

Coking coal

July 15, 2021

In news- The Union Cabinet approved the Memorandum of Understanding (MoU) between India and Russia on cooperation regarding coking Coal.

Key updates-

- The objective of the MoU is to strengthen cooperation between India and Russia in the steel sector.
- It shall benefit the entire steel sector by reducing their input cost.
- It may lead to reduction in cost of steel in the country and promote equity and inclusiveness.
- The activities involved in the cooperation are aimed at diversifying the source of coking coal.

About Coking coal-

- Metallurgical coal or coking coal is a grade of coal that can be **used to produce good-quality coke**.
- Coke is an essential **fuel and reactant in the blast furnace** process for primary steelmaking.
- Metallurgical coal comes mainly from Canada, the United States, and Australia.
- **Bituminous class coals** of high, medium, and low volatile rank that possess these properties are called “coking” coals.
- It is **low in ash, moisture, sulfur and phosphorus content**.
- Coke quality is largely influenced by coal rank, composition, mineral content and the ability to soften when heated, become plastic, and resolidify into a coherent mass.
- Coke is produced by baking coal in the **absence of oxygen** to remove the volatile hydrocarbons contained in coal.
- On heating, the coal softens, and volatile components

evaporate and escape through pores in the mass.

The property that really sets coking coals apart from other coals is its **caking ability**, which is the specific property required in order to make coke suitable for steel making.