

Q. Despite the increasing uproar against coal energy, utilization of coal bed methane assumes critical importance in this context. Explain. (200 words)

A. Coal bed methane (CCBM) is ^a the gas trapped/adsorbed in coal beds, that can be used as a clean fuel, to meet our power needs as an alternative to coal.

India has 91 Trillion Cubic feet of estimated CBM reserves (1997 estimate) but has only managed to develop production of 1.8 million cubic meter per year. In comparison, Australia has managed to develop 108 mcm per year, having started their ^{CBM} policy at around the same time as India.

Reasons for Indian lack of production :-

- India has yet to adopt international best practices, scientific and systematic proving of reserves and exploration.
- There is less incentive for private investment in

the field, as the coal bed methane tapping would require new and expensive technology, and the market to be developed, ~~and~~ ^{for} infrastructure that supports CBM combustion should be put in place.

Part of the
• Methane in the mines (of CBM) needs to be released to protect the miners' health. This methane when released into the atmosphere is a potent green house gas (25x warming effect of CO₂).

But some development has been made :-

1. Out of the 33 CBM blocks sanctioned, 4 have become operational - 2 in Ranigang, and one each at Sohagaura and Jharria.
2. In 2015, the government allowed coal miners to tap CBM without separate license.
3. In 2018, the government allowed gas companies to set the gas prices themselves.

It is important that we harness CBM because -

1. We India is still a coal dependent country and ~~if~~ if we switch to CBM, then we can keep our commitment to clean energy while meeting of our energy security needs.
2. The window of opportunity to use CBM is closing, as renewable energy technology becomes widespread.
3. Tapping our CBM resources will reduce our dependence on energy imports.

Way forward -

The government needs to shed its apathy, increase research and development into the utilization of CBM via appropriate technology, adopt international best practices and prioritize the utilization of CBM, ~~to~~ making suitable policy and implementation changes, both to meet its ^{clean} energy ^{security} needs and to fulfil its commitment towards 'Atma Nirbhar Bharat'.