

### Oil, Natural Gas and YOUR FUTURE

In the uncomfortably near future, the costs of oil and gas will not be measured in just dollars and cents. It will also be measured in the changes to our quality of life, our financial health, and our safety. We in the United States enjoy an envied level of comfort and health, as well as relative safety, in our society. All of those luxuries, whether directly or indirectly, depend upon the ready availability of a relatively inexpensive source of energy. Even today, with oil averaging around \$80 a barrel, the true cost of our dependency on foreign sources of energy with their rising costs has not been fully acknowledged. Add to that the probability of those tangible and intangible costs rising and negatively affecting our current way of life.

You can discuss energy conservancy and the need to wean our nation from its dependency on fossil fuels, but the hard reality is that conservation and alternate fuels are in *no way* ready to displace oil and gas as America's chief source of energy. While it is likely that conservation will lesson our dependency on fossil fuels, and alternative sources of energy may one day supplant oil and gas (just as crude oil supplanted whale oil in the United States); that day is not yet here and is unlikely to occur in the foreseeable future. Therefore, in our near future, let's say the next decade; will include the continued use of oil and natural gas as our primary sources of energy, then what should the educated investor know?

And even more importantly, what should that investor **do**?

#### DEMAND AND DEPLETION

The socio-economic complexities of the world, and in particular China and India, will continue to place huge demands upon the global energy market. As these developing nations become more industrialized, the demand for energy to feed their foundries and build their infrastructures will increase. Currently, the average person in China uses about two barrels of oil per year where as the average American uses about 25 barrels. The rising affluence of an emerging middle class in these developing countries will drive a huge demand for greater amenities, goods, and services that will either directly or indirectly depend upon oil and gas. With China's and India's significant populations, even slight increases per capita consumption will continue to increase world wide consumption at a staggering pace, while simultaneously pushing the price ever upward.

The steady decline in spare capacity of fossil fuels and the scramble to increase that capacity through the discovery of new hydrocarbon reserves are direct results of the current day's demands for fuel in the global energy markets. This situation is complicated further by the so-rapid depletion of the easily accessible and cheaply produced light crude oil. Many experts believe that oil production from current sources has either peaked or will do so within the next decade. This means that the dwindling reserves are being replaced more slowly, and often with oil that is more expensive to locate, extract and refine. As a result, in some cases, particularly since 2002, the hydrocarbon reserves are quietly being replaced with natural gas acquisitions.

When compared with oil or alternate fuels, natural gas is attractively plentiful, relatively inexpensive, and has a clean burning nature. It is the natural successor to oil, and many experts forecast natural gas to emerge as the principle source of energy in the world as early as 2025. There is; however, no guarantee that it will not quickly follow the path of oil in becoming more scarce and more expensive.

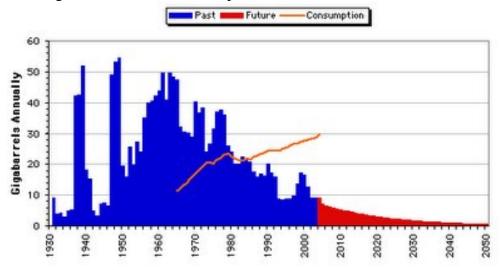


Figure-1: Oil discovery versus production: vertical bars represent discovery and the red worm charts the production. Source: ASPO

The uncertainty in the global energy market has created a socio-economical and political cost. This has been readily apparent in recent world changes that illustrate how having insufficient oil and gas reserves affects a nation's conduct. Changes such as: Russia's aggressive energy diplomacy and its resurgence as an imperialist power in Eastern Europe; the growing shadow of a militant Islamic-Fascist Iranian leadership with nuclear ambitions; China's growing influence in the world energy market along with its growing willingness to flex its newfound economic and military muscle in Asia; and the Latin American government of Hugo Chavez in Venezuela.

