy

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 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.

Conventional and nonconventional sources of energy

Sources of energy that have been in use for centuries are called conventional sources of energy. Conventional sources include wood, coal, petroleum and flowing water. Conventional sources like coal and petroleum are nonrenewable, while sources like flowing water are renewable.

Sources of energy that we have started using in new ways or only in recent times are called nonconventional or alternate sources of energy. These include energy from the sun, the heat inside the earth (geothermal

energy), tides, ocean waves, etc. Nuclear energy is also a nonconventional source. Note that nonconventional energy sources are renewable.

We have been using wind and biomass (like cow dung) for energy for ages. In that sense they are conventional sources. However, they were not used conventionally to do tasks like electricity generation, which has now been made possible with improvement in technology. In that they can also be called nonconventional sources of energy.