

Why Petroleum is called 'black gold'?

Petroleum is called 'black gold' because it yields several substances that are commercially successful. The useful substances obtained from petroleum and natural gas are called '**petrochemicals**'.

Petrochemicals are used in manufacturing:

- Synthetic fibres (such as Polyester, Nylon, Acrylic etc.),
- Detergents,
- Polythene, and
- Man-made plastics.

Natural gas also yields Hydrogen gas which is used in the production of fertilisers (such as urea).

Natural Gas



Figure 1 Natural Gas

Natural gas is a fossil fuel found naturally as a hydrocarbon gas mixture in the oil wells. Its main component is methane but it may also contain varying amounts of other higher alkanes (a group of elements). Gases like carbon dioxide, helium, nitrogen, and hydrogen sulphide are also found in natural gas in small percentages.

Why is Natural Gas important as a fossil fuel?

- Natural gas is considered important as this fossil fuel can easily be transported through pipes.
- It is stored as CNG which is used for several purposes and is also used as a starting material for manufacturing many chemicals and fertilisers.
- Natural Gas does not cause pollution and has high calorific value.

Compressed Natural Gas (CNG) is the natural gas stored under high pressure.

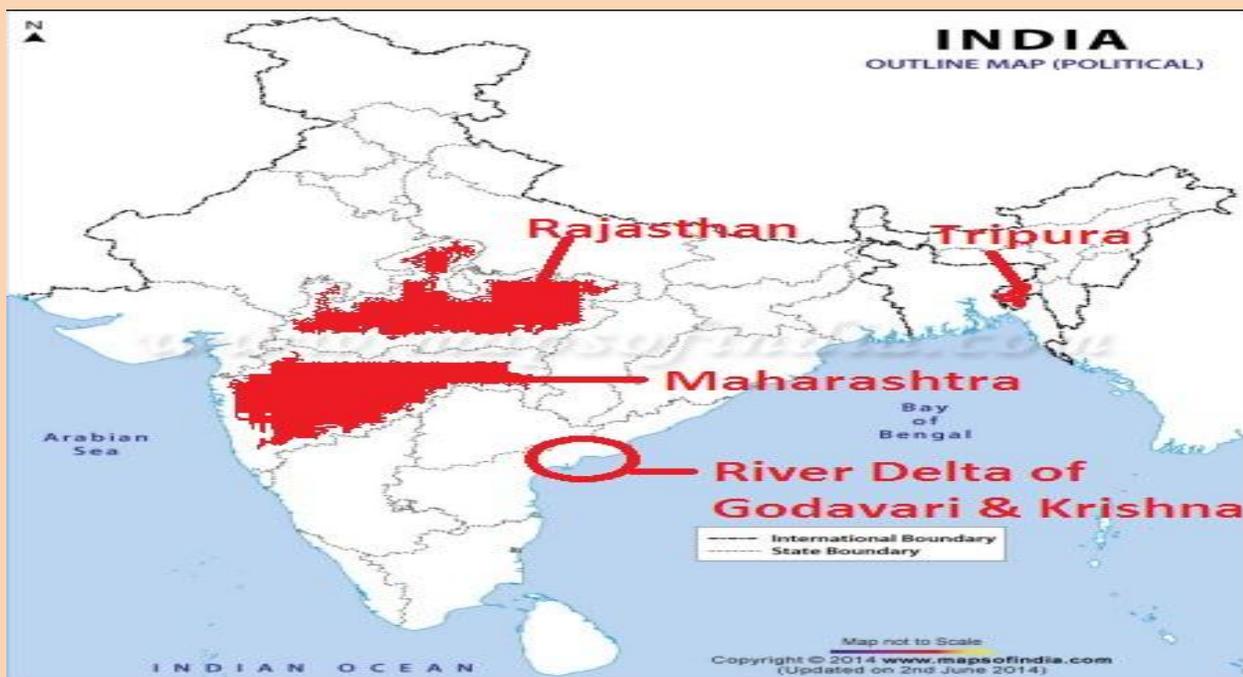
Why is CNG useful?

CNG is used as:

- Fuel to generate power
- Cleaner fuel for transport vehicles (less polluting than petrol and diesel)
- Fuel in homes and industries which can be supplied through pipes.
- CNG pipeline network already exists in Vadodara in Gujarat, some parts of Delhi and some other places.

Why is CNG considered as a cleaner fuel?

- Natural gas is considered a better fuel than coal and petroleum because it is cleaner.
- This means that it results in less amount of pollution than the other fossil fuels.
- Natural gas emits 50% less carbon dioxide, sulphur and nitrogen oxides in the air.
- However, it is not the best solution as there are better sources of energy present nowadays like solar energy



Some Natural Resources are Limited

Fossil fuels, such as coal, petroleum, and natural gas cannot be created in the laboratory as it is not possible to create the natural conditions

