

Oil, Gas, and Electric Power: Some Issues for 2010

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Oil & Gas Journal invited me to write a 750 word editorial for Oil & Gas US Magazine, talking about 2010 could mean for the oil and gas and electric power industries. The article was published yesterday (here), and I thought I would repeat it for Oil Drum readers.

Oil, Gas and Electric Power: Some Issues for 2010

Continued Recession

It seems to me that the current recession is very much energy-related, and is likely to continue. The recession is occurring because the current US "system" (individual homes, private cars, many imports) was built for cheap (\$20 barrel) oil and gas, and cannot function well using expensive oil and gas.

I expect that the recession will experience some ups and downs, but will generally be worse by the end of 2010. Government revenues will continue to decline, making it increasingly difficult to support subsidies for renewables and to provide funding guarantees for nuclear and wind.

Underlying the continued recession is a basic issue: people's incomes are relatively fixed. If people are required to pay more for gasoline, home heating, and electric power (which most consider necessities), they will have less for repaying debt and less for discretionary spending. If the cost of necessities go up—even as a result of something most consider relatively good—such as an increased proportion of renewables—it will increase the tendency toward worse recession.

With continued recession, debt defaults are likely to become more and more of an issue. While debt defaults are likely to come mostly from sectors other than oil and gas and electric power (such as commercial real estate and credit card debt), the fall-out in terms of reduced credit availability is likely to affect all.

Most economists will continue to miss the connection between energy costs and recession and will continue to forecast recovery around the corner. Their models are based on the assumption that the economy can continue to grow pretty much as in the past—but if we are faced with higher fuel costs because cheap energy sources have to a significant extent been exhausted, this really isn't the case.

Fluctuating Oil and Gas Prices

While many are forecasting higher oil and gas prices, I am doubtful that higher prices will hold for very long because of the inability of people's incomes to cover the higher prices. Parts of the world

that use much less oil and gas per capita may be able to sustain higher prices with less recessionary impact, but ultimately, all will be affected.

I see a high cost of oil production (or of any type of energy production) as a marker for low "energy return on energy invested" (EROEI). It seems to me that we should be cautious about substituting higher cost energy sources for lower cost energy sources, because doing so will tend to raise the cost to the consumer and lead to greater recessionary impacts.

Continued Pressure to Reduce Emissions, Particularly CO2

While I doubt that the Waxman-Markey bill can pass this year, I expect that the EPA and individual states, such as California, will continue to exert pressure to reduce emissions. To the extent that these actions are effective, I expect the results will be recessionary.

Peak Demand for Energy Supply of All Types

Recently, we have been hearing about "Peak Demand". I think Peak Demand is a possibility—if not in the next year, in the slightly longer term. The way Peak Demand is likely to play out is through increased recession and continued reduction in credit availability. Difficulty with international trade may also enter the picture.

While some are painting "Peak Demand" as a good thing, I see it as a problem, since it is likely to be accomplished through declining standards of living. Peak demand may, in fact, be inevitable because our current standard of living cannot be supported if oil and gas prices rise to too high a level—people will spend too much of their incomes on necessities, and will not have enough left over for new homes, new cars, and all of the other things that have enabled economic growth in the past.

Some expect energy efficiency to play a major role in peak demand. I expect its role to be quite minor because of the huge amount of investment and long timeframe required to make a major change, such as increasing passenger auto fleet efficiency by 20 mpg.

To Summarize

- 1. Demand for oil, natural gas, and electricity is likely to fall over the next few years, because of increased recession and decreased credit availability.
- 2. Subsidies for renewables and nuclear are likely to decline, as governments find themselves more and more financially stretched.
- 3. Even with (1) and (2), there may be pressure to reduce emissions and thus fossil fuel use.

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