

Shale Gas

Shale Gas can emerge as an important new source of energy in the country. India has several Shale formations which seem to hold Shale Gas and oil. The Shale Gas formations are spread over several sedimentary basins such as Cambay, Gondwana, Krishna-Godavari and Cauvery onland.

The Government has issued “Policy Guidelines for Exploration and Exploitation of Shale Gas and Oil by National Oil Companies under Nomination regime” on 14th October, 2013. Under this Policy, the right to exploration and exploitation of Shale Gas & Oil will lie with the NOCs holding Petroleum Exploration License (PEL)/Petroleum Mining Lease (PML) granted under the nomination regime. ONGC has commenced drilling of one well in Cambay basin in Gujarat for shale gas/Shale Oil exploration. Currently, there is no commercial production of shale gas in the country.

It is estimated that a number of sedimentary basins (Gangetic plain, Gujarat, Rajasthan, Andhra Pradesh & other coastal areas) in India, including the hydrocarbon bearing ones - Cambay, Assam-Arakan, & Damodar - have large shale deposits. Various agencies have made different estimates of shale gas and oil in the Indian sedimentary basins.

- i. M/s Schlumberger: 300 to 2100 TCF of shale gas resource for the country.
- ii. Energy Information Administration (EIA), USA in 2011: 290 TCF of shale gas in 4 basins (Cambay Onland, Damodar, Krishna Godavari Onland & Cauvery Onland).
- iii. Energy Information Administration (EIA), USA in 2013: 584 TCF of shale gas and 87 billion Barrels of shale oil in 4 basins (Cambay Onland, Damodar, Krishna Godavari Onland& Cauvery Onland).

- iv. ONGC: 187.5 TCF of shale gas in 5 basins (Cambay Onland, Ganga Valley, Assam & Assam Arakan, Krishna Godavari Onland & Cauvery Onland).
- v. Central Mine Planning and Design Institute (CMPDI): 45 TCF of shale gas in 6 sub basins (Jharia, Bokaro, North Karanpura, South Karanpura, Raniganj & Sohagpur).
- vi. United States Geological Survey (USGS) has also estimated technically recoverable shale gas resources of 6.1 TCF in 3 basins (Cambay Onland, Krishna Godavari Onland & Cauvery Onland). Further, USGS has indicated that these basins have also potential for shale oil.