Sources of Energy: Renewable and Non-Renewable

What is Energy?

Energy is the ability to do work. We need energy to cook food, run machines, travel, and light our homes. Energy comes from different natural sources.

Renewable Energy Sources

Definition: Renewable energy sources are naturally replenished and will not run out. They are also called inexhaustible sources.

Examples of Renewable Energy:

Solar Energy: Energy from the Sun used to generate electricity.

Wind Energy: Energy from moving air used to run windmills.

Water (Hydropower): Energy from flowing water used to generate electricity.

Biomass: Energy from plants and animal waste used for cooking and heating.

Geothermal Energy: Heat from inside the Earth used to generate power.

Non-Renewable Energy Sources

Definition: Non-renewable energy sources are available in limited quantities and cannot be replaced easily. They are also called exhaustible sources.

Examples of Non-Renewable Energy:

Coal: Used to produce electricity and heat.

Petroleum (oil): Used to make petrol, diesel, and kerosene.

Natural Gas: Used for cooking and heating.

Nuclear Energy: Produced from uranium, used to generate electricity.

Differences Between Renewable and Non-Renewable Energy

Renewable Energy	Non-Renewable Energy
Replenished naturally.	Limited in quantity.
Does not run out.	Can be used up completely.
Environmentally friendly.	Causes pollution.

Renewable Energy	Non-Renewable Energy
Examples: Sun, wind, water.	Examples: Coal, oil, gas.

Importance of Saving Non-Renewable Energy

Non-renewable sources take millions of years to form. If we use them carelessly, they will run out. Using energy-efficient appliances helps to save energy. CFL bulbs consume 80% less electricity than regular bulbs.

Ways to save energy:

- Turn off lights and fans when not in use.
- Use public transport or carpool.
- Switch to solar-powered devices.

Fun Facts

The Sun is the main source of energy for the Earth. Wind turbines can generate enough electricity to power 1,000 homes. Biogas plants convert animal waste into cooking gas. Hydropower plants use the energy of flowing water to generate electricity.

Conclusion

Renewable energy is sustainable and eco-friendly. Non-renewable energy is limited and should be used carefully. We should save energy to protect natural resources for future generations.