# Ferguson: Energy Matters

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## All Is Well, Or Is It?

All appears well, according to the International Energy Agency, official energy advisers for developed countries. The business-as-usual scenario of the recently released World Energy Outlook 2006 (WEO 2006) projects that oil prices will remain at about $50 per barrel (in 2005 dollars) over the next 25 years, despite a 38 percent increase in consumption. The world economy continues to expand at 2 percent per year.

It's a nice rosy scenario.

Demand for natural gas increases even more rapidly than demand for oil - up 68 percent over the 25-year period. However, IEA projects that the price of global natural gas imports will not rise either, remaining in the $6 per MMBtu range.

How convenient.

Consumption of coal is projected to increase, too. But coal prices also remain at current levels for the next 25 years.

There seems to be a pattern to their price projections.

Lurking behind the scenes, however, are some thorny problems. According to IEA, oil production in non-OPEC countries has nearly reached its peak of 52 million barrels per day and is projected to begin a gradual decline.

To expand OPEC oil production by 50 percent and maintain non-OPEC supplies as long as possible, IEA projects that $164 billion per year (in 2005 dollars) will be required. And 90 percent of this amount is for exploration and field development. Transportation and refining account for the remainder.

WEO 2006 Part B: the alternative policy scenario paints a decidedly less rosy picture. "The consequences [of the business-as-usual scenario] for energy security and emissions of climate-altering greenhouse gases are stark. The major oil- and gas-consuming regions . . . become even more reliant on imports, often from distant, unstable parts of the world." Emissions of carbon dioxide and other greenhouse gases would increase faster than ever before.

The alternative policy scenario assumes aggressive policies are put in place to reduce energy demand, but the outcome is discouraging. These efforts are projected to reduce total energy demand a mere 10 percent by 2030 and lean heavily on nuclear power.

How seriously should we take these projections? WEO 2006 appears to ignore the fundamental changes that are occurring in the global energy business. Increasingly, oil and gas are subjects of global geopolitics rather than commodities whose prices are set in New York and London markets and denominated in dollars.

Oil and gas production in all of the major producing countries is now firmly under control of governments. China and India are increasingly signing long-term supply contracts rather than leaving themselves to the vagaries of Western markets. New oil and gas markets trading in currencies other than the dollar are arising in the Middle East and elsewhere.

The days of Western dominance over global oil and gas appear to be over. Energy in the next 25 years is apt to be a very different scene than we are used to. The dollar isn't what it used to be.

I admit to being biased against any forecast that assumes energy prices will remain at today's levels for the next 25 years, an entire human generation. There are many scenarios in which energy prices rise, and very few in which prices fall.

My energy advice to politicians would be to expect the unexpected and prepare for the worst.

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