

The Wall Street Journal¹
OPINION

MARCH 9, 2011

Our Man-Made Energy Crisis

By NANSEN G. SALERI

There's plenty of oil and no fundamental reason to expect prices of \$200 per barrel. But that doesn't excuse the administration's punitive approach toward the industry.

The unfolding turmoil in Libya has amplified concerns about the reliability of global energy supplies in an era of political uncertainty. Is oil at \$200 per barrel inescapable? Is this the beginning of the end so vigorously underscored by peak oil enthusiasts for the last several decades? The short answer is clearly "No."

Yet the question remains: What will happen to the price of crude? This, in turn, necessitates an appreciation of the "anxiety" component in current and future prices. The anxiety premium may range from \$10 to \$30 given current events in Libya and their spillover effects.

The good news is that such a premium is not sustainable in the long run. Prices will eventually come down due to global excess capacity—estimated at three million to five million barrels of oil per day—and even more so due to migration of demand from oil to natural gas by electric utilities and industrial markets. Natural gas holds more than a 3-to-1 price advantage over oil on an equivalent unit energy basis in the U.S. So \$200 crude is unlikely given market fundamentals.

In the context of global liquids production, the civil strife in Libya represents a minor disruption (less than 2% of the total, approximately 85 million barrels of oil per day). Nor is there any evidence to suggest that even a protracted scenario of instability will result in a sustained reduction of crude supplies. Iraqi oil production dropped by 30% at the start of the second Iraq war in 2003, and then it quickly bounced back to the prewar level of two million barrels of oil per day. Currently, Iraqi oil production stands at 2.6 million barrels of oil per day, with much higher levels projected during this decade.

Fossil fuels make up about 85% of total U.S. energy demand, which is estimated at about 45 million to 50 million barrels of oil equivalent per day. Energy imports, mainly crude oil, account for 20% of the total U.S. energy requirements. This level of imports is a huge burden on the balance of payments, hence the U.S. dollar.

What is less widely recognized is the overall inefficiency of energy utilization. According to a 2007 study by National Petroleum Council, at the request of the U.S. Department of Energy, approximately 61% of energy produced is lost due to factors such as poor insulation, gas-guzzling vehicles or suboptimal power plants. On average, only one out of three reservoir barrels is recovered, which translates to an overall efficiency of only 13% for oil that is converted to a usable form. Improving energy efficiency should be a top priority, not just in our surface usage but also at the point of extraction.

Technology is reshaping every facet of our lives. The energy world is no different. This includes the resurgence of U.S. liquid production in recent years (5.5 million barrels of oil per day and trending upward), as well as conventional gas production's six-fold increase over the last two decades (to approximately 32 billion standard cubic feet of gas per day in 2010, nearly equaling U.S. liquid production). Both are attributable to recent innovations, such as highly sophisticated wells that can reach thousands of feet underground with GPS precision.

The planet is endowed with plentiful sources of natural gas and oil, conventional and unconventional. Some estimates place global unconventional gas resources at about 33,000 trillion cubic feet, or about five times the amount of proven reserves at the end of 2009. The outlook for liquids is no less promising. At current rates of global consumption, there are sufficient oil and gas supplies to last well into the next century.

What's missing is a coherent U.S. energy policy. At best, the Obama administration's approach to U.S. domestic oil and gas production can be characterized as a strategy of ambivalence, an uneasy equilibrium between desire to lessen the role of fossil fuels and the reality of their necessity in a functioning U.S. economy. Last year's Deepwater Horizon tragedy in the Gulf tilted the current administration's policies to an even more punitive posture vis-a-vis domestic energy production.

As the French philosopher Antoine de Saint-Exupéry wisely observed, "A goal without a plan is just a wish." Unfortunately for the U.S., there is not even a wish. The time to rethink and redesign our entire energy strategy is now.

The Obama administration must seriously ponder the following questions, because they relate directly to what the president likes to call "winning the future." What will be the make-up of the energy-supply pie, and how can we dramatically increase, even double, our energy efficiency? What exactly are our carbon emission goals? And how do we go from where we are today—importing about 20% of our daily energy supply—to where we want to be in 2026, perhaps even an energy exporter?

We've already entered a new energy era that is dramatically more competitive, diverse and high-tech than the past. The global consumer is king. The future energy picture for the U.S. or the planet is not constrained by the availability of supplies, either fossil or non-fossil, but by efficiency gains in generation and consumption.

This will require real leadership and the clear articulation of energy goals, costs and priorities. Ambiguity will not serve the best interests of future generations. The U.S. does not have an energy problem. It has an energy strategy problem.

Mr. Saleri, president and CEO of Quantum Reservoir Impact in Houston, was formerly head of reservoir management for Saudi Aramco.

Notes

¹<http://online.wsj.com/article/SB10001424052748703386704576186622682563228.html>