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## Conventional and Non-conventional

### Energy sources

There are lots of energy resources available on the Earth but on the basis of availability these sources are categories into two parts called Conventional and Non-conventional energy resources.

**#Non-Conventional Energy Sources**

- Renewable energy is energy from sources that are naturally replenishing but flow-limited; renewable resources are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy often providesenergy in four important areas:electricity generation, air and waterheating/cooling, transportation, and rural(off-grid) energyservices.

- In energy resources, the is the ultimate energy resource and the Ninety-nine percent our energy comes from the Sun. This energy comes to the in the form of electromagnetic radiation.

**#Conventional Energy Sources**

- Conventional sources of energy are the natural energy resources which are present in a limited quantity and are being used for a long time. They are called non-renewable sources as once they are depleted, they cannot be generated at the speed which can sustain its consumption rate. They are formed from decaying matter over hundreds of millions ofyears.

- These resources have been depleted to a great extent due to their continuous exploitation. It is believed that the deposits of petroleum in our country will be exhausted within few decades and thecoalreservescanlastforahundredmoreyears. Some common examples of conventional sourcesof energy include coal, petroleum, natural gas and electricity.

**Comparison between conventional and non-conventional energy resources**

| Conventional sources of energy | Non-conventional sources of energy |
|---|---|
| These sources of energy are not abundant, present in limited quantity, e.g. coal, petroleum, natural gas. | These sources of energy are abundant in nature, e.g. solar energy, wind energy, tidal energy, biogas from biomass etc. |
| Theyhavebeeninuseforalong time. | They are yet in development phase over the past few years. |
| They are not replenished continuously. They are formed over a million years. | They are replenished continuously by natural processes. |
| They are called non-renewable sources of energy. | They are called renewable sources of energy. |
| They can be exhausted completely due to over-consumption except for hydel power. | They cannot be exhausted completely. |
| They pollute the environment by emitting harmful gases and also contribute to global warming. | They are environment-friendly, do not pollute the environment. |
| They are commonly used for industrial and commercial purposes. | They are used commonly used for household purposes. |
| Heavy expenditure is involved in using and maintaining these sources of energy. | Usingthesesourcesislessexpensive. |
| They are used extensively, at a higher rate than the non-conventional sources. | They are not used as extensively as conventional sources. |

## GLOBAL ENERGY USE OF PATTERN

| En | | ub-total ercentage |
|---|---|---|
| No | s | |
| Oi | | |
| Co | | |
| Na | | |
| Nu | | |
| No | | 82 |
| Re | | |
| Bio | | |
| Sol | eothermal | |
| Re | | 18 |
| To | | 100 |