

Coal gasification plant for Urea

April 21, 2020

Why in news?

Chemicals & Fertilizers Ministry recently concluded a coal gasification plant contract in Talcher, Odisha for the urea sector.

About the plant:

Presently urea is produced in the country using pooled natural gas, which includes domestic natural gas and imported LNG. The use of natural raw material for urea and other fertilizers in a country is therefore desirable.

- The project will enhance the independence of India in Urea and promote agriculture.
- It will promote the environmentally friendly use of highly available domestic coal.
- This shall also accelerate the use of coal for the manufacture of synthetic gas (SNG), as opposed to the combustion of fossil fuels, in other products such as synthesizing, gasoline, methanol, petrochemicals, etc.
- It produces syngas, which is mainly composed of methane (CH₄), carbon monoxide (CO) and hydrogen (H₂), used primarily for the production of electricity, and for chemical feedstock production.
- The hydrogen produced by coal gassing could be used to produce ammonia, to promote a hydrogen economy for various purposes.