

## Regional Trends in World Oil Production

### Abstract

For the purpose of identifying regional trends in oil production, the world has been subdivided into six areas. One of these areas, the Former Soviet Union, represents an artificial division but it is a useful one because the countries in this area had similar resource development histories until recently. The five-year historical trends are described below. A discussion of specific areas and plays that will account for future oil production increases will form the conclusion of the presentation.

The **Middle East** accounted for 30.4% of World oil production in 2003, down from 31.7% in 1998. Production in Iraq was disrupted by war in 2003, but production in other countries was not affected. The importance of Middle East oil peaked in the mid-seventies, when it reached 39% of World supply. Million-barrel-per-day producers in the Middle East are Saudi Arabia (8.6 million barrels per day in 2003), Iran (3.8 Mb/d), the United Arab Emirates (2.3 Mb/d), Kuwait (2.2 Mb/d) and Iraq (1.3 Mb/d).

The **Western Hemisphere** provided 24.9% of World oil production in 2003, down from 26.8% in 1998. Production in Mexico, Canada and Brazil reached record levels in 2003, but an oil workers' strike disrupted production in Venezuela. Million-barrel-per-day producers in the Western Hemisphere are the United States (5.7 Mb/d), Mexico (3.4 Mb/d), Canada (2.3 Mb/d), Venezuela (2.0 Mb/d) and Brazil (1.5 Mb/d).

Oil production in the **Former Soviet Union** grew to 14.3% of World supply in 2003, up from 10.6% in 1998. Much of this production growth came from Western Siberia, but substantial future growth is expected from Kazakhstan and offshore Sakhalin Island. The million-barrel-per-day producer in this area is Russia (8.2 Mb/d) but Kazakhstan (0.9 Mb/d in 2003) will soon join the club as the Tengiz and Kashagan Fields are fully developed. Oil production in Azerbaijan (0.3 Mb/d in 2003) may exceed one million barrels per day when its offshore Caspian Sea fields are developed.

**Africa** accounted for 11.0% of World oil production in 2003, up from 10.4% in 1998. Numerous deep-water oil discoveries offshore West Africa are continuing to add production capacity. Million-barrel-per-day producers in Africa are Nigeria (2.1 Mb/d), Libya (1.4 Mb/d) and Algeria (1.1 Mb/d). Angola (0.9 Mb/d in 2003) will join the million-barrel-per-day club as deep water discoveries are developed.

The **Asia-Pacific Region** accounted for 10.7% of World oil production in 2003, unchanged from 1998. Production increases in China, Vietnam and elsewhere offset a decline in Indonesia. Million-barrel-per-day producers in the Asia-Pacific region are China (3.4 Mb/d) and Indonesia (1.0 Mb/d).

**Europe** provided 8.8% of World oil production in 2003, down from 9.8% in 1998. Most of Europe's oil production comes from the North Sea, where major fields are facing production declines. Million-barrel-per-day producers in Europe are Norway (3.1 Mb/d) and the UK (2.1 Mb/d).

## **The Speaker**

Greg Croft is an independent exploration consultant based in San Leandro, California. He was previously executive vice president, exploration, Harrods Energy Thailand Ltd. and executive vice president, new ventures, Harrods Natural Resources Inc. Prior to joining Harrods, he was a partner in Pantera Petroleum Inc., a consulting firm specializing in Latin America. Before that, Mr. Croft worked for Chevron Overseas Petroleum on projects in Latin America and West Africa. Mr. Croft has been involved in a number of oil and gas discoveries including the Nemba and Lomba fields offshore Angola and the Jasmine Oil Field in the Gulf of Thailand. He holds an MS degree in geophysics from Stanford University and a BA in geology from the University of California.