Every major industrialized or developing country is either simultaneously pushing to secure oil and gas reserves, or using their ample reserves as leverage on the world's political stage. With today's level of consumption that is presently estimated as being between 80-85 million barrels per day, what can we expect the geopolitical and economic conditions to look like in 10 years? In the next decade, consumption is projected to reach 135 million barrels of oil per day.

Experts are predicting that the 135 million barrel projection will significantly outstrip production. The litanies of warnings from the financial and scientific communities are becoming increasingly difficult to ignore, and we know that the shortfall will be measured in *considerable* world economic and social costs. For this reason alone, we need to act, and the most logical direction at present is to invest in the domestic oil and gas industry of our own country.

#### WHY INVEST?

The socio-political and economic ramifications of the impending higher energy prices on the global economy over the next decade are myriad and far-reaching. Our present vantage point does provide some clarity, however, as to the probable effects:

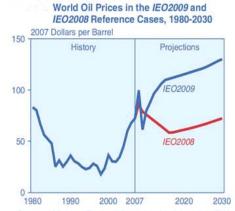
#### 1. The rising cost of oil will require a shift to a less expensive energy source.

Despite the various energy alternatives, both green (solar, wind, bio-fuel, etc.) and otherwise (coal and nuclear), natural gas holds the most promise for meeting the world's voracious demand for energy over the next decade. As natural gas is

relatively inexpensive, highly versatile, and clean- it will likely become the transitional source of the 21<sup>st</sup> century.

## 2. High energy prices will certainly slow the global economy.

The world economy, at the very least, will be forced to change gears. Energy costs will become an increasingly important financial consideration. While it will be nearly impossible to escape its universal reachgasoline for the car, heating and cooling costs, added costs of any type of transportation, increased prices of textile products, etcenergy costs may still be mitigated through participation in the oil and gas industry.



Sources: History: Energy Information Administration (EIA), International Energy Annual 2006 (June-December 2008), web site www.eia.doe.gov/iea. IEO2008: EIA, International Energy Outlook 2008, DOE/EIA-0484(2008) (Washington, DC, September 2009), web site www.eia.doe.gov/oiaf/ieo/ieoarchive.html. IEO2009: EIA, Annual Energy Outlook 2009, DOE/EIA-0383(2009) (Washington, DC, March 2009), web site www.eia.doe.gov/oiaf/aeo.

# 3. The tax benefits associated with direct participation in domestic oil and gas exploration remain one of the last great beneficial tax deductions afforded by the federal government.

The ability to write-off between 70-80% of one's initial investment and the remaining amount over the next 7 years makes direct participation a much greater value than indirect participation through the stock market or mutual funds.

In conclusion, as the innumerable costs of oil and gas continue to rise over the next decade, it becomes vital to invest in such a manner as to lessen one's financial exposure to what is likely to be a very significant and negative change due to the volatile energy future.

#### **REFERENCES:**

Energy Information Administration (EIA) (2006-2009) http://www.eia.doe.gov/oiaf/aeo

"Association for the study of peak oil & gas" (2010) http://www.peakoil.net/

"The Party's Over," (2003), by Richard Heinberg.

Peaking of World Oil Production: Impacts, Mitigation, and Risk Management, US Department of Energy (2005), by Robert L. Hirsch

"A growing appetite in U.S. for natural gas," The New York Times (June 15, 2005), by Simon Romero.

"A boom in alternative energy," The Economist (November 3, 2005).

"Energy security," The Economist (January 5, 2006).

"World is headed for oil price shock," Financial Times (August 15, 2005), by George Magnus.

"The Natural Gas Explosion," The Economist (February 28, 2005)

"The End of Oil: On the Edge of a Perilous New World," (2004), by Paul Roberts.

"The Oil Factor," (2004), by Stephen Leeb and Donna Leeb.

"Piqued by Peak Oil," University of British Columbia Reports, (May 31, 2006), by Rob Millar.