



**Testimony before the  
Subcommittee on Energy and Mineral Resources  
Committee on Resources  
United States House of Representatives**

**“U.S. ENERGY AND MINERAL NEEDS,  
SECURITY, AND POLICY: IMPACTS OF  
SUSTAINED INCREASES IN GLOBAL ENERGY  
AND MINERAL CONSUMPTION BY EMERGING  
ECONOMIES SUCH AS CHINA AND INDIA”**

March 16, 2005

A Statement by

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Mr. Chairman, Members of the committee, I appreciate the opportunity to appear before you today to discuss recent global oil developments and their implications for U.S. energy requirements and commercial markets.

I am appearing on behalf of the Center for Strategic and International Studies where I am a Senior Fellow with the Energy Program. The remarks are drawn from some recent CSIS analysis as well as from my own personal observations and experience, including policy positions in the U.S. government and almost 20 years in the energy industry.

### **Recent Developments.**

Over the past 18 months there have been three significant developments which have prompted serious assessment of the implications for US energy supply for the immediate period as well as for the long term.

They are:

- Forecasts from the EIA predict a 50 percent increase in worldwide oil demand over the next two decades. These demand forecasts take place at a time when the surplus in oil surge capacity is at its lowest level in 30 years.
- Unexpected high oil prices in 2004. Prices increased rapidly, similar to the increases in the 1970s, suggesting a structural shift in oil prices to a higher level. Surprisingly, this occurred without prompting a major public outcry and with little impact on short-term world economic growth.
- The emergence of new competitors in the international market place determined to secure short term oil imports as well as longer term oil investments.

These and related developments have prompted a reassessment of the implication for U.S. energy policy as it seeks to adjust and manage a changed international energy market.

### **Demand forecasts.**

EIA's long-term forecast for oil demand is similar to that of the International Energy Agency. Behind the 50 percent increase in oil demand to 2025 is a short-term demand forecast reflecting a continuing dramatic increase in the growth of oil demand.

Historically, short-term demand has grown only slowly. For example, it took 18 years for oil demand to grow from 60 to 70 mmb/d. However the increase from 70 to 80 mmb/d took only 8 years. Now, the IEA forecasts oil demand to exceed 90 mmb/d in 2010, only five years from now.

This pace of increase will require dramatic increases in investment and infrastructure all along the oil supply chain.

Even if continued high prices reduce this rate of growth, and absent a major economic or financial change, oil demand is expected to remain on an upward trajectory for the foreseeable future.

Given the long lead times in the oil investment cycle, the increased supply to meet this demand will have to come from areas with some surplus capacity, primarily the Middle East, as well as from new production in the Caspian, Latin America, Africa, West Africa, and the U.S. offshore Gulf of Mexico.

Beyond 2010-2015, production from the Arabian Gulf will account for the major share of incremental supply to the world market.

With U.S. oil production flattening increases in U.S. domestic consumption will be met increasingly from imports. This increased dependency will include both crude oil and, absent significant investment in domestic refining capacity, refined petroleum products.

### **Oil Prices**

The period 2003-2004 witnessed a wide variety of supply developments contributing to the rapid increase in prices. These included: declines in Venezuelan production; domestic strife in Nigeria leading to reduced crude exports; strikes in Norway; concern over Russia's ability to sustain production and exports as a result of the Yukos affair and pipeline capacity concerns; sabotage and security concerns in Iraq; and, the sustained loss of U.S. production in the Gulf of Mexico resulting from Hurricane Ivan.

Oil prices remained high in spite of increases in production from OPEC member countries. The quality of the OPEC crudes being offered to the market was less attractive to refiners who were competing for the higher quality crude oil leading to price discounting for the surge capacity offered to the markets.

The most significant cause of higher oil prices was higher demand, however. Growth in Chinese and U.S. oil demand accounted for the majority of the worldwide increase.

With supply continuing to be stretched and demand forecasts continuing to be bullish, most analysts expect oil prices to remain at or near current levels for the next year or two. Whether these prices demonstrate a cyclical or a structural change in oil prices is a major question.

For many of us the change appears structural as industry and consumers adjust to the higher price levels. At the same time, there is also likely to be a correction in response to market developments.

### **New Competitors in the Market Place**

The emergence of China in both the trading and investment markets has prompted speculation if not concern. In the trading market, China has emerged as a new competitor for worldwide crude oil in response to its increasing demand and short term peaking of domestic production.

Of equal importance is the emergence of Chinese investment in both OPEC and non-OPEC countries. Chinese companies have aggressively pursued oil investment opportunities in, inter alia, Kazakhstan, Sudan and Australia, and is considering deals in Venezuela, Canada, Russia and Iran. China, as a matter of strategic importance, appears determined to lock up long-term supplies in expectation of continuing tight markets.

Private companies complain that the ability of the Chinese to outbid them for attractive prospects reflects their lower cost of capital and ability to offer political sweeteners and perhaps guarantee better prices. At the same time, there is at least one example of China winning a closed auction indicating that the record of Chinese investment practices is mixed.

The practice of tying commercial investment to politics and finance to acquire oil supplies is not new. The French government pursued a similar strategy in the late 1970s rather than join the International Energy Agency with its reliance on multilateral cooperation and market-based strategies.

Whatever the nature of the deals, Chinese oil trading and investment strategies carry the potential to lock up attractive additional opportunities at the expense of private investors and, of equal importance, reduce the liquidity in the trading market as the crude it obtains is likely to be dedicated solely for use in the Chinese market.

Bilateral oil deals involving consuming governments are a two edged sword for a producing country. On the one hand they appear to offer a guaranteed and growing market for incremental production, something producers have sought for years. However such access may come at the expense of price, as Chinese investors and buyers try to leverage guaranteed access to the market in exchange for lower prices.

### **Implications for US policy**

U.S. policy since the Carter Administration has been to rely on private investment, international commercial decisions on investment and trading activities, and access to a generally fungible international market to supply the United States. The United States has been able to leverage access to an attractive domestic market in which to invest and sell under commercial terms to encourage sales and investment. This strategy has worked.

The question is whether this strategy can continue to assure supplies at the levels required and at acceptable prices.

Worldwide investment over the past year in the oil sector has reportedly been below levels needed to effectively meet increasing short-term demand. In addition, and in spite of higher prices, private companies appear to have had difficulty replacing oil reserves over the past year. The reasons appear to be numerous and involve a failure to obtain access to promising opportunities, delays in bringing new production on stream, and changes in investment terms.

Several producing governments have radically changed investment terms by increasing the government share of the investment, unilaterally changing investment laws, and increasing the government financial take.

These developments can have serious consequences. They can reduce the attractiveness of international investment particularly in those countries expected to provide incremental production. Abrupt government decisions to abrogate the financial terms of the investment contract can, at a minimum, reduce the reinvestment opportunities needed to continue to increase production. Such action also reduces the amount of money available to private investors for investment. And, most importantly, these practices tend to have a dampening affect on the addition of new short term oil production to meet the expected demand growth, helping to maintain high prices if not increase them while doing little to improve the supply demand balance over the mid to longer term.

It is in this context in which the debate over the future of U.S. energy policy is being framed.