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Scope of Heavy Oil as a Fuel of the Future

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Abstract : Increasing imbalance between energy supply and demand has made nations and companies involved in the energy sector to boost up their research and find suitable solutions. With the high rates at which conventional oil and gas resources are depleting, efficient exploration and exploitation of heavy oil could just be the answer. Heavy oil may be defined as crude oil having API gravity value of less than 20°. They are highly viscous, have low hydrogen to carbon ratios and are known to produce high carbon residues. They have high contents of asphaltenes, heavy metals, sulphur and nitrogen in them. Due to these properties extraction, transportation and refining of crude oil have its share of challenges. Lack of suitable technology has hindered its production in the past, but now things are going in a more positive direction. The aim of this paper is to study the various advantages of heavy oil, associated limitations and its feasibility as a fuel of the future.

Keywords: energy, heavy oil, fuel, future

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