Oil and gas developments and future growth

In last 10 years major developments have changed the market where Middle East essentially Saudi Arabia was controlling the market. With the new developments in horizontal drilling and fracturing tight oil and gas formations have made major changes and USA has become exporter of oil and gas. The prices have tumbled from 90+ dollars (which touched for a which to 147 dollars) to around 50 dollars per barrel (and touched below 30 dollars / barrel). This has happened due to onshore drilling in tight geological formations where one was able to recover gas and oil and with new technology of horizontal drilling one can recover oil/gas in 5 mile radius with one well which previously needed 20 wells. This provided at least better than breakeven economics around 40 to 50 dollars per barrel and gas is also very low cost and export of LNG from USA to Far East and Europe has started to meet the demand. New developments provide much higher recovery of oil OOIP (original oil in place) and gas based on patent with moderate temperature and pressure CO₂ and H₂O 2 in Classical EOR mode under critical conditions. Figure provides some information. The future of oil and gas industry is going to be cyclic as before but there are some shifts taking place due to environment issues and new developments and growth in near term is going to be slow. Major issues are that diesel vehicles are being phased on coming years and electric cars and hybrid will take market share. So refinery operation will shrink due market place shift due to electric cars. The Oil and gas will move to petrochemicals and power production so shift will be there. Next 10 to 20 years will be challenging in developments in this area.

Biography

Over 40 years' experience in Engineering/Consulting Management at senior level in Process Engineering, Technology, Business Development, Licensing, Acquisitions, Alliances and Project Management and Engineering, Operations Management and Process Engineering. Provided proven leadership and vision with broader perspectives and able to manage multiple tasks and personnel on mega projects. Patents provide refiners and petrochemical plants innovations to enhance the performance of the units. Worked in all EU countries including UK, Germany, The Netherland. Major developments in Oil and gas business, downstream and petrochemicals technology, Catalysts, international alliance, licensing & contract negotiation, technology marketing, new technology commercial launch, partner relations. Dr Amarjit Bakshi has a Ph.D and also undergraduate degree both in Chemical Engineering from University of Surrey, Guildford, UK.

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