October 19th, 2013

Dear clients and colleagues,

We are optimistic on natural gas and alternative energies and increasingly convinced that we will see long term Oil prices below $60 within seven to 10 years.

Our February 12th, 2012 comment was giving our arguments for a higher natural gas price. At that time, the price was below US$2.50 per mcf, the first time in 10 years that gas has been this cheap in the winter heating season. A lot of industry analysts and speculators were forecasting even lower prices. Last April, natural gas prices reached $4.10. Today, towards the end of the shoulder season (restocking), inventories sit at 5-year average and the price at $3.85 is about 10% higher than last year.

We are still optimistic on medium to long-term natural gas prices and see a longer term price around US$6 per mcf. Why?

Capital re-allocation, Growing Industrial Demand and Growing Electricity Generation. Natural Gas as a transportation fuel

U.S. natural gas producers quickly reallocated capital away from dry gas to liquids. The natural gas rig count has declined from 936 in October 2011 to 375 last April and 378 now, the lowest since 1999. So clearly, we will need prices higher than $5 for producers to drill for dry gas. US gas production is starting to decline.

With the US recovery well underway and the lowest energy prices in the industrialized countries. Industrial demand is growing.

Increasing environmental regulation is favoring natural gas over coal for electricity production.

Finally, we are now seeing acceleration in natural gas as a fuel for heavy trucks as well as automobiles.

Conversion of LNG Import to export facilities

By 2016, the US and Canada will become exporters of LNG. The first export terminals have already been approved. One can see natural gas become a global market just like oil is today. You may want to look at BG Group PLC or Cheniere Energy to get more details.

In conclusion, **we believe that Natural Gas prices will continue to go up and should be around $5.50- $6.00 by the end of 2014.**

An update on alternative energy and the electrification of vehicles.

One of the major success stories this year in the stock market has been Tesla (TSLA US). The stock price is up 410% this year and its market capitalization of US$21 Billion exceeds the market capitalization of Fiat (owner of Fiat, Chrysler, Ferrari, and Case New Holland), Peugeot and Mazda together.

August represented the best month on record for sales of Electric vehicles (EV), Plug-in Electric vehicles (PIEV) and Hybrid Electric Vehicles (HEV). With all major manufacturers increasing the number of models and the price premium narrowing, we see continued growth and a market share of 15-20% of all new vehicles by 2017 from around 3% today. And we have not talked about the future, the fuel cell car and hybrid fuel cell, which will start to be commercially launched by Toyota in 2015.

On the alternative energy front, Renewable energy now accounts for about 20% of global energy consumption. Traditional sources such as biomass (13%) and hydro (3%) are still the most important, but new renewable sources, such as sun, wind and geothermal, currently account for 4% and are growing rapidly.

Our thesis is that renewable will represent more than 40% of global energy consumption by 2030, higher than most forecasts. Oil will not run out, sorry peak theory believers. Coal as an energy source will start to decline within 5 years and nuclear will remain negligible except for a few Countries. The latest World Energy Council report will be proven wrong.

Let’s look at a few numbers:

- Wind power is growing at a rate of 30% annually. Worldwide capacity is 282 GW at present (enough for 100 million households), a 25% annual growth in the last 5 years. The US is one of the fastest growth markets, growing at 28% in 2012.
- Solar energy capacity has now passed the 102GW mark in 2012, 250% more than in 2010. It is also expected to grow at more than 30% annually. The US grew at 74% in 2012. And China has now become the world’s largest producer and client for new capacity.
- The earth contains enough geothermal energy to supply its entire population. The world’s largest geothermal installations are in the US.
- Brazil, one of the leaders in renewable energy, gets 18% of the country’s automotive fuel from ethanol.

This leads us to say that our long term forecast for the price of **oil at US$60, why?**

Demand destruction and increased production

Back in 1973, electricity consumption consumed about 17.3 million barrels of oil per day to generate 17 percent of its electricity. Today, that share is down to about 1 percent.

In 2012, the US produced an average of almost 66 billion cubic feet of natural gas per day - more than at any other time in its history. The surge in natural gas production has occurred alongside a major increase in oil output. Last year, U.S. production rose by about 800,000 barrels per day, the biggest annual increase since 1859. This year, it is expected to climb by another 600,000 barrels per day.

Although oil remains a critically important commodity, petroleum's share of the global energy market has been in steady decline. In 1973, it accounted for 48 percent of all global energy use. Last year, its market share fell to 33 percent.

With the electrification of vehicles combined with better fuel efficiency and the rise of natural gas as a fuel for transportation, we see demand decline in the near future.

With the increased production coming from new Countries and with better technology to find oil is existing areas, we see oil price decline to around US$60 per barrel.

Have a good weekend.

The Global Alpha Team