New American

Written by **Bob Adelmann** on March 22, 2013

Cheap Abundant Natural Gas is a Game Changer, Says the IMF

Expressing surprise at the enormous increase in U.S. production of oil and natural gas by unconventional means, Thomas Helbling, a division chief in the IMF's (International Monetary Fund) Research Department, was forced to admit that it was free enterprise that was responsible for it after all. In his March 2013 article he wrote:

> A strong rebound in gas and then oil production in the United States over the past few years has taken markets and policymakers by surprise. As a result, natural gas prices in the United States are at a 20-year low….

It's all because of fracking and free enterprise, which have "fundamentally changed the outlook for natural gas as a source of energy," he added. This illustrates the phenomenon known in Economics 101 as "the law of supply and demand." In other words, "the cure for high prices is high prices." Helbling concluded:

> The sudden takeoff in the production of oil and gas from unconventional sources in recent years is another case in which high prices and new technologies combined to turn a previously uneconomical resource into an economically viable one.
>
> The jump in oil prices in late 1973, for example, made the development of new oil resources in the Arctic (Alaska) and the North Sea economical and eventually contributed to declines in oil prices that persisted well into the 1980s.
>
> More generally, the development of new sources of supply is a normal response to a commodity price boom and has historically been one of the forces behind price declines after a boom.

The increase in the production of natural gas in the United States over the past several years has indeed been impressive, with output rising 30 percent between 2008 and 2012, with no end in sight. At present, the Energy Information Administration (EIA) has estimated that recoverable natural gas now exceeds 750 trillion cubic feet, about 30 years of total annual production of natural gas. And revisions will no doubt expand that number greatly as the existing fields are explored and exploited and new ones discovered and developed. Back in July, a report from an energy company in North Dakota predicted that that state's production is likely to increase *sixfold* in the next ten years, driving the price of natural gas even lower.

The impact in the United States is already being felt. Economist Mark Perry calculated that on an energy equivalent basis, natural gas is now almost 80 percent cheaper than oil, making it "a real game changer." At the pump, natural gas prices are already between $1.50 and $2.00 cheaper than gasoline, and some major companies are taking notice, including Ford, General Motors, and Chrysler. At present, Ford has 10 different models of over-the-road tractors ready to use either liquefied petroleum gas

(LPG) or compressed natural gas (CNG) with sales of such vehicles exploding 350 percent just in the last three years. When the vehicles are modified, their drivability is the same as with gasoline, but the savings can be huge. Over six years fuel savings can exceed $150,000, making the switch economically very attractive.

It will also make the environmentalists happy, as either LPG or CNG burns cleaner than either gasoline or diesel, emitting some 20-30 percent fewer of those despised "greenhouse gases" that stoke the fires of the greenies.

The modifications add about $10,000 to the cost of a typical tractor, but keeping in mind that these units on average cost upwards of $90,000 and more, this additional cost is usually returned in fuel cost savings in less than two years. And that assumes the tractor is driven only 100,000 miles a year.

Each company will have to decide which fuel to use, but on a pure math basis, LPG wins hands down. Since it is stored under pressure of 250 psi instead of 3,600 psi for CNG, the additional cost for the tractor is several thousand dollars less than for CNG. And LPG refueling stations are much cheaper to build, usually about $50,000 compared to $400,000 for CNG. And it should give comfort to the owner of an over-the-road transportation company that there are already some 17 million LPG-powered vehicles on the road around the world, so this is hardly a step of faith for him to take.

As the price advantage of natural gas over oil continues, one can expect to see more tractors like this one on the highway, enjoying another benefit of the market economy serving customers through improved technology and lower prices. The miracles happening in North Dakota and elsewhere are being translated into real world benefits for U.S. consumers.

A graduate of Cornell University and a former investment advisor, Bob is a regular contributor to The New American *and blogs frequently at www.LightFromTheRight.com, primarily on economics and politics. He can be reached at badelmann@thenewamerican.com.*