

Re-assessment of shale oil & gas resource potential of Indian sedimentary basins

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Shale oil (15 million tons of in place oil) and gas (63 tcf, technically recoverable, EIA 2011) resource estimates for India are mostly based on the geo-scientific data generated during surveys carried out for conventional oil & gas exploration and development. Oil shale occurrences in India are confined to the Assam- Arakan basin; these are surface exposures of the Barail formation in the belt of Schuppen. With the development of technology for subsurface retorting there is a need to carry out detailed surveys (geological, geochemical, geophysical and petrophysical) in the Assam-Aarkan, Cambay and Cauvery basins of India to demarcate new sub-surface areas for oil shale development and evaluate their oil shale resources. India has several sedimentary basins, which have potential for shale gas exploration and exploitation. It is suggested that a National Facility for Geological, Geochemical, Petro-physical and Optical characterization of shale rocks/ cores be set up to re-assess the shale gas resource potential, which could be 4-5 times more than the present estimates. An outlook of National Facility and a work plan for Indian sedimentary basins for shale oil & gas resource re-evaluation will be presented and discussed.