Abstract

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PETROLEUM INDUSTRY OUTLOOK

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Global energy demand is rising, with fossil fuels—oil, natural gas, and coal—continuing to provide more than 90% of the world's energy needs. Although demand for natural gas is growing faster than that for oil, oil remains the dominant fuel because it is relatively inexpensive and easily transported. World oil demand reached a record level of 72 million b/d in 1997 and is projected to increase to 91 million b/d by 2010. In the 3 major consuming regions of North America, Europe, and the Asia-Pacific, oil production is expected to be stable at best, and oil imports are expected to rise from 25 million to 42 million b/d. Most of the increase in oil exports after 2000 will originate in the Middle East whose oil reserves can easily support the higher output.

The array of environmental issues, ranging from local air quality to global climate change, will play a significant role in the energy industry's future. Alternative and especially renewable energy sources will be increasingly favored in the longer term. The global trend toward cleaner fuels (gasoline and diesel) is proceeding faster than many had anticipated, with tightening requirements on parameters such as sulfur, benzene, oxygen, and olefins content, as well as evaporative qualities and other aspects.

To meet future demand for lighter and cleaner products, including demand for petrochemical feedstocks, which is growing faster than demand for fuel products, new refinery capacity is being built. Investment is focused in the growth markets of the Asia-Pacific, South America, and the Middle East. At the same time, the world refining industry has faced years of low profits and is undergoing significant consolidation, with numerous major joint ventures, mergers, and alliances announced since 1996. For maximum efficiency and profitability, refiners need to align their technology configurations with regional product demand. Given announced capacity additions in Asia-Pacific, which is experiencing lower than expected demand, we foresee the potential for excess gasoline production capacity in that region. Europe has faced similar product imbalances for years, which have tended to depress prices and contribute to lower refinery profitability in that region.

Given that an understanding of world oil markets is essential for knowledge of petrochemical feedstocks, this compendium of petroleum market data and analysis for all regions of the world will be of interest to those in the energy and petrochemical industries.

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