

Benefits of Underground Coal Mining

Posted On: 06 AUG 2025 3:37PM by PIB Delhi

Underground coal mining offers several advantages, particularly from environmental, land-use, and social perspectives. Since underground mining causes minimal disturbance to surface features, it results in reduced damage to infrastructure, agricultural land, forests, and habitation areas.

From an environmental standpoint, underground mining generates significantly less dust and noise pollution compared to opencast mining. It is also well-suited for extracting deep-seated coal reserves, which are often of higher quality. Moreover, underground mining leaves a smaller surface footprint, thereby contributing to lower indirect greenhouse gas emissions associated with land degradation and loss of vegetation.

Additionally, underground mines are generally less susceptible to adverse weather conditions such as heavy rains or flooding, which can disrupt surface mining operations. This makes underground mining relatively safer throughout the year due to varying climatic conditions.

The Government has taken steps to promote underground coal mining. In this regard, the methodology dated 28.05.2020 for auctioning coal and lignite mines/blocks for the sale of coal/lignite on a revenue-sharing basis has been amended vide order dated 23.04.2025 to provide specific incentives for underground mines. These include:

1. Reduction of the floor percentage of revenue share to 2%.
2. Complete waiver of the Upfront Amount.

These incentives apply to bidders participating in the auction of coal or lignite mines reserved for underground mining. The successful allocates under this category, availing the above benefits, shall not be permitted to convert the underground mine into an opencast or mixed mine at any stage during the life of the mine.

The proportion/share of coal production from underground mining in the total coal production of the country during the last five years is given below:

Year	% share of UG production in the total coal production
2019-20	5.54%
2020-21	4.50%
2021-22	4.26%
2022-23	3.90%
2023-24	3.44%

Further, to enhance percentage share of underground mining, along with steps as mentioned at Para(b) above, taken by Government, coal companies have undertaken steps such as adoption of Mass Production Technology, embracing Mine Development and Operation (MDO) projects and re-operationalization of abandoned/ discontinued underground mines through MDO under revenue sharing mode.

This information was given by Union Minister of Coal and Mines Shri G. Kishan Reddy in a written reply in Lok Sabha today.

Shuhaib T

(Release ID: 2152985)