

The substances which act as energy sources are known as fuels. The buried organic matters which can be converted to crude oil, coal, natural gas or any heavy oils by applying pressure and heat on earth's crust over hundreds of years are known as fossil fuels. A good fuel is one which is readily available at a cheap rate and produces moderate amount of heat on burning. The amount of energy produced by 1 kilogram of fuel is known as its calorific value. A fuel which burns completely in air at moderate rate and produces large amount of energy is known as an ideal fuel. No fuel has such properties and hence ideal fuel is not easy to obtain. Burning of fossil fuels leads to release of harmful products.



Increase in the consumption of fuel leads to harmful effects on environment. Following points will clearly depict these effects:

1. **Carbon fuels** such as wood, coal, petroleum release unburnt carbon particles in the environment. These particles are very dangerous pollutants and cause respiratory diseases for example asthma.
2. When fuels are incompletely burnt, they release carbon monoxide gas in the atmosphere. This gas is very dangerous as it is poisonous in nature. If we burn coal in a closed room, then the person sleeping in that room will be killed by the action of carbon monoxide.
3. The combustion of fossil fuels also releases a large amount of carbon dioxide in the atmosphere. Carbon dioxide is a green house gas which is responsible for global warming. Global warming is rise in the overall temperature of earth's surface. This leads to melting of polar caps and rise in the sea level and further results in flooding of coastal regions.
4. Burning of coal and diesel releases sulphur dioxide gas. This gas is extremely corrosive and suffocating in nature. Petrol gives off oxides of nitrogen. The oxides of sulphur and nitrogen get dissolved in rain water and form acids. This is known as acid rain. This water is very harmful for plants, animals and various monuments.
5. Nowadays these fuels are being replaced by CNG (compressed natural gas) because it is a clear fuel and produces less harmful products.